

**ORCHESTRAL CONDUCTING SINCE 1950:
A COMPARATIVE ANALYSIS OF CONDUCTING MANUALS,
PRACTITIONERS' TESTIMONIES AND TWO ORCHESTRAL PERFORMANCES**

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Abstract

This dissertation studies the phenomenon of orchestral conducting as it unfolds since 1950 in what may be seen as the international arena of this profession, and does so by comparing three types of texts: respected conducting manuals, leading conductors' testimonies and expert orchestra players' accounts. Two models, empirically inferred from these texts – the Visible Action Continuum and the Thematic String Matrix – are instrumental in subdividing the phenomenon into categories in order to discuss the practitioners' opinions. Scholarly studies then contextualise these discussions. A video analysis of Bernstein and Boulez conducting Mahler's Second Symphony complements this text-based approach, aiming to find points of contact between what the practitioners say about orchestral conducting and what the conductors actually do. This video analysis applies the Continuum and the Matrix as well as theories of movement analysis and nonverbal communication. By cross-examining the above-mentioned sources, this study aims to thoroughly discuss the phenomenon of orchestral conducting. It does not intend to provide direct guidance, theoretical or practical, on how to conduct an orchestra, nor does it propose a standalone score analysis of Mahler's Second Symphony.

This study draws the following conclusions:

1. A significant part of the phenomenon of orchestral conducting is not apparent to the observer and exceeds musical boundaries. However, both aspects may be accessed through the practitioners' testimonies.
2. The alleged invisibility of some aspects of the phenomenon is better addressed in terms of the observer's unconscious perception.
3. Differences of opinion between practitioners often stem from situational factors: pedagogues, conductors and players see conducting differently. Sometimes sources conflict, but more often they complement each other.
4. The common vocabulary seems unsatisfactory to adequately describe musical praxis and may breed misunderstandings, as much regarding alleged agreements as alleged disagreements between practitioners.
5. As a possible consequence of this insufficiency, only few elements discussed in text-based part of this study are traceable in the conductors' actual performance, and vice versa.

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Preface

This dissertation approaches the phenomenon of orchestral conducting from several angles: conducting manuals, conductors' testimonies, players' accounts and video recordings. Being a professional musician – choral and orchestral conductor, pianist and composer – I have undertaken this study both for my own improvement as a practitioner and as a contribution to a better understanding of this field. I have studied choral and orchestral conducting in Belgium, France and England, and worked professionally with orchestras in Belgium and Romania. Nonetheless, I felt that this research would help deepen my understanding of this art and make a significant contribution to knowledge.

I began this project by trying to develop a syntax of conductors' gestural discourse, analysing a number of filmed performances and rehearsals held by leading conductors. I reached the conclusion that I could hardly abstract from these excerpts a standardised model of orchestral conducting, except for some rudimentary aspects of it, and even these display great variety among conductors and many exceptions. This elementary syntax appeared to leave unaddressed a significant part of the phenomenon.

I then changed my approach and compared the orchestral phenomenon as described in conducting manuals, reported in conductors' and players' testimonies, and displayed in video recordings. I have identified patterns running through these various sources and from these patterns I derived two analytical models: the Visible Action Continuum and the Thematic String Matrix, both of which I have applied to the examination of the written testimonies and to the comparative video analysis. As will be seen in the course of this dissertation, not only did the practitioners' testimonies inform my main theoretical models (the Continuum and the Matrix) and various concepts I derived from these models, but they also shaped the very way in which I discuss the issues the practitioners raise, according to my understanding of their priorities.

Introduction

“The only clear thing about [orchestral conducting] is that it is a mystery.”

Vladimir Ashkenazy (Matheopoulos, 1982, p. 472)

In his book *Behind the Baton* Charles Blackman argues: “conducting has been called an art, a craft, an instinct and even an instinctive art” (1964, p. 25). This dissertation studies the phenomenon of orchestral conducting by examining the testimonies of ninety-four practitioners and complements this study with comparative video analyses of two major orchestral performances. By practitioners, I refer to authors of conducting manuals, leading conductors and orchestra players. The videos feature live performances of Leonard Bernstein and Pierre Boulez conducting Mahler’s Second Symphony. Through this approach, this study not only aims to explore the extent to which Blackman’s words (art, craft and instinct) may apply to the phenomenon. It also intends to answer three research questions on the basis of three fundamental premises.

Research questions and premises

My first research question concerns the practitioners’ description of orchestral conducting: what do pedagogues, conductors and players say about this art? As will be seen through the literature review, trivial as this question may seem, it appears that little, if any, former research concentrates on a systematic study of the practitioners’ opinions about this art and a methodical comparison of their points of view. The present thesis is devoted to the thorough analysis of testimonies provided by expert pedagogues, conductors and orchestra players. Most players and pedagogues analysed here, and all conductors, are of international stature.

My second research question delves into methodology: how can we organise and compare the topics addressed by these practitioners? Indeed, these sources develop a wide array of subjects, belonging to a variety of areas, musical and non-musical.

My third and last research question has to do with validation: how can we verify the results of this study? How can we evaluate the degree of pertinence with which words tell us of the conductor's art?

I base my research on three fundamental premises. My first premise is that the practitioners' testimonies constitute a valuable source for describing orchestral conducting. I examine three sources: conducting manuals, renowned conductors and orchestra players. They provide complementary points of view on the phenomenon. Liz Garnett argues: "by taking what practitioners do, and what they say about what they do, seriously, one can discover aspects of practice that might otherwise be ignored" (2009, p. 18). It is my aim to carefully examine the practitioners' opinions, paying attention not only to what they say but also, when opportune, inferring as accurately as possible what they *mean* by contextualising their testimonies within the wider frame of scholarly studies about musical praxis.

Garnett points out: "conducting is surprisingly under-theorised; it enjoys a substantial literature, but most of it is pedagogical in intent. That is, it seeks to produce more effective conductors rather than understand how the conducting process works" (2006). To address this deficiency, "empirical studies emerging from university departments in the form of dissertations and scholarly articles" (Garnett, 2009, p. 18) have been conducted and aim to provide a better understanding of the phenomenon. It is significant that among three books specifically devoted to music and gesture, published between 2006 and 2011 (Gritten and King, 2006 and 2011; Godøy and Leman, 2010), the first does not address conducting at all, and the two others dedicate only three chapters (80 pages out of a total of 600) to conducting. 'Conductors' Gestures and their Mapping into Sound Synthesis' by Gunnar Johannsen and Teresa Marrin Nakra in Godøy and Leman, 2010, and 'Computational Analysis of Conductors' Temporal Gestures' by Geoff Luck in Gritten and King, 2011, address the computational aspect involved in the analysis of the orchestral phenomenon; and 'Gestural Economies in Conducting' by Phillip Murray Dineen in Gritten and King, 2011, consists of a comparison between sport and conducting gestures, the author pointing from the outset to the difficulty of assessing conductors' effectiveness in measurable terms.

It is also significant that in both books edited by John Rink (*The Practice of Performance*, 1995 and *Musical Performance*, 2002), only one chapter (20 pages out of a total of 500), that of Nicholas Cook, approaches the phenomenon of conducting. This chapter (Cook, 1995) draws a parallel between Furtwängler's interpretation of Beethoven's Ninth Symphony and Schenker's analysis of this work. In several chapters, however, Rink's publications come close to issues central to orchestral conducting: musical motion and performance, psychology of performance, score and sound, body communication in performance, ensemble performance, memorising music, and listening to performance. Yet none of these chapters addresses specifically the conductor's role. The practitioners' accounts thus appear as a helpful alternative to the scarce academic literature and scholarly dissertations devoted to conducting.

My second premise is that the phenomenon of conducting may be segmented in order to facilitate the organisation of the practitioners' opinions. I posit that distinguishing between different phases of the conductor's work constitutes a valid way to segment the phenomenon, providing helpful categories to sort and compare the practitioners' testimonies, and offering specific compartments for discussing closely related matters. This study segments the practitioners' opinions according to two criteria: the degree of visible action involved in the conductor's work (applied by the Visible Action Continuum) and the different facets of this work, regardless of their degree of visibility (applied by the Thematic String Matrix). Both models categorise differently the topics addressed by the practitioners and, in so doing, provide different types of niche and prompt different types of discussion. These models have been informed by previous studies, as pointed out in the literature review, and shaped according the practitioners' testimonies.

The Visible Action Continuum, as introduced in Chapter Two, is designed to categorise the topics the practitioners address in their testimonies according to the amount of action these topics require from the conductor and to the degree of visibility of these actions. My focus on the visual aspect of the conductor's activity is grounded primarily in the nature of this activity, the conductor providing the players with visual cues, which they are expected to translate into aural utterance. The Continuum deserves close attention as it is grounded in a seemingly straightforward concept,

arguably separating what is visible from what is not. However, what the common language calls *visible* is an agglomerate of different qualities, which may as well be termed *apparent*, *manifest*, *noticeable*, *obvious* or the like. The degree of visibility may depend on the object itself (large arm movements are more noticeable than subtle facial expressions or breathing rates) or on circumstantial factors (the conductor's facial expression on the podium is visible to the players whereas score study or musicological research conducted in the conductor's personal studio is not). Additionally, there are several types of apparentness: the conductor's work in front of a mirror is unapparent to the players, as they do not witness this phase of the conductor's work, but is nonetheless a visible process, whereas the conductor's inner hearing or musical memory is visible to no one. Similarly, the conductor's movements are visible to the observer but the mental images steering these movements are not. Therefore, the topics the practitioners address occupy different places on the Continuum according to their assumed degree of visibility. It may be rightfully argued that players may infer what is unapparent to them: they do not see the conductor studying the score but may deduce whether the conductor studied it or not; they do not see the conductor's breathing rate but they may conjecture whether it is high or low; they do not see the conductor's inner hearing but they may infer to what extent the conductor hears the music mentally. However, this study does not engage with what players may infer from the podium nor with the way they construct their opinions about orchestral conducting, as it has no evidence of these processes. It only deals with what players say about this phenomenon and sometimes infers what they may mean when the common vocabulary possibly falls short of conveying the required nuances.

By using the Visible Action Continuum, I aim to address both the segments of the process that are apparent *and* unapparent to the observer (orchestra players being the only type of observers I deal with in this study). The Continuum provides specific locations to the topics that the practitioners approach, and does so according to their (assumed) degree of apparentness to the observer. By using this tool, I intend to stimulate discussions about phenomena presenting a similar degree of visibility. For example, I discuss the conductor's inner hearing and mental images under the same umbrella, as I do for score study and musicological research, leadership

and organisational skills, or body posture and arm movement. It should be pointed out, however, that the Continuum only provides a tool to categorise the topics the practitioners raise and it seems that the diversity of these topics may legitimise the complexity of the tool. By no means does the Continuum intend to measure the degree of visibility of the art of conducting. It aims to acknowledge that not all that practitioners report about this art are visible phenomena, and to categorise these phenomena according to their visibility, in the sense described above. The very design of this study defers all judgements to a single researcher, whether in reading the practitioners' testimonies, allocating the topics they raise into categories or analysing the conductors' video recordings. These one-person judgements may hardly claim the scientific exactness that the word 'measure' connotes.

The Thematic String Matrix, as introduced in Chapter Three, aims to identify themes running through the practitioners' testimonies, categorising topics according to their content rather than their degree of visibility. For example, the conductor's physical preparation and musicological research are both unapparent to the observer and sit close to one another on the Continuum. However, they address different themes and, therefore, are allocated on different places of the Matrix. The Matrix is also designed to accommodate aspects of the orchestral phenomenon that exceed musical boundaries, such as public appeal and leadership, and also concatenates the themes into larger aggregates (strings). The Matrix does not intend to *isolate* the segments it has detected, but to *discuss* the practitioners' opinions according to these segments, and then *reconstruct* these segments in a holistic way.

My third and last premise is that this study needs to test words against actions in order to ensure trustworthiness. As Clemens Wöllner remarks, "there is scarcely any empirical evidence to confirm [corporeal] observations for the field of conducting" (2008, p. 250). By supporting the video analyses with theories of movement analysis and non-verbal communication, this study aims to turn informal observations into more stable empirical evidence. In Chapter Seven, this dissertation analyses the videos through the Continuum and the Matrix, not only comparing what

the practitioners say with what conductors do but also, indirectly, gauging the limits of these models when applied to actual performances.

This dissertation unfolds as follows. Chapter One explains the methodology that I use (Continuum, Matrix and derived concepts) and presents the sources that I refer to (manuals, conductors and players). Chapter Two deals with a first examination of all testimonies through the Continuum. The reason for not discussing at first each source separately is that they address substantively similar topics, hence benefiting from immediate interrelated discussions. Chapter Three examines all testimonies through the the Matrix. Chapter Four then studies each source separately in order to identify specific trends. Chapter Five examines particularities: thirteen conductors provide several accounts each and three practitioners display double status (pedagogue/conductor, conductor/player, and player/pedagogue). It aims to assess if and how circumstantial factors (time of the testimony or status under which the practitioners speak) influence the accounts. Finally, Chapter Six compares all the main sources and reconstructs the segments of the phenomenon in a holistic a manner. Chapter Seven analyses the video performances of Boulez and Bernstein conducting Mahler's Second Symphony and Chapter Eight concludes this dissertation, assessing to what degree it has answered the research questions, evaluating how accurate my premises were and opening paths for further studies.

It should be pointed out, especially, that this thesis does not deal directly with technical guidance (such as beat patterns, bodily posture, or arm independence), musical interpretation (such as interpretational traditions, tempi and metronome markings, or dynamic range and orchestral forces), stylistic issues (such as historic performance and period instruments, choice of score edition, or phrasing and musical articulations) or score analysis (Schenkerian or other). It only touches upon these aspects in as much as the practitioners themselves develop these in their testimonies. The next section reviews the literature devoted to orchestral conducting that provided a base for my own study.

Literature review

Few scholarly texts address the phenomenon of orchestral conducting in a holistic way, examining the entire process and providing multiple points of view. Liz Garnett (2009 p. 51) and Yaakov Atik (1994, p. 22) explicitly propose that conducting has been surprisingly under-addressed. Other scholars suggest it more subliminally. While I wholeheartedly agree that orchestral conducting appears to sit at the margins of scholars' interests, I am less convinced that this is surprising. Remarking on this issue, Blackman argues that "the function and responsibilities of the modern conductor is a subject so vast it defies academic description" (1964, p. 115). Additionally, as previously proposed, part of the phenomenon is unapparent to the observer and, for the apparent part, the practitioners' opinions do not always concur. However, academia today is not what it was fifty years ago, especially regarding performance practice, and some scholars do examine discrete areas of the orchestral phenomenon, providing helpful information about the parts they have explored. Moreover, empirical studies have much developed in English-language musicology, which "in the past few decades, [has] witnessed a virtual explosion in scholarly writing about musical performance" (Rink, 1995, ix), a trend which Nicholas Cook refers to as the "'page-to-stage' approach" (2010, p. 3). It is this academic literature, devoted to general aspects of musical performances, which constitutes the ground material that I use to discuss the practitioners' testimonies about orchestral conducting.

Three texts have been instrumental in providing me with a frame for my own research. First and foremost, Garnett provided through her book *Choral Conducting and the Construction of Meaning* (2009) a robust frame for my own thinking. Although studying choral conducting (and not orchestral) and analysing filmed rehearsals (and not concerts), she studies the musicians' own words and what she calls 'the meta-language' they develop to speak about gestures and sound. She compares conducting textbooks, explaining how pedagogues think about conducting, and refers to nonverbal communication theories which help understand the conductor's behaviours. The way Garnett cross-examines this body of knowledge has informed my own methodology, consisting of a comparison between conducting manuals and practitioners' testimonies, and between two video recordings of orchestral performances.

The second source I draw on is Anu Konttinen's dissertation, 'Conducting Gestures: Institutional and Educational Construction of Conductorship in Finland, 1973–1993' (2008). Konttinen grounds her study in interviews of Finnish conductors and their professor, Jorma Panula. I refer to her dissertation as a snap-shot of the orchestral phenomenon, depicting such aspects as the conductor's leadership, psychological skills, working methods, relation to contemporary repertoire and self-evaluative process. Konttinen limits herself to Finnish conductors but many of them enjoy an international career, conducting major orchestras in the world. It is reasonable to believe that the way they describe the orchestral phenomenon is in line with the way it is practised internationally. What is missing from Konttinen's approach is a thorough examination of any other pedagogical discourse than the one developed by Panula. The third text on which I rely, partially filling this gap, is the dissertation of Ki Sun Lee (2008). She studies the manuals of Max Rudolf (1995), Elizabeth Green (1997) and Hideo Saito (1988), and provides me with a framework for discussing the pedagogues' perspective through six conducting manuals, including Rudolf's and Green's. However, none of the former books examines the players' point of view on the phenomenon.

Other texts have informed my research and divide into two categories, descriptive books and scholarly dissertations. Both categories have been instrumental in two ways: they have provided a context for my research (sociological, historical and other) and, by focusing on some specific aspects of the phenomenon, they have incited me to examine other aspects, which they have not addressed. The descriptive books have developed more the contextual aspects. The scholarly dissertations have tackled more precise areas of research, developing methodologies which have informed mine to one extent or the other.

Six descriptive books have helped set up the general landscape for my study. Elliott W. Galkin (1988) devotes several hundred pages to the history of the orchestra and the art of conducting. He organises his book into three parts: the historical and instrumental evolution of the orchestra; the theory involved in orchestral conducting; and the practice of this art (including issues such as the use of the baton, divided leadership and memory), devoting the last 300 pages to examining

important composer-conductors of the past (such as Berlioz and Wagner) and leading conductors (such as Toscanini and Furtwängler). Several topics addressed by Galkin enter the realm of my study, notably the conductor's historical and instrumental knowledge, their physical and mental work, and the modern conductor's relation with the composer's legacy. The structure of Galkin's book was instrumental in setting up the concept of segmentation.

With a similar approach, Elisabeth Bernard (1989) writes a historical account of the art of conducting in Germany, Italy, France and England from the Baroque era to the present day. She compares the symphonic to the operatic conductor, and professional to non-professional ensembles. She explains the double direction until the establishment of a single conductor and the appearance of the baton. She reviews several major composer-conductors and orchestral societies in Europe and the United States, concluding with various aspects involved in the orchestral phenomenon: the financing of the orchestra, the orchestral recording, the emergence of radio and TV, the persona of the conductor, and specific conducting issues such as tempo, memory, repertoire and gender issues. In addition to consolidating the context provided by Galkin, Bernard addresses issues that have further informed my segmentation and subsequent categories: the conductor's relation to the wider world, the discussion around repertoire, and the geographic expansion of this art. Bernard's text was also instrumental in exploring the conductor's persona, travelling between the professional and non-professional world, a concept that has informed the dual status categories that I examine in Chapter Six.

Alfred Willener (1997) addresses the orchestral phenomenon from a sociological perspective. In nineteen short chapters, he approaches issues such as the conductor's authority, the conductor-orchestra partnership, gender issues among players and conductors, and the social organisation within the orchestra. This text has provided the basis for studying the relational aspect between the conductor and the orchestra, and between the conductor/orchestra as a unit and the wider social fabric. It is unclear, however, how Willener constructs his opinion about the orchestral phenomenon, to what extent his beliefs are based on players' or conductors' opinions, and who these players and conductors might be. The present study not only draws on several ideas

suggested by Willener (notably the concept of the players' co-interpretative role) but also aims to test these ideas against more recent testimonies.

In 2003, Cambridge University Press published two Companions. One (Bowen, 2003) focuses on conducting and the other (Lawson, 2003) on the orchestra. The former divides into three parts: the first part addresses issues such as rehearsals, choral conducting, opera conducting and a player's account; the second part traces the evolution of the orchestra in several European countries and the United States; the last part tackles subjects such as early music, the pedagogy of conducting and gender issues. Colin Lawson (2003) examines in fifteen chapters the history of the orchestra and various adjacent issues such as orchestration, repertoire, period instruments, and educational programmes. These two books have provided an update of the former descriptive texts, and helped strengthen my research categories (notably regarding rehearsal techniques, performance practice and educational programmes). Moreover, by their general architecture, they have informed my stance of 'letting the specialist speak'. Each book consists of chapters written by recognised authorities, one chapter stemming from a leading conductor (Mackerras in Lawson) and another from an expert player (Ripley in Bowen), both of which I analyse in the present study. Finally, these books examine separately 'conducting' and 'the orchestra', the former pointing to the process and the latter to the receiving end, fostering my interest in knowing other players' viewpoints.

Raymond Holden (2005) devotes his book to the Central European tradition of conducting, which he sees as the cradle of this art form. From Wagner and Mahler to Furtwängler and Karajan, he recounts the lives and careers of these legendary figures and their specific contribution to the art of conducting. His book also remarks on the transition between the composer-conductor era and the modern conductor (that is, between the creative and the re-creative artist), on which several practitioners analysed in the present study comment as well. Holden's book also provides a historical perspective on various aspects of the field, notably the conductor's relation to contemporary versus standard repertoire, their criteria for excellence, and more generally the

consequences of the shift between the composer-conductor tradition and the re-creative modern conductor.

The following sub-sections review the scholarly literature devoted to more specialised aspects of orchestral conducting and to non-musical phenomena informing this art. None of these studies, except Nakra's, is based on testimonies or performances of internationally recognised conductors or expert orchestra players, but they do provide useful elements for my own study. Richard E. House (1998) studies the effect of expressive and non-expressive conducting on the performances and attitudes of advanced instrumentalists. He proposes that "gestures result largely from the conductor's inner musical ear, with more sophisticated musical images creating more effective gestures" (p. 6), implicitly correlating the conductor's mental image with their gestures and subsequent orchestral rendition. Acknowledging the "importance of visual signals in communicating musical expression" (p. 7), he also suggests that "selecting an experienced conductor [...] is important for studies" on effective conducting (p. 87), this last aspect significantly informing my choice of practitioners. The present study discusses House's categories of 'expressive' and 'non-expressive' gestures, and his concept of the conductor's 'inner ear', in the frame of the practitioners' testimonies. Moreover, the terms 'advanced instrumentalists' and 'experienced conductor' reflect the author's concern to deal with high musical achievements. The present dissertation follows a similar path, examining opinions shared by leading conductors and expert orchestra players.

Expanding House's concept of 'mental image', Diane M. Lewis (1999) examines the possibility for the conductor to conduct musical shapes. She argues: "shape goes far beyond following the instructions in a score; all aspects of the music are part of shape" (p. 1). It comprises melody, harmony, texture, dynamics, meter, rhythm, tempo and sung words. Lewis proposes three principles: (1) the conductor's conceptual construct, the "aural image developed and formed in the conductor's mind [as] a result of score study" (p. 17); (2) the inner layers of the music "where small details are [...] creatively shaped inside the conceptual framework" (p. 79); and (3) the conductor's ability to communicate their aural image "so as to provide musical continuity and

cohesiveness” (p. 112). These three principles follow a chronological and a conceptual path, going from the conductor’s early/abstract study to their later/physical involvement. The first step deals with the score and the conductor’s mental image stemming from it. Further investigation seems necessary to comprehend how one goes from the first to the second. I have attempted to do so by isolating these issues and cross-examining them through the practitioners’ testimonies. The third step concerns the communication of the aural image. The conductor’s aural image and their ability to communicate it to the orchestra are two different issues which also seem to require further study to understand how the first connects to the second. This communication may be physical, oral, or – as some practitioners put it – subliminal.

House’s and Lewis’s dissertations revolve around the conductor’s expressiveness and ability to conduct their aural images. The next two dissertations revolve around methods used by Donald Schleicher (Toney, 2000) and Hideo Saito (Valent, 2000). Hubert Toney devotes his study to the pedagogy of Donald Schleicher, whose artistic mentors were Ozawa, Bernstein, Rattle and Meier. He triangulates Schleicher’s method with, on the one hand, the comprehension of it by the students of his Conducting Seminar, and on the other, with its consistency with conducting manuals. He bases his study on interviews of Schleicher and his students. Two of Toney’s chapters are indicative of Schleicher’s views: ‘Conducting the music, not the ensemble’, and ‘Serving the music and composer’. As a conclusion, Toney argues: “the conductor should not hesitate in using gestures that do not use the standard patterns shown in most conducting texts if the gestures reflect the music better” (p. 240). In addition, he describes the conductor as a collaborator responsible for “creating a positive rehearsal environment [including] safety, challenge for reachable goals, and encouragement” (p. 240). Toney’s dissertation has set up the principle of triangulation: pedagogical literature (manuals), pedagogical practice (conductor-professor), and receiving end (students). It usefully informed my triangulation (manuals, conductors and players), expanding Toney’s pedagogical realm to real-life situations. Additionally, Schleicher’s expressions of ‘Conducting the music, not the ensemble’, and ‘Serving the music and the composer’, seem to require further study as to how other practitioners relate to

these concepts. Finally, Toney's description of the conductor being responsible for 'creating a positive rehearsal environment' has informed my Matrix theme 'Work with the Orchestra'.

Joseph A. Valent (2000) studies the pedagogy of Professor Okabe based on the method of Hideo Saito and his categorisation of conducting gestures. In Chapter Three, Valent argues: "at the very foundation of [Saito's] teaching philosophy was a firm belief in providing all his students with basic musicianship skills" (p. 26). The author reviews several of Saito's renowned students and grounds his confidence towards Saito's method in their success. He goes on to describe Saito's gestures as executed on video by Professor Okabe and examines their graphic representations. Valent emphasises: "Saito has made a valuable contribution to the conductor's craft" (p. 93). However, he adds: "Saito's book, standing alone, is difficult to understand" (p. 99) needing the intermediary of a teacher to demonstrate. The present dissertation explores Saito's notion of the conductor's 'basic musicianship skills' through the diverse categories of knowledge it has developed and further discusses the graphic representations of the conductor's gestures as found in the conducting manuals, Lee's dissertation and Bernstein's 'The Art of Conducting'.

Teresa M. Nakra's dissertation (2000) represents an important shift in the field. The author records electronically the conductor's physical reactions (muscular tension, skin temperature, breathing rate) while conducting, unveiling aspects unnoticeable to the observer. By operating her system, Nakra comes to several conclusions: "[conducting] is a gestalt profession, it involves all of the faculties simultaneously, and cannot be done halfheartedly" (p. 23). She also remarks: "rules and expectations [...] are not [...] consciously analysed by their practitioners" (p. 23). These issues highlight two fundamental aspects: the holistic nature of the phenomenon (which has informed my approach), and the lack of the players' awareness of what conductors physically do (which has fostered my interest in the unconscious part of the process). The plurality of the voices that I examine (6 pedagogues, 38 conductors and 50 players) helps me draw a compounded map of the phenomenon, some of these practitioners being aware of some aspects and others of others. In her Chapter Eight 'Biggest Lessons', Nakra addresses the issues of the orchestral sound mapping the conductor's movements. Regardless of the 'objective' recording of

both gestures and sound provided by her electronic devices, she argues: “it is the audience that ultimately decides if a mapping ‘works’ or not. If the audience is confused about the relationship between the gesture and the music, then the mapping does not work” (p. 133).

My study explores through the practitioners’ testimonies several aspects addressed by Nakra. It examines what is involved in this ‘gestalt profession’, how aware conductors are of what they physically do, and how players perceive the relationship between the conductor’s gestures and the resulting sound. By recording unapparent aspects of the conductor’s physical responses while conducting, Nakra attempts to provide further explanation of the phenomenon of conducting. This search has fostered my interest in such aspects, be they physical or not, and encouraged me to develop analytical tools that would acknowledge and help discuss them.

It has been proposed that leadership is an attribute commonly attached to the conductor’s persona. Two studies have examined this aspect of the phenomenon. Mapping one domain onto another, Niina Koivunen argues: “this is a study about leadership in symphony orchestras. [...] Business scholars have found the art sector inspiring and the art organizations have found business skills and knowledge useful” (2003, p. 13). She remarks: “subordinates seldom have their voice heard in such studies” (p. 40). She adds: “conductors may be among the most undemocratic leaders in the world. [...] My interviewees in Finland argue that even the army [...] is more democratic than a symphony orchestra” (p. 67). She studies the conductor’s leadership in two orchestras, the Tampere Philharmonic Orchestra (Finland) and the Philadelphia Orchestra (United Kingdom), and emphasises that both orchestras constructed and understood leadership in a very similar manner (p. 147). She concludes that “the leaders [i.e. the conductors] would trust that all knowledge already resides in the organization [i.e. the orchestra], their job would be to let it come out, [...] letting the music happen” (p. 219). The present dissertation echoes Koivunen’s concern of ‘having the subordinates’ [i.e. the players] voice heard’, exploring how undemocratic players think the conductor’s leadership is. It also examines on what grounds conductors construct their leadership and how they endeavour to let the music happen.

A dancer and choreographer, Yoav Kaddar (2009) adopts a similar cross-mapping approach and studies leadership in several performing arts: orchestral conducting, choreography and theatre directing. He argues: “this study [...] examines the particular pedagogies used in performing arts program and discusses their possible transfer to other leadership-training disciplines” (p. iii). He further remarks that leadership programs in the performing arts should stress more on the social and theoretical facets of leadership” (p. iii). As a conclusion to his study, Kaddar notes: “in the performing arts [...] training focuses on the creation of such artists as conductors, choreographers and directors. [...] There is an unconscious facet that also trains these artists to be leaders” (p. 112). The present study aims to further discuss these unconscious and social facets of leadership through the practitioners’ testimonies.

The last four dissertations informing this research represent a new trend in musicology, proposing the point of view of the performer-analyst, that is the performer analysing their own performance and theorising it. Eric Hinton (2004) explores the issue of expressivity, analysing his own conducting of a wind orchestra. Central to his arguments is the concept of ‘behind the notes’. Emphasising the limitations of score analysis in assessing musical significance, he remarks: “text-based modes of analysis do not afford access to the music as it is created by the actions of the performers and conductors” (p. 2), and describes his movements as an essential carrier of meaning. He argues: “the performer’s contribution to the performance process is of critical importance in its own right” (pp. 40–41). Hinton’s ‘behind the notes’ concept has informed my category of ‘Spirit of the Music’. However, the present dissertation suggests that reaching ‘behind the notes’ requires contextualisation, and therefore proposes two hyper-structures (strings) devoted to conveying this contextualisation: Musical Material and Musical Knowledge. These strings allow further discussions about the limitations of the written score and the contribution of the conductor to the composer’s legacy.

Julian Hellaby (2006) devises a nine-step method for assessing instrumental performances, taking into account the listener, the analyst, the composer and the performer. Highlighting the process behind the musical product, he argues: “a ‘work’ is surely the product of a work” (p. 16),

and “putting the ontological cart before the empirical horse” (p. 15) would fail to accurately describe the musical phenomenon. Hellaby concludes his research with case-studies of his own interpretations of piano pieces by Bach, Brahms and Messiaen. Although Hellaby analyses piano music, his nine-step method provides a framework for the analysis of any performance. Particularly relevant to my study are his third and fourth steps: step 3, the common points of reference between the analyst and the performer, implicitly cast the performer as a possible analyst of his or her performances and more generally as a critique of their art; and step 4, applying analysis to performance, implies that analyses may examine not only (frozen) scores but also (moving) musical discourses.

Half-way between score and performance analysis, Brandon R. Faber (2012) examines conducting issues arising in Copland’s symphonic work *Appalachian Spring*. He does not document his study with footage of his own conducting; his analysis, however, is informed by his public performance of the piece. He identifies conducting issues such as fermatas, rapid mixed meters, and fast sequential cues, “all [of which] fall to the conductor’s responsibility” (p. 2). In his conclusions, he argues: “listeners have repeatedly reported that the music evoked a sense of springtime in Appalachia. [...] Copland was reported to have said, ‘Well, I’m willing if they are!’ [This] frames a philosophical relationship between the composer, the music, and the listener” (p. 18). This discussion highlights the dialectics between what Jean-Jacques Nattiez (1990) calls *poiesis* (the creative process) and *esthesis* (the receptive process), and between the letter (the score) and the spirit of it (the aesthetic/emotional content), all of which constitute topics frequently debated by scholars and practitioners. Faber’s study has been instrumental in discussing the conductor’s relation to the score and to the composer’s aesthetic universe. The present dissertation proposes further validation of these topics by exploring them through the plural voices of the conductors (at the creative end) and the players (at the receiving end).

Murphy McCaleb (2012) investigates ensemble playing as a testimony of embodied knowledge. Although this topic does not deal with conducting *per se*, McCaleb’s study develops two aspects involved in the phenomenon of orchestral conducting: the way players interact through their

bodily discourse while performing together, and the models we may rely on when exploring embodied knowledge (that is, the type of knowledge involved in physically doing something versus the one involving solely the intellect). In his abstract, McCaleb argues: “musicians’ physical motions could not only be influenced by musical content but also be required for effective performance” referring to the performer’s movements as an important carrier of meaning. McCaleb explores several models of communication and addresses issues such as leadership, musical content, intentionality, and adaptability. In his final conclusions he argues: “ensemble interaction may be understood in terms of performers transmitting qualitative musical information, inferring musical intentions from performance and attuning to those intentions: a cohesive framework of processes I have called inter-reaction [which] has significant effects on how leadership may be understood to operate in unconduted musical groups” (p. 177). I argue that McCaleb’s framework may operate in *conduted* groups as well. The conductor’s role would then encompass, among other functions, that of not impeding the players’ spontaneous mutual responses. McCaleb’s concepts of embodied knowledge, construction of meaning through bodily discourse and inter-reactions are elements which the present dissertation tests through the practitioners’ accounts and the video analysis.

If any one trend may be identified among the texts about conducting it would be the ‘out-to-in’ tendency. Chronologically, these texts first describe conducting in general terms, then analyse certain abstract aspects of it, study real people’s practice, record conductors’ physical responses while conducting and, finally, go inside the conductor, the researcher *being* the conductor. This out-to-in approach mirrors the overall in-to-out structure of this dissertation, going from the inner aspect of the phenomenon (as described by the practitioners) to the outer expression of it (as apparent through the videos).

Finally, it is worth mentioning that the Conducting Continuum Committee of the League of American Orchestras have endeavoured ‘to clarify the roles of conductor and music director’ through its survey ‘Traits and Skills of a Music Director’ (1997, online). This paper presents no evidence regarding processing methodology and it is unclear whether the information has been

gathered through individual or collective reports and whether the communication was written or oral. The article does not mention whether the persons having participated in this survey have been presented with an agenda, and if so what this might have been. Additionally, this survey gathers indiscriminately opinions of pedagogues, conductors and players, a methodological element making this report hardly compatible with the present study, which separates these three sources. However, given the relative exhaustiveness of this report (reviewed in 2001), this dissertation presents its conclusions in Appendix 7 and highlights points of divergence and convergence in Chapter Six.

Chapter One: Sources and Methodology

This chapter reviews the source-texts that I examine, which divide into three main categories: conducting manuals, conductors' testimonies and orchestra players' accounts. Later on, it presents my methodology, explaining the two main tools I have developed (the Continuum and the Matrix) and several concepts that I derived from these tools in order to answer my first two research questions: what do practitioners say about orchestral conducting and how can we compare and analyse the practitioners' testimonies?

Sources

The sources that I analyse provide complementary points of view: the manuals display a pedagogical discourse, the conductors share their practical experience (implicitly testing the pedagogical discourse) and the players explain their opinions about conductors (implicitly testing the conductors' discourse). These sources are also situated in a natural cascade of time and influence: pedagogues educate conductors (as suggested by the agenda of these texts and confirmed by the conductors' testimonies) and conductors shape the players' rendition (as evidenced by praxis and attested by the players' testimonies).

The six conducting manuals that I analyse were written between 1950 and 2009. They offer the pedagogical perspective on orchestral conducting. The manuals are:

- Max Rudolf (1902-1995): *The Grammar of Conducting* (1950/1995)
- Elizabeth Green (1906-1995): *The Modern Conductor* (1961/1997)
- Joseph Labuta (1931-): *Basic Conducting techniques* (1982/2010)
- Henri-Claude Fantapié (1938-): *Le chef d'orchestre: Art et technique* [The conductor: Art and technique] (2005)
- Jean-Louis Petit (1937-): *Le chef d'orchestre* [The conductor] (2007)
- Gustav Meier (1929-): *The Score, the Orchestra, and the Conductor* (2009)

Other authoritative conducting manuals exist, such as Ilya Musin's (1967) and Ennio Nicotra's (2007), written respectively in Russian and Italian. To my knowledge, no English or French translations exist for these books, and due to my linguistic limitations, I have had to limit myself to manuals written in tongues in which I am fluent. The first three manuals are among the five most popular and respected in the United States, according to a study conducted by Deal et al. in 1985 (House, 1998, p. 4). The last three are among the most recent on the market, the last one being praised by conductors such as Marin Alsop and Antonio Pappano. Given the background of their authors, these publications may be seen to reflect various approaches to conducting, echoing notably German, Russian and French traditions. In an attempt to capture, or at least not disrupt, the natural cascade of influence these texts may have exerted on each other, and in order to trace chronologically possible evolution of thought in the conducting pedagogy, this study follows the order of their first edition. However, in order to analyse the most complete versions of these manuals, I deal with their latest editions.

All six authors took special care of their pedagogical legacy, either by revising their books several times (sometimes at a very advanced age) or by acquiring long pedagogical experience before writing down their texts for the first time (also at an advanced age). These facts attest to the importance of these manuals in their authors' eyes, requiring the authors' constant revision for a satisfactory rendition of their ideas. It is significant that all three authors with whom I have had email contact about their books (Petit, Fantapié and Labuta) have mentioned, from the very outset of our exchange, that they have written additional texts on the subject, complementary to their recently published or republished manuals.

I also analyse 58 testimonies, provided by 38 conductors of international stature, published between 1965 and 2003 in eight books. Some conductors provide two, three or four testimonies, often several years apart, offering helpful possibilities for comparison. Whereas I distribute the conducting manuals according to the year of their publication, I divide the conductors' testimonies according to the conductors' birth dates, facilitating historical comparisons between groups of

conductors as well. The 58 testimonies are of comparable length so as to convey the conductors' plural voice in a balanced way.

This study quotes abundantly the conductors' own words in order to best convey their beliefs. Not all conductors comment with equal eloquence on all matters. As Leonard Slatkin remarks, "most of the outstanding conductors learn the elements that make them outstanding by themselves" (Wagar, 1991, p. 261). It may be hypothesised that they also comment best on what they have discovered through their own experience, and perhaps, as Garnett puts it, emphasise more vividly "things that are [...] uniquely theirs and [...] that make them interesting as artists" (2009, p. 107).

This abundant quotation, not only of conductors but of all the practitioners, has direct effects on the very design of this dissertation. As has been previously mentioned, my main models (the Continuum and the Matrix) and various concepts connected to these models, are derived from the practitioners' testimonies. Moreover, the issues I discuss are those that the practitioners raise according to their own agenda, which I made mine. The topics they stress are the ones I address the most, according to my understanding of their priorities. As may be expected, a certain randomness prevails when adopting this method, and some important issues may have been forgotten by the practitioners. It may also be said that issues which have been eloquently addressed gained visibility by the very eloquence of the practitioners raising them. This is part and parcel of empirical studies, and I did not feel it was my role to act as a censor of the practitioners' testimonies by following my own theoretical agenda, however valid, rather than the practitioners' practical one, as some of these practitioners share at times their lifelong experience.

The conductors' testimonies are compiled in eight books:

- *The Conductor's Art* (ed. Carl Bamberger, 1965)
- *Conversations with conductors* (ed. Robert Chesterman, 1976)
- *Conductors on Conducting* (ed. Bernard Jacobson, 1979)

- *Maestro* (ed. Helena Matheopoulos, 1982)
- *Je serai chef d'orchestre* [I shall be a conductor] (Abbado, 1986/2007)
- *Conductors in conversation* (ed. Robert Chesterman, 1990)
- *Conductors in conversation* (ed. Jeannine Wagar, 1991)
- *The Cambridge Companion to Conducting* (ed. José Antonio Bowen, 2003)

Some editors are practising conductors, others are informed music lovers, a number of them have been raised in Europe, others in North America. In addition to Claudio Abbado's interviews published in Matheopoulos (1982) and Chesterman (1990), this study also analyses this conductor's children's book *Je serai chef d'orchestre* [I shall be a conductor] (1986/2007). The above-mentioned publications propose two types of documents. Bamberger's, Abbado's and Bowens' publications consist of texts written by conductors for the purpose of their publication (as far as the texts that I analyse are concerned). The five other books compile interviews of great conductors who reviewed and authorised these texts, implicitly agreeing, as Colin Davis points out, "to express their views for something as relatively permanent as a book" (Jacobson, 1979, p. 103).

In order to trace possible chronological trends, this study categorises the conductors into three groups. Group A, whose conductors' birth year starts in 1876 (median birth year 1899), ranges from Bruno Walter to Leonard Bernstein and comprises thirteen conductors. They provide twenty-three testimonies.

- Bruno Walter (1876-1962)
- Pablo Casals (1876-1973)
- Leopold Stokowski (1882-1977)
- Adrian Boult (1889-1983)
- Karl Böhm (1894-1981)
- Eugene Ormandy (1899-1985)
- John Barbirolli (1899-1970)
- Eugen Jochum (1902-1987)

- Herbert von Karajan (1908-1989)
- Igor Markevitch (1912-1983)
- Georg Solti (1912-1997)
- Carlo Maria Giulini (1914-2005)
- Leonard Bernstein (1918-1990)

Group B, whose conductors' birth year starts in 1921 (median birth year 1927), opens with Margaret Hillis and closes with Carlos Kleiber. It comprises also thirteen conductors. They provide eighteen testimonies.

- Margaret Hillis (1921-1998)
- Pierre Boulez (1925-)
- Charles Mackerras (1925-2010)
- Mstislav Rostropovitch (1927-2007)
- Colin Davis (1927-2013)
- Kurt Masur (1927-)
- Herbert Blomstedt (1927-)
- André Previn (1929-)
- Bernard Haitink (1929-)
- Nikolaus Harnoncourt (1929-)
- Christoph von Dohnányi (1929-)
- Lorin Maazel (1930-2014)
- Carlos Kleiber (1930-2004)

Group C, whose conductors' birth year starts in 1933 (median birth year 1941), starts with Claudio Abbado, concludes with Simon Rattle, and comprises twelve conductors. They provide seventeen testimonies.

- Claudio Abbado (1933-2014)
- Roger Norrington (1934-)
- Seiji Ozawa (1935-)

- Zubin Mehta (1936-)
- Charles Dutoit (1936-)
- Vladimir Ashkenazy (1937-)
- Ricardo Muti (1941-)
- James Levine (1943-)
- Catherine Comet (1944-)
- Leonard Slatkin (1944-)
- Ricardo Chailly (1953-)
- Simon Rattle (1955-)

The majority of the testimonies consist of the conductors' comments about their art. Bruno Walter and Adrian Boult also express their views about, respectively, Gustav Mahler as a conductor and Arthur Nikisch (Walter was an assistant to Mahler, and Boult studied with Nikisch). Additionally, Abbado's book for children provides a specific angle on the subject, whereas three instrumental virtuosos and conductors, Pablo Casals, Mstislav Rostropovitch, and Vladimir Ashkenazy, offer, through their double identity, a complementary perspective.

Finally, the present study analyses testimonies provided by 50 players and published in three books and six websites. These books are:

- Charles Blackman, *Behind the Baton* (1964)
- Robert L. Ripley in *The Cambridge Companion to Conducting* (Bowen ed., 2003)
- Donald Peck, *The Right Place, The Right Time* (2007)

The websites are:

- Diana Ambache survey: What Players Think Of Conductors (2001)
- Jay Friedman: Evaluating conductors (2004)
- Polyphonic survey: Baton down the hatches (2007)
- The Chicago Symphony Orchestra reminisce about Sir Georg Solti (2007)
- Cesar Aviles: How to Know if your Conductor is Good or Bad? (2010)

- “The Horn”: What Do Orchestral Musicians Expect From A Conductor? (2011)

I divide these testimonies into three groups, according to two criteria. A chronological criterion separates testimonies published in 1964 and after 2001. I have not found convincing testimonies dating from the intermediary period. I do not claim that such testimonies do not exist, but they have not been accessible to me. A certain degree of randomness has thus played a role in the way this dissertation has been shaped. It may be that, in the past, and except for Blackman's book, orchestral players were less inclined to evaluate (and possibly criticise) their conductors, for a host of reasons. Without delving too much into such sociological considerations, certain testimonies that I have dealt with address this issue and suggest explanations for this state of affairs. The second criterion distinguishes testimonies belonging to a collective survey in which individual players agreed to participate from those testimonies players wrote of their own initiative. I call the first Grouped Testimonies (they consist of short accounts of several lines up to one page), and the second Individual Testimonies (consisting of longer accounts of several pages up to an entire book). Group A belongs to the first generation of testimonies, Groups B and C to the second. Groups A and B are grouped testimonies, Group C gathers individual accounts. More specifically, concerning Group B, the interviews about Georg Solti are not available any more on the website of the Chicago Symphony Orchestra, as they were by the time I visited the website. I obtained the right to attach the sound files of these interviews to this thesis from the administration of this orchestra. They constitute Appendix 5. Similarly, the design of the Polyphonic website has changed substantially, not only allocating another link to the interviews I have analysed, but also dividing the text of these interviews into several parts, which could make their reading uncomfortable. Therefore, I attach the complete text of these interviews in Appendix 6. Hereunder, I identify the players' instrument and, where the information was available to me, in which orchestra they work or have worked, limiting myself to their last known position by the time of their testimony.

Group A comprises:

- Joseph Adato (percussion, Cleveland Orchestra)

- Sidney Cohen (viola, Pittsburg Symphony Orchestra)
- Harold Farberman (timpani, Boston Symphony Orchestra)
- George Gaber (percussion)
- Bernard H. Garfield (bassoon, Philadelphia Symphony Orchestra)
- Albert Goltzer (oboe, New York Philharmonic)
- Sam Green (tuba, Cincinnati Symphony Orchestra)
- Edouard Kesner (violin, Detroit Symphony Orchestra)
- Werner Lywen (violin, concertmaster, Washington Symphony Orchestra)
- Richard Moore (horn, Metropolitan Opera House Orchestra)
- George Morgulis (viola, New York Philharmonic)
- Ferdinand Prior (oboe, New York Philharmonic)
- Robert Rohe (double bass, New Orleans Symphony Orchestra)
- William Schneiderman (percussion, Pittsburg Symphony Orchestra)
- William Schoen (viola, Philadelphia Orchestra)
- Harry Shulman (oboe, Pittsburg Symphony Orchestra)
- Joseph Singer (violin, New York Philharmonic)
- Ray Still (oboe, Chicago Symphony Orchestra)
- Abe Torchinsky (tuba, Philadelphia Symphony Orchestra)

Group B comprises:

- Victor Aitay (violin, concertmaster, Chicago Symphony Orchestra)
- J. Lawrie Bloom (clarinet, Chicago Symphony Orchestra)
- William Buchman (bassoon, Chicago Symphony Orchestra)
- Rachel Byrt (viola)
- Tony Catterick (horn, Ambache Chamber Ensemble)
- Dale Clevenger (horn, Chicago Symphony Orchestra)
- Marcia Crayford (violin, Ambache Chamber Ensemble)
- Don Ehrlich (viola, San Francisco Symphony)
- Ruth Ehrlich (violin, Ambache Chamber Ensemble)

- Judith Herbert (cello, Ambache Chamber Ensemble)
- Adolph "Bud" Herseth (trumpet, Chicago Symphony Orchestra)
- Robert Levine (viola, Milwaukee Symphony)
- John Locke (percussion, Baltimore Symphony Orchestra)
- Sam Magad (violin, concertmaster, Chicago Symphony Orchestra)
- Robert McCosh (horn, Calgary Philharmonic)
- Craig McNutt (timpani, Rhode Island Philharmonic)
- Michael Mulcahy (trombone, Chicago Symphony Orchestra)
- Catherine Musker (viola, Ambache Chamber Ensemble)
- Gaylon Patterson (violin, Memphis Symphony Orchestra)
- Jeremy Polmear (oboe, Ambache Chamber Ensemble)
- Max Raimi (violin, Chicago Symphony Orchestra)
- Francine Schutzman (oboe, National Arts Centre Orchestra)
- Brian Sewell (bassoon, Ambache Chamber Ensemble)
- Stephen Stirling (horn, Ambache Chamber Ensemble)
- Gary Stucka (cello, Chicago Symphony Orchestra)
- John Bruce Yeh (clarinet, Chicago Symphony Orchestra)

Group C comprises:

- Cesar Aviles (violin, Santa Fe Pro Musica)
- Jay Friedman (trombone, Chicago Symphony Orchestra)
- "The Horn", as identified in his website
- Donald Peck (flute, Chicago Symphony Orchestra)
- Robert L. Ripley (cello, Boston Symphony Orchestra)

This dissertation proposes three types of comparison, as far as players' testimonies are concerned: a chronological one between Group A on the one hand, and Groups B and C on the other; a comparison between grouped and individual testimonies; and a comparison between testimonies provided by string, wind and percussion players. These comparisons aim to identify

chronological differences between groups of players (older versus more recent testimonies) and between succinct versus longer testimonies. They are also intended to trace if and how sound production (bow versus breath and mallet), orchestral status (tutti string players versus orchestral soloists such as winds and percussion), or players' topographic situation within the orchestra (front stage, backstage) affect their perceptions of the orchestral phenomenon and their expectations from the conductor.

All testimonies are written texts, except for nine interviews broadcast on the Chicago Symphony website in 2007 as a tribute to Georg Solti for the tenth anniversary of his death. The solemnity of the moment, the prospect of having these interviews uploaded on Internet, displaying the players' beliefs in something 'as relatively permanent as a website' (to paraphrase Colin Davis in Jacobson, 1979, p. 103), the pre-recorded aspect of this medium allowing the players to review (and possibly amend) their testimonies, and their trustworthy and stable opinions about the conductor (they knew him for a long time, a long time ago), afforded these interviews an adequate degree of reliability to be considered in this study.

Methodology

As proposed in the Introduction, this study addresses three primary questions:

- I. What do practitioners say about orchestral conducting?
- II. Can we divide the phenomenon into segments to facilitate the analysis of the practitioners' testimonies, and if so according to what criteria?
- III. Can we validate the practitioners' words by analysing orchestral performances? That is, can we assess how accurately the practitioners' words describe what the conductor does on the podium, and, conversely, how much of the conductor's actions may be traced in the practitioners' testimonies?

This section presents the two models I have developed to analyse the practitioners' accounts (Chapters Two through Six) and the video performances (Chapter Seven). The Visible Action Continuum and the Thematic String Matrix are both designed to capture and categorise the topics

that the practitioners address, proposing different angles for the same topics, hence applying the reshuffling principle explained in later sections. They also help quantify these topics and propose comparisons between individual and collective opinions. The common denominator between the Continuum and the Matrix is the *topic*. In this dissertation, this term signifies the smallest unit of opinion and may point to simple ideas, such as showing the first beat by a downward movement, or to more complex concepts such as engaging with musicological research. The two models organise and quantify topics according to different criteria, and therefore are likely to construct different meanings.

Several sources, musical and other, have informed the development of these models. The literature review has mainly pointed to musical sources, several authors segmenting the phenomenon into categories or chronological stages. The non-musical sources consist of psychological theories, notably Neuro-Linguistic Programming (NLP), and semiotics, notably the work of Charles S. Peirce (1892/2009). NLP thinkers, such as Richard Bandler and John Grinder (1979 and 1983) or Robert Dilts (1996) identify six segments called Logical Levels of Change, defining the favouring factors for personal change: Environment, Behaviour, Capabilities and Skills, Beliefs and Values, Identity, Purpose. The Visible Action Continuum (Figure 1.1) analyses the conductor's persona and activity, and maps this system to a certain degree. Behaviour relates to both Attitude and Action, Capabilities and Skills to Aptitude, Beliefs and Values to Knowledge, and Identity to Being.

Peirce (1892/2009) has developed the semiotic triple tripartite: firstness, secondness, and thirdness; iconicity, indexicality and symbolism, *representamen*, *representatum* and interpretant. This fairly complex system aims to identify the conditions in which a sign adequately conveys its meaning, depending not only on the sign itself but also on the person displaying it, the person perceiving it, and the environment (cultural and other) in which this sign is being exhibited. Peirce's system has informed my Thematic String Matrix (Figure 1.2). Musical Material, for example, may be seen to comprise both the *representamen* (the score) and the *representatum* (the sound being symbolically represented in the score). On another level, the *representamen*

may designate the sound, and the *representatum* the meaning that the sound may harbour (emotion, atmosphere, narrative, structure, or any other meaning). As pointed out by Umberto Eco (1977 and 1986) and Naomi Cumming (2000), Peirce explicitly acknowledges the possibility for a *representatum* to become a *representamen* for a new *representatum*, that is for an object to become the sign for a new object, *ad infinitum*. Peirce's semiotics have also informed the theories of Jean-Jacques Nattiez (1990), and, on the level of the string, The Conductor's Self may point to Nattiez's poietic level (i.e. the person displaying the sign). Finally, by having the players' voice heard, this dissertation acknowledges both Nattiez's aesthesic level (i.e. the person perceiving the sign) and Peirce's concept of interpretant (the specific circumstances where the sign is being perceived and interpreted).

With these two models (the Continuum and the Matrix) I aim to propose as rigorous a method as I can to analyse what is admittedly a fairly slippery territory, displaying multiple and interconnected ramifications. Indeed, many times, conductors find themselves at the fulcrum between music-making (including music history and performance practice), physiology (including conducting technique and hearing abilities), pedagogy (including instrumental technique and musical interpretation), psychology (including leadership and communication) and sociology (including public taste, stage etiquette and the ever-evolving concept of power).

The Visible Action Continuum

The Visible Action Continuum organises topics according to what an external observer may perceive of the conductor's persona and rests on the assumption that not all of it is visible.

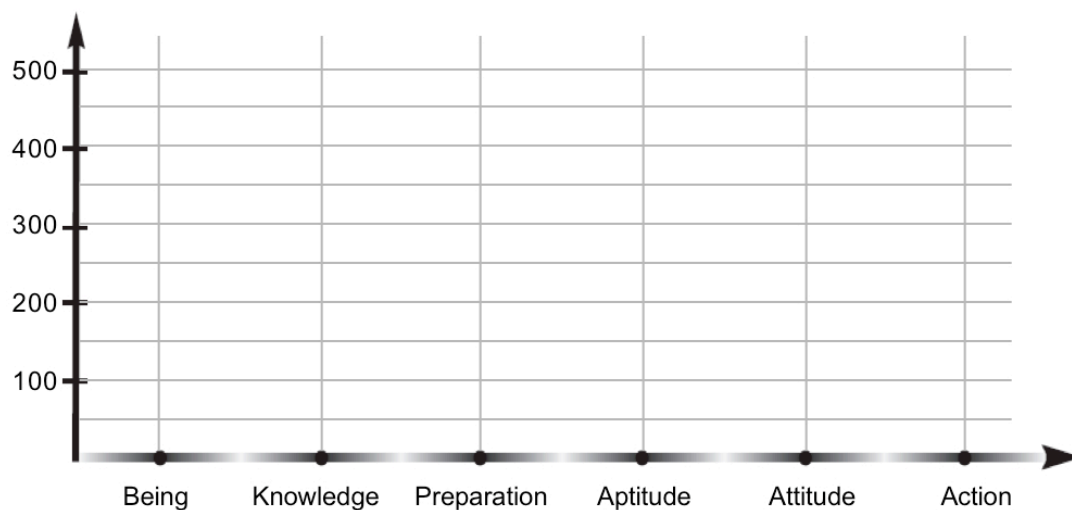


Figure 1.1
Visible Action Continuum
Aspects of the conductor's persona as described in the testimonies

'Being' refers to the essential qualities that conductors display. Being generous, enthusiastic or eclectic are adjectives emphasising who the conductor is as a person. It is often not explicitly visible to the observer (whether player or spectator) and only accessible through inference. Impalpable as they are, these qualities affect the persona of the conductor and, as practitioners point out, the orchestral utterance elicited from the players.

'Knowledge' displays an increased apparentness as it assumes previous actions from the conductor in acquiring this knowledge. Playing an instrument or speaking several languages is discernible and may affect the orchestral outcome, if only by the conductor's prestige that it helps build among the players. Players comment, for example, on Solti's qualities as a pianist, and Ormandy attributes the sound he elicits from the orchestra to his education as a violinist.

'Preparation' consists in issues such as analysing scores, rehearsing beat patterns or engaging with musicological research, all of which is invisible to the observer but more easily assessed than knowledge. Players often comment on the degree of preparation they sense from the conductor. It not only affects the player's appreciation of the conductor (which is important in the long run) but quite directly impacts on the quality of the rehearsals and performances.

The next three points of the Continuum enter the realm of visibility. 'Aptitude' addresses the conductor's capabilities. Some of these connect to mental skills, such as transposing orchestral parts, learning a piece from memory or the ability to concentrate. Others concern more temperamental aspects, such as the ability to bond people. Aptitudes are more perceptible to the observer than the previous points of the Continuum, as conductors are sometimes called upon to activate these in specific situations. Whether they do so or not reveals to the players the presence or absence of these aptitudes. The same has been said about Preparation in a more diffused way. However, Aptitude is more detectable, as having absolute pitch, knowing the piece from memory or keeping a steady tempo are fairly black-or-white attributes, more discernible to players than score study or musicological research.

'Attitude' addresses the conductor's way of behaving: physically relaxed, respectful, enthusiastic, or flexible (intellectually, musically or otherwise). No real actions are involved but physical clues may be traced: muscle tension, facial expression, bodily posture and behaviours. This study discusses only marginally the conductor's consciousness of their attitude, as it may depend on their personalities, the intensity of the attitude and the circumstances of their display. It pragmatically analyses the practitioners' observations. Finally, 'Action' reveals the most visible part of the conductor's activity: beating time, displaying independence between arms, showing cues and dynamics, indicating tempo and measure changes, or speaking to the orchestra.

The X axis of Figure 1.1 displays segments of progressive shades of grey, aiming to symbolise the continuous nature of the Continuum and counterbalance the discrete connotation which the points may convey. Some topics are fairly clear-cut and sit perfectly on the points of the axis: being generous cannot be taken as a knowledge, nor playing the piano as an attitude. However, some topics may sit between two points and be allocated to one point or the other according to context: being eclectic is a way of being but also assumes the knowledge supporting this eclecticism; playing the violin is a knowledge but may also constitute a long-term preparation increasing the conductor's understanding of the string section; being flexible refers to an attitude but may translate into actions aiming to follow the soloist's tempo or dynamics. The Y axis of the Continuum signals the number of topics that a given point of the Continuum gathers across the

sampled source-texts, a piece of information derived from the table housing all topics of a particular testimony (see Appendix 1: Table 1.1 and Figure 1.1).

The Continuum adopts a phenomenological approach to conducting, aiming to elicit discussion about the visible and invisible parts of orchestral conducting. The next section develops the founding concepts of the Matrix. It is a lengthy part of this chapter and deals with twenty-five themes, included in six strings.

The Thematic String Matrix

Whereas the Visible Action Continuum organises topics according to the conductor's persona, the Thematic String Matrix does so according to the conductor's work primarily. In a way, it may be said that the Continuum provides a *subjective* approach to the testimonies, as it deals with the subject (the conductor) and the Matrix an *objective* approach, as it deals with the object (the conductor's work). The Matrix categorises topics into themes and strings. The topic being the minimal unit of opinion, the theme may be understood as the sentence, and the string as the paragraph. The theme gathers several topics related to a common subject (such as the conductor's relation to the composer), whereas the string concatenates several themes living under the same umbrella (such as the musical material the conductor works with). Before explaining one by one every theme and string, it is helpful to be aware of the *Reshuffling Principle*. It constitutes one of the founding principles of this research and consists in the same topic being viewed from two angles, reorganising on the Matrix all topics previously displayed on the Continuum (see Appendix 1: Table 1.2 and Figure 1.2). For example, the treatment of the conductor's pedagogical aptitudes appears on the Continuum under Aptitude, whereas in the Matrix this topic appears under Pedagogy, which belongs to the wider string of Interaction with the Orchestra. Both environments – Aptitude and Pedagogy – help understand this parameter of the conductor's work, but each one sheds a different light of the topic. Under Aptitude, the conductor's pedagogical skills are discussed along other skills such as absolute pitch or conducting techniques (all of which impacts, directly or indirectly, on the conductor's pedagogy),

whereas under Pedagogy this topic is approached along specific didactic strategies: metaphors, technical advice, musical instructions (such as phrasing or dynamics).

Practitioners develop hundreds of topics about orchestral conducting. They sometimes address identical topics and express identical opinions, but more often they develop similar rather than identical ideas, using their own vocabulary, metaphors and idiosyncracies, all of which requires contextualisation to be fully understood. Therefore, structures (themes) and hyper-structures (strings) are important tools, as they facilitate this contextualisation. They also determine the cognitive environment of the ensuing discussions.

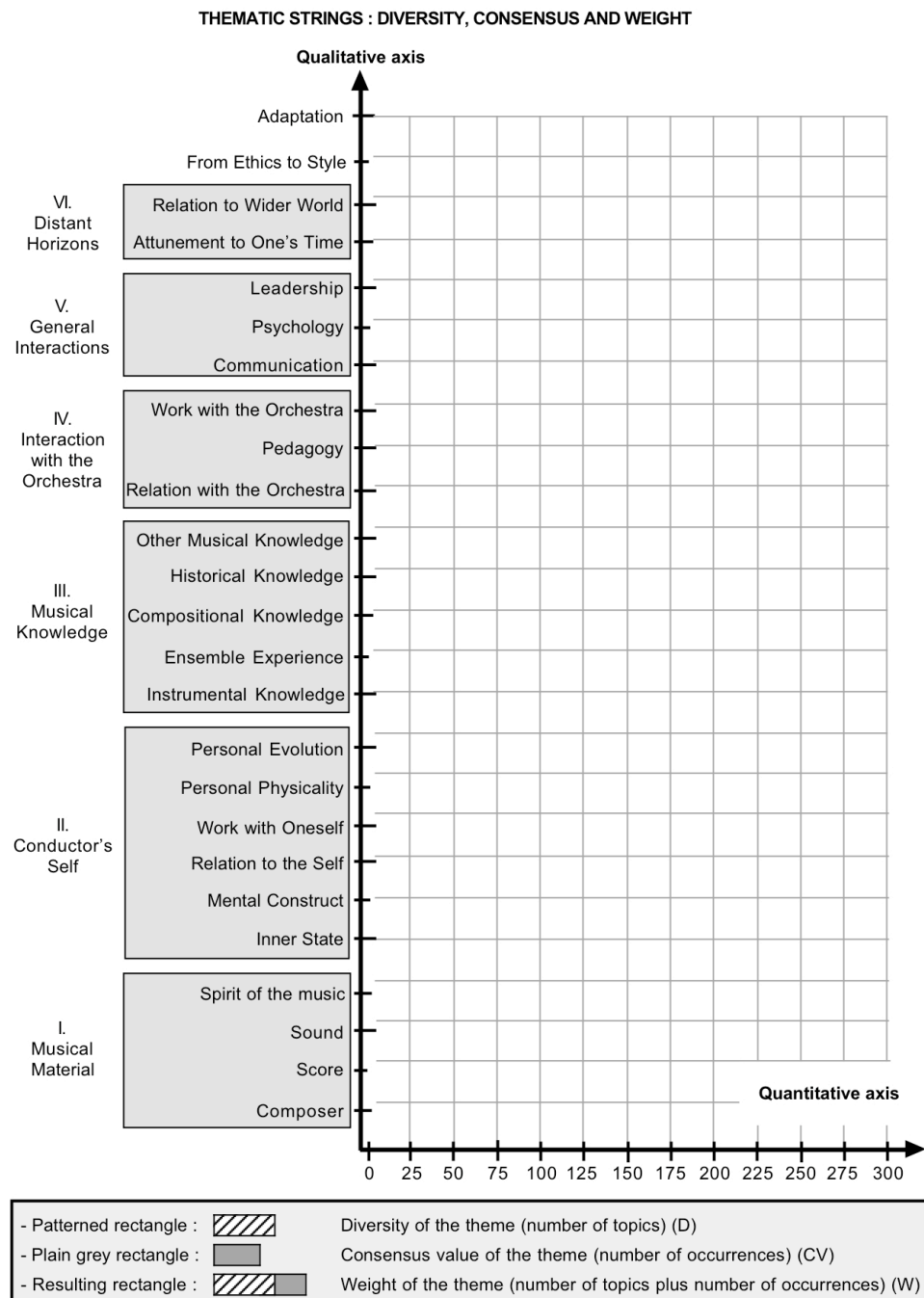


Figure 1.2
Thematic String Matrix
Aspects of the conductor's work as described in the testimonies

The six strings of the Matrix are the following:

- I. 'Musical Material' deals with the composer, the score, the sound and the meaning of the music.

- II. 'The Conductor's Self' discusses all matters concerning the conductor's person and persona, whether defined aspects or more impalpable traits.
- III. 'Musical Knowledge' addresses several types of knowledge the conductor displays.
- IV. 'Interaction with the Orchestra' studies what happens in the intercourse between the conductor and the players
- V. 'General Interactions' refers to the conductor's interpersonal modalities, within and beyond the orchestral frame.
- VI. 'Distant Horizons' examines how conductors deal with the wider social environment, whether this affects their music-making or not.

The twenty-five themes of the Matrix are the following:

String I: Musical Material

- 1. 'Relation to the Composer' concerns itself with the way the conductor relates to the composer as a person and artist.
- 2. 'Relation to the Score' tackles the conductor's approach to the written material.
- 3. 'Relation to the Sound' examines how the conductor deals with the orchestral utterance.
- 4. 'Spirit of the Music' explores how the conductor connects with whatever meaning the music may be seen to convey.

String II: The Conductor's Self

- 5. 'Inner State' points to the conductor as a person and artist.
- 6. 'Mental Construct' refers to the cognitive activity the conductor develops to assist their music-making.
- 7. 'Relation to the Self' explores how the conductor deals with him– or herself.
- 8. 'Working Methods with Oneself' investigates the conductor's personal work within and beyond the orchestral situation.
- 9. 'Personal Physicality' examines issues connected to the conductor's corporeal behaviours.

10. 'Personal Evolution' tackles the unfolding of the conductor's artistic life over time.

String III. Musical Knowledge

11. 'Instrumental/Vocal Knowledge' refers to the conductor's expertise about instruments and voices.
12. 'Ensemble Experience' deals with the conductor's ensemble practice, whether chamber music groups, orchestras or choirs.
13. 'Compositional Knowledge' addresses the conductor's acquaintance with aspects of the creative process.
14. 'Historical/Stylistic Knowledge' has to do with the conductor's expertise in music history and stylistic issues.
15. 'Other Musical Opinions/Knowledge' explores musical knowledge that does not fit well into the previous categories.

String IV: Interaction with the Orchestra

16. 'Relations with the Orchestra' looks into interpersonal aspects between the conductor and the orchestra.
17. 'Pedagogy' examines the didactic principles the conductor adopts with the players.
18. 'Working Methods with the Orchestra' delves into the wider field of rehearsal techniques.

String V: General Interactions

19. 'Communication' deals with the conductor's stance as a communicator.
20. 'Psychological Skills' points to the conductor's acquaintance with the psychological aspects involved in their task.
21. 'Leadership' refers to the conductor's position as a leader.

String VI: Distant Horizons

22. 'Attunement to One's Time' examines the conductor's attitude to various aspects of modernity, excluding however the aesthetic facet of modernity addressed under Relation to the Composer
23. 'Interaction with the Wider World' studies the way the conductor interacts with the wider social fabric.

The next two themes do not comfortably blend in any of the twenty-three previous ones. Rather, they intersect them at various points.

- A. 'From Work Ethics to Stylistic Stance' connects the way the conductor approaches his or her task (score preparation, performance practices, conducting techniques, concert etiquette or human and professional intercourse with players) with the ensuing artistic outcome.
- B. 'Adaptation' to the musical reality refers to the conductor's adaptive attitude. It may cross paths with Personal Physicality, Working methods with the Orchestra, Working methods with Oneself, and Relation to Sound.

Allocating topics to one theme or the other is not always unproblematic. The next section emphasises the rationale for possible ambiguous situations.

Rationale for specific allocations

Due to the volatility of certain topics, this study follows three principles for allocating certain topics to certain themes: the *intersectional identity*, the *dominant colour*, and the *specifying factor*. Additionally, the *Reshuffling Principle* proposes a model which informs the general spirit of this dissertation, considering a particular phenomenon under various angles.

Intersectional Identity occurs when a theme intersects two or more others, and yet retains a definable identity.

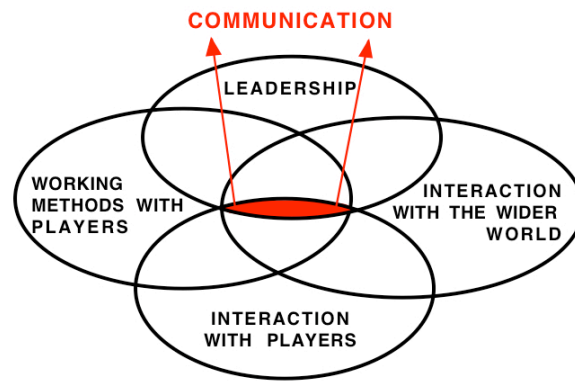


Figure 1.3
Intersectional identity

Communication may be seen as partaking of Leadership, Working Methods with the Orchestra, Interaction with the Orchestra, and Interaction with the Wider World. However, it is a theme in its own right, enjoying a widely recognised conceptual identity, researched in academic studies and identified in a wide variety of institutions.

Dominant Colour refers to issues which cannot be identified as independent and meaningful units. They, too, partake of two or more themes but, failing to display a clear and individual status, they adopt the dominant colour.

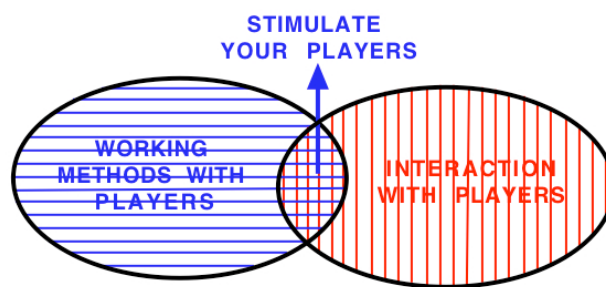


Figure 1.4
Dominant colour

Stimulating players may be seen to partake equally of Working Methods with the Orchestra and in Interaction with the Orchestra. However, since conductors meet their orchestra mainly for professional purposes, it seems more pertinent for this study to consider their stimulations as integral to a work situation rather than referring to it as an interpersonal exchange.

Specifying factor allows some themes to embrace other, more specific ones, and yet to harbour remaining issues that could not receive a more specific allocation.

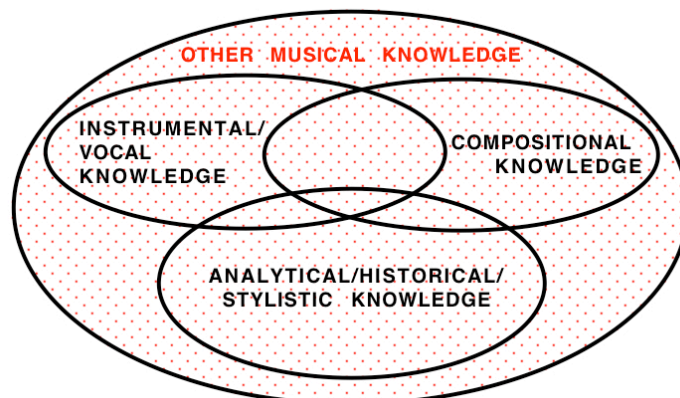


Figure 1.5
Specifying factor

Other Musical Knowledge belongs to Musical Knowledge, which also includes instrumental/vocal knowledge, analytical/historical knowledge and compositional knowledge. However, other musical knowledge may exist which would not belong to any of the former categories and, for the purpose of this study, will be referred to as 'other'.

This study points to the volatility of certain topics involved in the conductor's activity, whether seen through the Continuum or the Matrix. The *Reshuffling Principle* aims to validate this state of mind and propose its visual representation. The conducting art, whether explored by manuals, conductors, or players, displays an ever-changing image, attested by the pedagogues' constant revision of their manuals and the conductors' frequent re-evaluation of their art. The Continuum and the Matrix, as represented in Figures 1.1 and 1.2, may be seen as organic wholes. However, they may also be reshuffled and exhibit new morphologies.

Figure 1.6a aims to represent the Continuum and the Matrix merged into a unified whole.

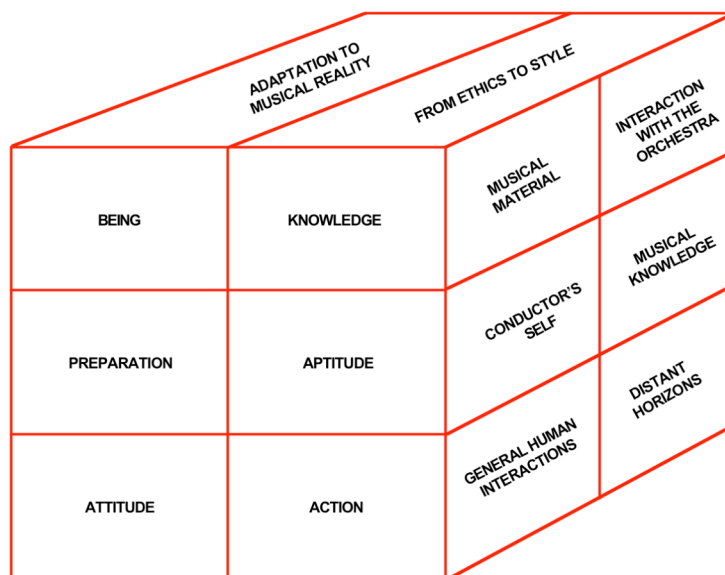


Figure 1.6a
Reshuffling Cube

Figure 1.6b displays a reshuffled physiognomy of these models.

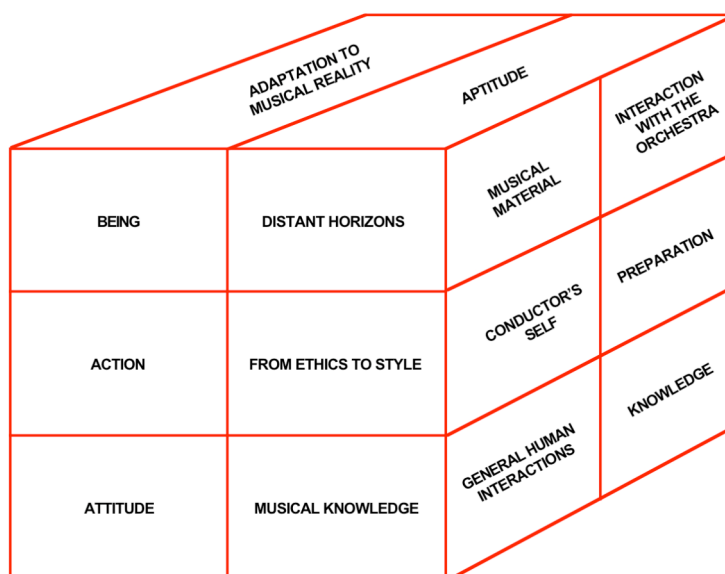


Figure 1.6b
Reshuffled Cube

'Being' may sit next to 'Distant Horizons'. It is the case when Bernstein, because of who he was, committed himself to political events and philosophical discourses, such as the concert celebrating the fall of the Berlin Wall. 'Preparation' and 'Interaction with the Orchestra' seem also to sit happily side by side. This occurs when, for instance, players consider Abbado's meticulous preparation as a sign of respect towards them. The Reshuffling cube may also suggest three-

dimensional images, combining, for example, 'Vocal knowledge', 'Attitude', and 'Ethics to Style'. According to Norrington's experience as a singer (Vocal Knowledge), conducting early music implies a certain approach to scores and players (Attitude) that needs to be nourished by a work ethic and an aesthetic vision (Ethics to Style), not only by advocating the use of period instruments. The Reshuffling cube may be seen to symbolise the power and flexibility of the human mind to engage simultaneously with complex cognitive situations, bringing together multiple concepts, thus transcending them all. The next sections have to do with the quantitative aspect of this dissertation.

So far, this research has explained my two main models and the principles I use to categorise topics. The models are designed not only to organise individual testimonies but also to compile multiple ones. In so doing, they quantify the practitioners' opinions and allow comparison between groups of testimonies. This treatment of data has generated several concepts.

The Diversity of a theme indicates its number of topics. If a theme contains 12 topics its diversity is 12 ($D=12$). The Consensus Value indicates the level of agreement a topic or a theme reaches among practitioners. If 15 conductors concur on a specific topic, the Consensus Value of this topic is fourteen ($CV=14$), representing the additional popularity this topic gains by being shared by 14 other conductors. This concept shows how pervasive an idea is among a given group of practitioners. The Weight of a theme is a measure of its overall importance within a given source, adding its diversity to its consensus value. If a theme houses 2 topics, the first reaching a consensus value of 10 and the second of 9, its diversity is two ($D=2$), its total consensus value is 19 ($CV=19$), and its weight is 21 ($W=21$). The proportion between diversity and weight indicates the Average Consensus Rate, in this case 10.5 ($ACR=10.5$). These four concepts are instrumental in discussing groups of practitioners by tracing collective trends. Chapter Four delves into such analyses and further explains these concepts. The themes that reach the greatest weight are referred to as Top Themes. Given the great number of topics that a Top Theme may contain, it is important for this study to identify inner trends within these themes. Two concepts are instrumental in doing this: the nebula and the cluster.

This research covers at times topics that display strong resemblance to each other, rather than total identity, and which, together, may be seen to belong to a larger concept. How many topics may be grouped into one general idea, and when, on the contrary, an issue needs a category of its own, are pervasive questions that I sometimes addressed through my experience as a practitioner, when logic alone was wearing thin. This (necessarily subjective) approach does not preclude rigour and consistency, which I steadily pursued in order to provide a robust frame for discussions. When suitable, I therefore propose two additional sub-groupings to categorise the topics that the practitioners address: the nebula and the cluster. The nebula groups topics closely related to a common idea: playing the score on the piano, listening to recordings, and singing the orchestral parts all refer to different aspects of score study. The cluster indicates different qualities of the same topic: when addressing baton technique practitioners cite various adjectives, such as precise, economical, beautiful, expressive or organic. More of these concepts are developed as they come into play in this dissertation.

Before concluding this chapter, it is worth discussing the general design of this research and addressing a natural concern of the researcher regarding the validity of the knowledge that he or she produces. The literature review has pointed to the dialectics between practitioners and scholars, that is between those who do and those who analyse. In real life, however, this dichotomy applies less than it may seem, as the doers rarely abstain from any analysis and the analysts from any practice. It is far from obvious that the best performers are the best analysts, and vice versa. Some players may have a very convincing insight into their art but share their knowledge less than convincingly. Conversely, some scholars may have a virtuoso writing ability but less insight into their artistic field. However, when it comes to conductors, it seems that artistic and analytical/communicational abilities go hand in hand to a larger extent than among other performers. Indeed, by their very status as explainers and pedagogues, great conductors are also good communicators and are expected to be articulate about their opinions. This capability is even a measure of their talent and seems to legitimate them as valid speakers about conducting. The same applies to the authors whose conducting manuals I analyse, who spend years of work and hundreds of pages of text in analysing the phenomenon in order to pass on their knowledge.

The situation is less clear for players. This study analyses collective and individual testimonies. Whereas in social situations, those who speak well are not always those who carry the most interesting information, when it comes to publishing books this applies to a lesser extent, as one may assume that if an author has convinced a publisher to put a book on the market, there is a good probability that the text displays some validity of content. Moreover, when these authors have tens of years of experience as players in world-class orchestras, it can be assumed that they qualify to effectively represent the orchestral phenomenon at the receiving end. This 'natural selection' applies less for Internet material due to the relative casualness of the medium. However, not only the seriousness of the websites but, more importantly, the profiles of the players and the content of their testimonies, legitimate these musicians as reliable sources of information.

Once the sources have been accepted as authoritative, it is the researcher's methodology that needs validation. Five fundamental principles support this research. First, it rests on the principle of triangulation: a phenomenon is more fully understood when viewed from several perspectives. Toney (2000) analyses Schleicher's pedagogy and examines how consistent it is with other textbooks on conducting and to what extent his students comprehend his pedagogy. The present dissertation expands this triangulation from a pedagogical environment to real-life: the textbooks are the common point, the conductor/pedagogue's point of view expands to testimonies of leading conductors, and the receiving end consists of professional orchestra players instead of students.

Second, this dissertation applies the principle of plural voice. Lee (2008) compares three conducting manuals in order to cross-examine their respective characteristics. This dissertation studies six manuals, stemming from various cultural backgrounds and spanning a period of about sixty years, providing possibilities of pedagogical and chronological comparison. In the similar spirit of plurality, Konttinen (2008) investigates the Finnish school of conducting by interviewing several leading conductors from Finland. Garnett (2009) examines choral conducting by both filming and interviewing British choral conductors. This dissertation analyses the testimonies of

38 leading conductors, divided into three chronological groups in order to capture possible chronological evolution. To my knowledge, no systematic study of orchestral players' opinions has been conducted. This research examines the testimonies of 50 professional musicians, divided into two chronological groups and three groups according to instrumental specialism: strings, winds and percussion.

Third, the models which this research has inferred from the practitioners' testimonies apply the principle of themes and topics. Alan J. Gumm, Sharyn L. Battersby, Kathryn L. Simon and Andrew Shankles (2011, online) analyse eighty-four conductors and identify six main functions of the conductor, each function consisting of several topics (between ten and twenty-three). This study identifies twenty-five themes: some are grounded in the part of the phenomenon which is apparent to the observer, some in the part which is not apparent, and some are not visible at all, but only accessible through the personal experience the practitioners share in their testimonies.

Fourth, the practitioners' testimonies are cross-examined with scholarly studies about orchestral conducting and other fields possibly informing the phenomenon: performance studies, cognitive research, psychology, non-verbal communication, leadership, and movement analysis. This cross-examination is instrumental in comprehending the practitioners' experiential (and possibly subjective) discourse in regard to the observational (and allegedly more analytical) approach of scholarly research. Connecting these two bodies of knowledge helps to better understand the practitioners' undocumented and/or intuitive assertions, which then gain validity by being supported by systematically recorded facts. Conversely, this approach is also helpful in expanding the possible field of applicability of laboratory-like experiences to real-life situations, validating the researcher's work by the practitioners' hands-on experience.

Fifth, this dissertation tests words against action and engages with a video analysis, mapping the performance onto the models informed by the text-based study. Hinton (2004) analyses the video of his own conducting, examining the 'behind the notes' concept. Garnett (2009) reviews various theories which could be instrumental in assessing the conductor's gestural discourse, and

analyses videos of choral rehearsals. Faber (2012) analyses conducting issues in Copland's *Appalachian Spring*, informed by his own performance of this work. My analyses of Bernstein's and Boulez's videos conducting Mahler's Second Symphony are informed by the models inferred from the text-based study, Laban Movement Analysis, theories of non-verbal communication, and my own performance of Mahler's Second Symphony in a chamber version.

Conclusions

Chapter One has reviewed the two models (Continuum and Matrix) and the three sources (pedagogues, conductors and players) informing this study. The Continuum is designed to address the issue of visibility, or lack thereof, involved in orchestral conducting. The Matrix aims to facilitate discussions about possible divergences of opinions concerning the phenomenon.

The Visible Action Continuum categorises the topics that the practitioners address, according to their visibility to an external observer. It spans from 'Being', 'Knowledge' and 'Preparation', all of which are unapparent aspects of the phenomenon, to 'Aptitude', 'Attitude' and 'Action', which display varying degrees of visibility. It has been proposed that the categorisation of topics on the Continuum may be problematic, thus needing contextual interpretation.

The Thematic String Matrix allocates topics according to their content, regardless of their visibility. The Matrix spans from Musical Material, The Conductor's Self and Musical Knowledge (all of which have to do with the composer and the conductor) to Interaction with the Orchestra, General Interactions and Distant Horizons (addressing the conductor's relation to the players and the wider world). Two additional themes, From Ethics to Style and Adaptation, cross paths with the other themes.

Addressing through the Matrix the topics previously categorised on the Continuum is an application of the reshuffling principle, which proposes that examining the same topics under different angles provides additional insight. Chapter One has also highlighted rationales for topic allocation (the intersectional identity, the dominant colour, and the specifying factor) and

developed concepts necessary to better understand the quantitative information supplied by the Matrix (Diversity, Consensus Value, Weight, Average Consensus Rate, Top Themes, Nebulae and Clusters).

The sources informing this study are likely to display complementary perspectives on the orchestral phenomenon and are situated in a natural unfolding of time and causality: pedagogues educate conductors, conductors direct players. All sources divide into chronological groups in order to trace possible historical evolution: the six manuals divide according to their publication year, the 38 conductors according to their birth dates. The 50 players' testimonies not only divide along chronological lines but also according to communication procedures and instrumental specialism. This study seeks to trace whether and how these factors affect the practitioners' opinions.

Finally, this chapter has discussed the validity of the sources and methodologies, and their likelihood to provide meaningful knowledge.

Chapters Two and Three proceed to examine the practitioners' testimonies respectively through the Continuum and the Matrix, and do so by comparing from the outset all three sources (manuals, conductors and players) to ensure dynamic discussions around complementary, or sometimes conflicting, opinions.

Chapter Two: Analysing the testimonies through the Visible Action Continuum

Chapter One has reviewed my sources and described my methodologies. Chapter Two delves into the actual analysis of the practitioners' testimonies according to the Visible Action Continuum. This model follows a phenomenological logic, distributing topics according to what an external observer may perceive or not of the process. As will be seen, practitioners comment at times on aspects they do not fully perceive, but rather only conjecture. So do scholars. Garnett, for example, speaks of the conductor's 'ear and mind contact' (2014, online), both of which practitioners may only infer, notably through the conductor's corporeal behaviour. The Continuum aims to access these unapparent aspects of the phenomenon as well. It has been proposed that it is not the content of a particular topic that makes it more or less fit to be analysed by the Continuum or the Matrix; it is the approach to the topics that changes with the model. As shown in Appendix 1.1 and 1.2, all topics that practitioners address may be allocated into both models.

In order to reflect as closely as possible the practitioners' opinions, this chapter quotes their words abundantly. Many names are cited here, and it could be difficult for the reader to assess whether it is a pedagogue, conductor, player or scholar who is making a specific point. This study refrains from the assumption that the reader will have remembered the ninety-four practitioners' names presented in Chapter One, and their specific qualifications. In situations of possible ambiguities, references to names may be followed by a letter pointing to the author's identity: (M) for manual (C) for conductor (P) for player and (S) for scholar, with the awareness, however, that pedagogues, conductors, players or scholars may interchange identities in real life. These abbreviations point principally to the status under which the authors share their beliefs within the terms of reference of this dissertation, some authors being referred to as scholars here, even though they may be more widely known as performers. Tedious as it may appear, this disambiguation avoids, for example, that Green-the-player, Levine-the-conductor, Meyer-the-scholar, or Moore-the-player would be mistaken as Green-the-pedagogue, Levine-the-player, Meier-the-pedagogue, or Moore-the-scholar.

The holistic approach of this study makes it impossible to discuss in full detail all the topics practitioners raise. Some subjects are more substantially developed than others. This may be due to the scholarly literature addressing some topics more than others, or to the comprehensiveness of the practitioners' viewpoints, which sometimes call for less further comments, or simply to the necessity to progress with the study. It is both the strength and weakness of this research to see orchestral conducting in a holistic way and from various angles. It seems scarcely feasible to investigate fully all the issues addressed, even those deserving more attention.

Two caveats concerning this study have to do with linguistic issues. The first is the confrontational tone players use when it comes to their opinions about conductors, often revolving around the conductors' ego, their lack of humility towards composers and their disappointing attitudes towards players. It would be detrimental to place an exaggerated focus on this, but it would be equally detrimental to omit it totally. Henry Pleasants (S) points out: "orchestra musicians [...] play more or less the same notes in more or less the same way under the daily supervision of a variety of opinionated conductors year in year out" (Lawson, 2003, p. xii). This may account for the mindset of several orchestra players and explain why they comment about conductors the way they do.

The second has to do with what Garnett (2013, online) calls "the mythologies" surrounding conductors. Such mythologies may concern the players' expectations from the conductor: "[being] father, teacher, witch, doctor, lawyer, philosopher, medicine man, dictator, politician, salesman, confessor and friend, all in one" (Blackman, 1964, p. 105). Henri-Claude Fantapié humorously remarks: "they would not dislike [having] a superman [on the podium]" (2005, p. 19).¹ Other mythologies may have to do with the conductor's alleged aptitudes, such as what Charles Mackerras calls the conductor's "radiation" (Jacobson, 1979, p. 92), enabling them to change the orchestral sound through their brain power alone. In his book, *The Maestro Myth*, Norman Lebrecht argues: "the 'great conductor' is a mythical hero [...] artificially created for a non-musical

¹ "Un surhomme ne leur déplairait pas".

purpose and sustained by commercial necessity” (2001, p. 1). However, not all ‘mythologies’ are ‘artificially created’ nor ‘sustained by commercial necessity’, and this study does not dismiss them as lies or inventions. Even if they are not scientifically proven (mythologies often inhabit spaces that are hardly verifiable), they carry a meaning that is worth examining, with all due respect and requisited critical sense. However, an excess of the latter may easily become a sterile scepticism, disregarding as foolish any non-provable fact. After all, how verifiable are musical emotions, beauty of sound, stylistic elegance or enthusiastic drive?

Analysis

As mentioned earlier, Being, Knowledge, Preparation, Aptitude, Attitude and Action constitute the points of the Visible Action Continuum, which classifies the topics the practitioners address according to the visibility of the conductor’s actions for the observer. No visible action is implied in Being; Knowledge assumes previous acquisition of expertise and may be inferred by the players through their interaction with the conductor; Preparation implies the conductor’s study and is more readily assessed than the conductor’s knowledge, as it affects directly the quality of the orchestral session. The first three points of the Continuum may only be inferred, as they present no physical trace to the observer.

The last three points of the Continuum suggest more visibility. Aptitude refers to the conductor’s potentiality for doing something, which the players recognise when the conductor activates it (or identify its absence when the conductor should activate it, but does not). Attitude enters the realm of visibility as it often translates into verbal or nonverbal behaviours. Finally, Action concerns the topics which are most visible to the players, such as beating time, speaking, showing dynamics or cueing players.

1. Being: Konttinen (S) refers to the conductor’s profile as a “two-fold identity [...] balancing between the personal and [the] social identities” (2008, p. 48). While acknowledging this possible distinction, this study does not apply it, for it is hazardous to clearly state where the one ends and the other starts. Fantapié (M) speaks of the “perceptive philosopher and diplomatic achiever” (p.

9).² Jean-Louis Petit (M) sees the conductor as “a professional of the listening to the other” (p. 119).³ Both pedagogues highlight here personal qualities rather than social ones. However, they also come into play in the realm of the conductor’s function and may be viewed as socially driven traits. The conductors address similar aspects. Walter emphasises the conductor’s “general human spiritual qualities, and even [...] moral standards” (Chesterman, 1976, p. 21). Robert Chesterman (1990, p. 55), commenting on Bruno Walter, Carlo Maria Giulini and Rafael Kubelík, refers not only to their spiritual qualities as people but also to these qualities as imbuing their music-making. Finally, Herbert von Karajan addresses the conductor’s state of mind: “the moment one [...] becomes hateful, [...] one can no longer make music” (Matheopoulos, 1982, p. 254).

The players often remark on more anecdotal situations. Donald Peck comments on the shift of personality Daniel Barenboim went through between his status of guest conductor and music director of the Chicago Symphony Orchestra. A reverse situation occurred with Boulez, coming back to the orchestra after ten years as “an entirely different man: mellow, relaxed, and friendly” (2007, p. 16). Peck also remarks on Giulini’s “spiritual quality that affected the orchestra and the audience as soon as he walked on stage” (Ibid., p. 13). The practitioners, it appears, discuss aspects of the conductors’ personas that belong to other spheres than musical. The conductors often situate themselves on spiritual and ethical planes. Giulini’s spiritual qualities, for example, subliminal as they are, are widely recognised (and in a way validated by the recurrence of the testimonies).

2. Knowledge consists, for the manuals, in the conductor’s expertise in the various clefs and “the ranges of all instruments, their sonic characteristics, [...] their functioning modes, their weaknesses, [...] and the evolution of the instrument making” (Fantapié, p. 50).⁴ Conductors address rehearsal techniques, repertoire acquisition, acoustics, instrumentation, music history, and performance practice. They address extra-musical aspects as well: human relations,

² “Un philosophe clairvoyant et un réalisateur diplomate”.

³ “Un professionnel de l’écoute de l’autre”.

⁴ “Les tessitures de tous les instruments, leurs caractéristiques sonores [...] leur système de fonctionnement, leurs faiblesses [...] et l’évolution de la facture instrumentale”.

eclecticism, and group management. Finally, George Gaber (P) remarks: “[the conductor] must be an expert in the knowledge of the capacities and limitations of both player and instrument” (Blackman, 1964, p. 200), adding the human limitations to the instrumental knowledge addressed so far. This topic prefigures the discussion about the players’ role in the musical process, notably their interpretative freedom and their personal rewards as artists.

Each source sees knowledge from different points of view: the manuals highlight practical knowledge; the conductors expand knowledge to a wide array of subjects, exceeding musical boundaries; the players often comment on the conductor’s knowledge that affects them directly. Although Knowledge is not *per se* more visible than Being, its manifestation is more clearly assessed. Keeping in sight this visibility factor is instrumental in assessing the conductor’s qualities, as their effectiveness may lie in who they *are* as much in what they *know*. Although both aspects connect to one another, they are also conceptually separable. The Matrix further discusses the theme of Knowledge under more specialised headings.

3. Preparation deals with the tasks the conductor accomplishes prior to their activities on the podium. Manuals refer to score analysis and the physical work of learning beat patterns. Fantapié suggests: “the final result will only be satisfactory if the analytical work at the table has been properly conducted in its smallest details” (2005, p. 103).⁵ Gustav Meier further comments: “the conductor [spends] months or years learning a score and preparing for rehearsals and final performance” (2009, p. 343). Boulez adds: “the task of analysis is the biggest difficulty in conducting” (Matheopoulos, 1982, p. 32). Other conductors remark on the mental aspects of preparation, such as developing a holistic approach to the piece and memorising the music. Preparation also includes, for all three sources, engaging with musicological research, playing the score on the piano or preparing the orchestral parts for players. Peck (P) writes about Ozawa:

[He] came to rehearsals with knowledge of the scores but with no direction as to their achievement. He conducted clearly, with good tempi, and

⁵ “Le résultat final ne pourra être satisfaisant que si le travail d’analyse à la table a été convenablement mené dans ses moindres détails”.

listened carefully to us. [...] In a way, we were the teachers. He picked up an interpretation from our performances and went on from there to expand and personalize his later presentations of those works.

(Peck, 2007, p. 18)

Peck clearly distinguishes here between knowing the score and having a precise interpretative idea (including the expertise on how to realise it). Konttinen (S), too, identifies these “situations in which a conductor might rely more on what an orchestra has to ‘offer’ than on [what] he or she [...] is looking for” (2008, p. 197). Conversely, Peck remarks about Abbado: “[he] came to the rehearsals with the score extremely well prepared. It was clear what he wanted out of them and how he would ask us to achieve it.” (2007, p. 14). Other circumstances may play a role in the maturation of the conductor’s ideas. Christoph von Dohnany (C) argues: “you learn a work by both studying and performing it” (Wagar, 1991, p. 58). Along these lines, Chailly (C) recalls: “by the last [concert] I had reached the point when I could [...] start learning [the piece]” (Matheopoulos, 1982, p. 504). Both testimonies point to the role that the actual performance plays in the development of the conductor’s concepts.

4. Aptitude points to the conductors’ capabilities, musical or otherwise. Elizabeth Green (M) remarks on the conductor’s ear and their ability to engage with difficult contemporary repertoire (1961/1997, p. 7). On another register, Karajan remarks: “you could be a very bad musician, but if you have the power to transmit your thought and make the orchestra play it, you can still be a conductor” (Matheopoulos, 1982, p. 242). This ability to transmit is widely discussed among conductors. Mackerras speaks of *Ausstrahlung* [radiation] (Jacobson, 1979, p. 92) which he describes as an ability to make players feel what the conductor wants to hear. Muti further comments: “a conductor is able to bring one hundred musicians together, just convincing them that he has a musical idea. [...] He brings those people to him even if they disagree” (Chesterman, 1990, p. 139). Intangible as this may appear, some scholars have researched this topic. Monica Rector argues: “the conductor [...] depersonalizes the orchestra for it to interpret the conductor’s will” (1998, pp. 995–996).

The players remark on the conductor's aptitude to hear the orchestra well. Harry Shulman notes: "a superb ear among conductors is one of the great gifts, and a point from which most members of an orchestra first praise or deprecate a conductor" (Blackman, 1964, p. 196). Other players distinguish between the conductor's technique and their ability to achieve great musical results. Jay Friedman also notes: "[a] factor in judging conductors is the width and breadth of their musical tastes" (2004), which may be viewed as their aptitude to connect to various musical styles.

The manuals and players comment more on practical issues, while the conductors highlight less palpable qualities. The fact that one cannot measure a phenomenon should not mean it does not exist, and the conductors' plural voice addressing the same issues may, in a way, give support to their existence. Moreover, the conductors' international recognition in the long term constitutes a significant element, possibly granting additional validity to their beliefs. Further discussions will propose avenues of thought as to where these beliefs may be grounded.

5. Attitude refers, for the manuals, to the conductors' human or artistic stance, either towards the orchestra by "trusting the players' attention" (Rudolf, 1950/1995, p. 150), or towards the composer. Meier (M) argues: "when totally immersed in the score and history of a work, the conductor grows into a legitimate spokesman for the composer" (2009, p. 131). Green (M) views the conductor's stage etiquette as a guide to the audience's receptiveness (1961/1997, p. 248). On the conductor's attitude to the orchestra, Carlo Maria Giulini (C) remarks:

I greatly dislike the concept of the conductor. I would be much happier sitting in a chair among the musicians were it not for the sheer physical necessity of having a podium so that they see the beat. But the podium is a dangerous thing... It can so easily become a mental podium. [...] And yet from the moment we step on the podium, it is no longer permitted to be humble. I know this sounds contradictory.

(Matheopoulos, 1982, p. 187).

Konttinen (S) identifies this paradoxical issue as “the psychology of being on stage [as opposed to] appearing as him– or herself [...] in front of an orchestra” (2008, p. 92). In this respect, Haitink (C) exhorts conductors not to “display any signs of egomania, because the orchestras hate it” (Matheopoulos, 1982, p. 205).

The players, too, discuss the conductor’s attitude during rehearsals. George Morgulis argues: “[we expect conductors to] develop an atmosphere which will evoke from the players their very best artistic response” (Blackman, 1964, p. 190). Werner Lywen grounds this atmosphere in the conductor’s excellence: “the best musical results are achieved by musical [...] personality and not by the power of hiring and firing” (Ibid., p. 194). Exhorting the conductor’s humility, Gaylon Patterson adds: “few things are more off-putting than arrogance on the podium” (Polyphonic survey, 2007). Although several conductors highlight the importance for them to be sensitive to the orchestra, it is striking to read how apprehensive the players seem to be of the conductor’s authority, expecting him or her to reflect on what they, as conductors, represent for the players. Recalling Bernstein, Robert Ripley notes: “[he] always came on stage ten minutes late and then spent ten minutes more greeting old buddies. We lost twenty minutes already [...] About ten minutes before the end of the rehearsal, he would yell out, “I *must* have overtime!” (2003, p. 81). The conductor’s attitude towards players appears to be a volatile matter. William Buchman (P) notes: “conductors will always do well to put themselves at the service of the music and to approach it humbly” (Polyphonic survey, 2007).

Although Attitude may concern the conductor’s relation to many things (traditions, themselves, the audience), it is the conductor’s attitude towards the composer and the players that the practitioners address the most, notably the conductor’s humility towards the composer and their trust and partnership towards players.

6. Action concerns, for the manuals, discernible gestures that conductors are to display. Green suggests precise hand and finger positions (1961/1997, p. 94). Joseph Labuta refers to “the right hand [...] as a technician, [and] the left hand [...] as an interpreter” (1982/2010, p. 52), a concept

Bernstein challenges in 'The Art of Conducting' examined in Chapter Five. In the frame of this dissertation, it must be stressed, gesture refers to the conductor's corporeal movement rather than the virtual motion suggested by the music and developed by scholars such as Alexander Truslit (1938), Bruno Repp (1993) or Robert Hatten (2004). Although the conductor's gestures may sometimes intend to unleash this virtual motion, they also have a life of their own, for example in the case of functional gestures, such as beat patterns, cues or pre-emptive signals. Garnett (S) argues: "the conductor's gestures are not merely 'translations' of a pre-existent musical meaning, but are part of the cultural substrate of western musical praxis, and thus integral to our musical understanding" (2006). Garnett points here to the autonomy of the conductor's gesture vis-à-vis the musical content, and to these gestures being grounded in our western musical culture. I argue, as will be discussed through the Matrix, that they are also rooted in grounds exceeding musical realms.

Characteristics of each source

Before engaging with the systematic analysis of the practitioners' testimonies through the Thematic String Matrix, a fairly lengthy chapter reviewing and discussing the core of these accounts and their allocation into twenty-five themes, the next section reviews salient traits of the main sources (further developed in Chapter Four) as they appear through the Visible Action Continuum.

Figure 2.1 compiles all the pedagogues' opinions, suggesting that the manuals develop less the first four points (Being, Knowledge, Preparation and Aptitude), which address what the observer may assume or infer. They concentrate on the last two points (Attitude and Action), which deal with what observers can see or experience.

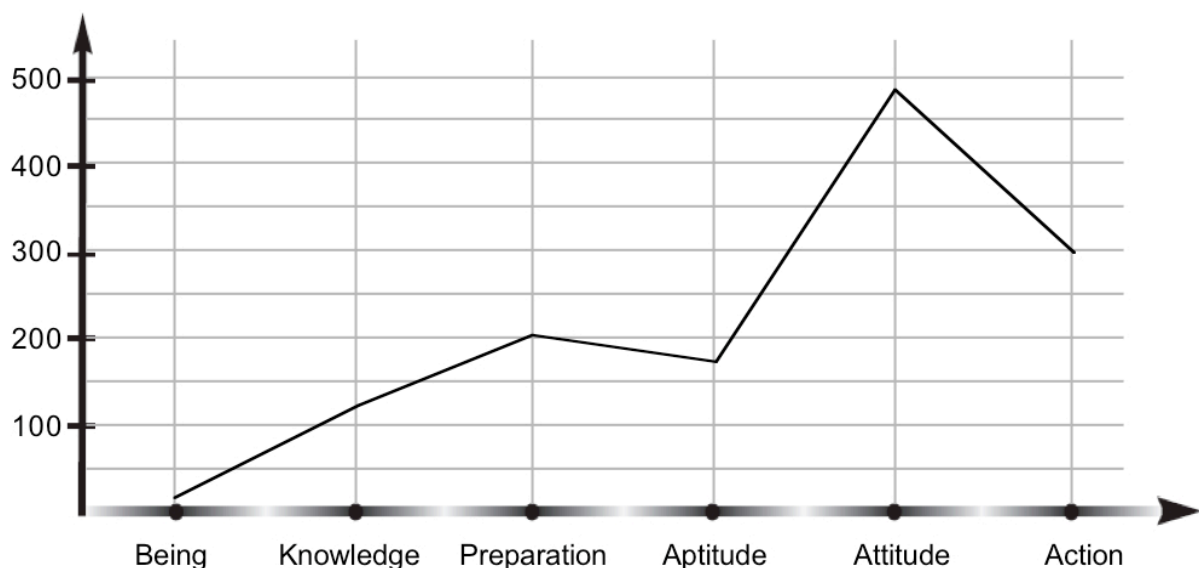


Figure 2.1
Visible Action Continuum: manuals

There is an aspect of conducting manuals that is worth addressing for a better understanding of their content, which has to do with the physical space (simply put, the page extent) that manuals devote to time-beating versus other concepts developed through their text. When leafing through conducting manuals, one gains this intangible impression that they mostly deal with beat patterns, which occupy a large physical space of the book and format the reader's expectations accordingly. However, the words themselves tell another story, developing a host of issues related more to the conductor's attitude than to their actions. It may be hypothesised that Petit's reason for not including any graphs in his manual (2007) has something to do with this issue, and may constitute an incentive for the reader to put into perspective the figures and go more avidly for the text.

Figure 2.2 analyses the conductors' perspective taken as a whole. It covers 58 testimonies provided between 1964 and 2003 by 38 conductors whose artistic activity spans over a period exceeding a century.

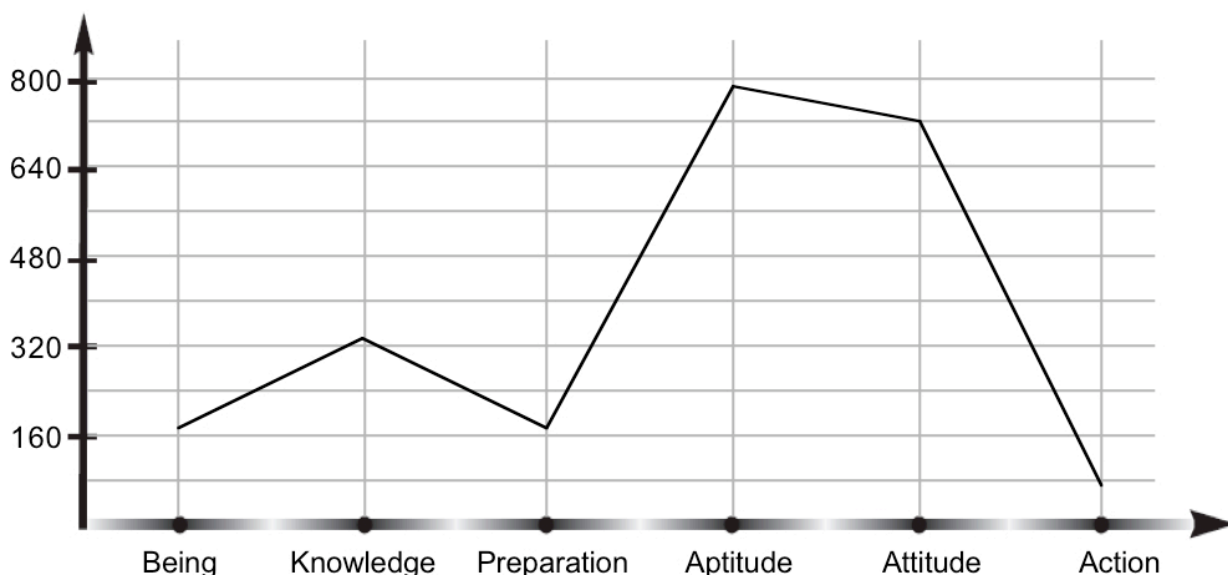


Figure 2.2
Visible Action Continuum: conductors

Figure 2.2 exhibits a significant resemblance between the conductors' testimonies and the manuals regarding the importance of Attitude. It displays, however, two strong dissimilarities: a much higher emphasis on Aptitude and a much lower one on Action. Knowledge appears as a low third point. A less prominent difference between conductors and manuals can be seen in the greater weight given to Being, which may be attributed partly to the nature of the main communicational vector (the interview format) in which interviewees divulge more generously their personal traits and philosophical stances than the pedagogues would do in their own books. Conversely, the very low level of Preparation and Action (compared to manuals) may be attributed to the possible lack of interest that these subjects generate among the wide readership, but also, more essentially, may echo the conductors' reluctance to talk publicly about these aspects of their art. In her study, Konttinen suggests: "conductors [...] find it difficult to verbalise what is it that they do and what exactly happens while they are conducting" (2008, p. 13), an idea which Nakra supports. She points to conducting "rules [...] which are not [...] consciously analysed" by conductors (2000, p. 23). Conductors may also feel reservations about sharing their personal working methods, and seem willing to focus on other aspects of their profession which they consider more illuminating.

The Visible Action Continuum could be viewed as a map for the conductors' priorities. However, priority and importance should be carefully distinguished. Teamwork is not necessarily more important than musicological research, but it constitutes a priority for the conductors' practical interaction with the orchestra. Paradoxically, their actions do not seem to constitute a priority in their comments, for two potential reasons: the conductors, as mentioned above, are possibly unaware of what they do in front of the orchestra, which they would then find difficult to explain; and, if they are aware of some of these actions, they may be unwilling to share their opinions out of musical context. However, it could hardly be maintained that the conductors consider their actions as an unimportant matter; they only refrain from developing this subject verbally.

Figure 2.3 analyses the players' testimonies. Some players are – or were – veteran orchestral musicians and expressed their views through lengthy accounts. Others have offered more succinct viewpoints. Both types of testimonies present different qualities and are, in different ways, representative of the players' opinions about orchestral conducting.

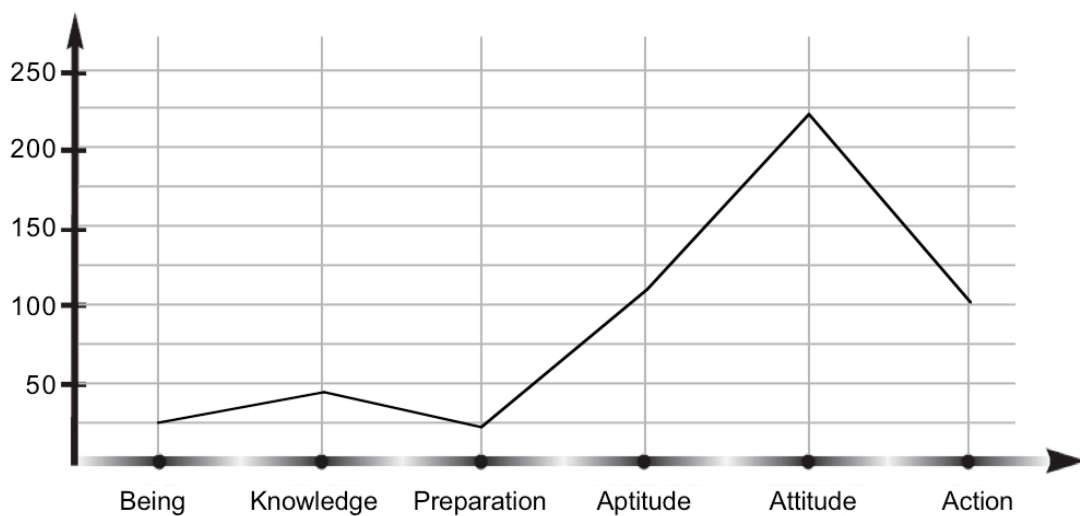


Figure 2.3
Visible Action Continuum: players

Figure 3.3 points to two poles which the players seem to distinguish in the conducting art: the part conductors manage behind the scenes, on which players do not comment much; and the part players experience personally, on which they comment much more, since it directly affects their interaction with the conductor. Again, this dichotomy does not necessarily mean that players view Being, Knowledge and Preparation as less important than Aptitude, Attitude and Action. It may

only mean that they have less to say about these subjects, as they belong to the conductor's more private sphere which players can only access through assumptions. It is worth noting the similarity between the conductors' and the players' graphs concerning the first three points of the continuum, culminating in both cases with Knowledge.

Conclusions

Chapter Two has explained in further detail the principles of the Continuum. It has addressed several caveats concerning this research, notably certain linguistic issues having to do with the confrontational tone of some testimonies and the alleged mythologies of others. It has then reviewed the Continuum point by point, distinguishing between the conductor's intrinsic versus social personas (Being). It has highlighted their knowledge of instruments, their expertise in rehearsal techniques and their proficiency in human relations (Knowledge). It has emphasised their technical work, score study, and musicological research (Preparation). Chapter Two has also addressed the conductor's hearing abilities, and their musical and human leadership (Aptitude). It has discussed their partnership with the orchestra and fidelity to the composer (Attitude). Finally, it has examined the conductor's gestural discourse and their verbal communication with the orchestra (Action).

This study has then reviewed some of the main characteristics of the practitioners' testimonies through the Continuum. The pedagogues focus on the conductor's Attitude and Action, and then on their Preparation. The conductors concentrate on Aptitude and Attitude, Knowledge being a much lower third point. The players emphasise Attitude. Aptitude and Action follow, both appearing almost to the same level. The players' three top points of the Continuum is a combination of those of the pedagogues and the conductors. Chapter Three analyses comparatively all three sources (manuals, conductors and players) through the Matrix.

Chapter Three: Analysing the testimonies through the Thematic String Matrix

The Continuum has categorised the topics according to a visibility factor, reminding us that not all segments of the orchestral phenomenon are apparent to the observer. The Thematic String Matrix, presented in this chapter, displays more stable criteria according to their cognitive content, allocating specific topics (whether visible or not) to particular themes and strings, and facilitating later discussions when differences of opinions arise among practitioners. As mentioned in the Introduction, topics, themes and strings are three different cognitive levels, akin to words, sentences and paragraphs. For example, being the composer's advocate and promoting new music are two distinct topics. However, belonging to the same theme (Relation to the Composer) they illuminate one another, as they both highlight the conductor's commitment to the composer's aesthetic universe, whether ancient or modern. This proximity may suggest that both types of repertoire may be approached with fresh eyes, as the practitioners point out in their testimonies. The string would then be the paragraph aggregating several themes. Relation to the Composer and Spirit of the Music belong to the same string, Musical Material. This contiguity may suggest, for example, that conveying to the orchestra and the audience the composer's aesthetic universe (Relation to the Composer) could imply unveiling the hidden meaning lying behind the notes (Spirit of the Music).

Close to the concept of themes and topics, Gumm, Battersby, Simon and Shankles (2011, online) have identified six main functions of the conductor's activity: Mechanical, Expressive, Motivational, Physical Technique, Psychosocial and Unrestrained Tone, housing between ten and twenty-two topics each. These functions come close to some themes of the Matrix: physicality (Mechanical), spirit of the music (Expressive), working methods with players (Motivational), and relations with players (Psychosocial). The authors investigate the degree of awareness of eighty-four conductors regarding these functions. Their study rests on the assumption that, in one way or another, these functions may be traced in the conductors' behaviours, which is a valid practical approach. However, the Continuum suggests that what we see is not all there is, and that part of the process cannot be traced directly in the conductor's

actions. For example, the conductor's mental awareness of these functions and his or her reflection on which gesture conveys which function are hardly apparent to the observer but constitute nonetheless a significant part of the phenomenon of orchestral conducting.

The next section analyses through the Matrix the testimonies of ninety-four practitioners, who develop a vast array of topics. It constitutes the groundwork of this research and one of the longest section of the dissertation. As may be inferred from the above-mentioned study (Gumm, Battersby, Simon and Shankles, 2011), it is helpful to work with hyper-structures (themes and strings) in order to organise the topics in a meaningful way, taking into account their cognitive proximity rather than treating every topic as a standalone, isolated matter.

Analysis

The first two strings are Musical Material and The Conductor's Self. They represent the composer's and the conductor's poles of the process of conducting.

String I: Musical Material

The first string constitutes the conductor's raw material and displays four themes: Relation to the Composer, Relation to the Score, Relation to the Sound, and Spirit of the Music.

1. Relation to the Composer refers to the way conductors connect to the composers, their aesthetics and their lives. Most manuals emphasise the necessity of the conductor understanding the composer's creative process. They also refer to the composers' peculiarities. In this respect, Green argues: "of all composers, Beethoven stands out in precision of notation, and in a variety that is all-encompassing. Every rest, every dot, every caesura says exactly what he means" (1961/1997, p. 104). Green does not envisage the possibility of different interpretative traditions proposing different understandings of the composer's indications. Meier (M) focuses on the composer's purpose rather than the strict observation of their indications: "the conductor must search for an approximation that best serves the composer's intent" (2009, p. 99). Rudolf (M) further remarks: "utilizing information about a composer's intentions need not lead to impersonal music making" (1950/1995, p. 357), referring to the conductor's interpretative freedom. These

issues increasingly appear on the practitioners' agendas as history unfolds, and are addressed in later sections.

The conductors also discuss their strict obedience to the composer's will versus their artistic freedom. Faber (S) remarks: "Copland certainly intended a purpose for every mark in the score. As conductors, it is our responsibility [...] to always seek the meaning behind every mark of the score" (2012, p. 19). Walter, however, recalls Mahler's guidance concerning their respective interpretations of Beethoven: "your Beethoven is not my Beethoven!" (Bamberger, 1965, p. 193), envisaging the possibility that this supposed meaning could change according to the performer, hence legitimating both interpretative stances. For Boult, however, "the conductor is the servant of the composer" (Chesterman, 1976, p. 37), implying his or her total submission to the composer's assumed intentions. Boult's opinion is widely shared among practitioners. However, scholars highlight the difficulty to assess with certitude the composer's intentions. Peter Hill (S) argues: "many performers refer to scores as 'the music'. This is wrong, of course. Scores set down musical information, some of it exact, some of it approximate, together with indications of how this information may be interpreted" (2002, p. 129). However, as Hellaby (S) further remarks: "there is no reliable way of knowing if a performance conforms to a [...] composer's wishes" (2006, p. 11). Robert Levine (P) notes, in addition:

"What the composer wrote should be taken seriously. Obviously there are mistakes, inconsistencies, miscalculations and sketchy dynamics and articulations in a lot of pieces. But there's lots of notation in many standard works that are substantive and are consistently ignored"

(Polyphonic survey, 2007).

Levine develops here a double discourse: on the one hand, he appeals to the conductor's fidelity towards the composer's intention; but on the other, he implicitly recognises the performer as a critique of the composer's 'inconsistencies, miscalculations and sketchy dynamics'. Most importantly, he does not propose a method for distinguishing the composer's 'mistakes' from their 'substantive' notations.

Viewing the conductor as a passive conduit between the composer and the player, Catherine Musker (P) argues: "in physics, a conductor is a transmitter of energy" (Ambache, 2001), confirming in a way Ravel's request for his "music not to be interpreted, [...] only to be played" (Walls, 2002, p. 17). However, other players expect the conductor to convey convincingly the composer's music and, additionally, to accept the player's input. Tony Catterick (P) notes:

I remember a performance of Mendelssohn's Reformation Symphony.
It was going rather well [...] when the conductor suddenly put his
baton down and glared at us for a few seconds. I realised that what
was annoying him was that we had been doing it, and not *him*
(emphases are mine). I lost respect for that man that day, because he
thought himself more important than the composer.

(Ambache survey, 2001)

Concerning the conductor's relation to the composer, Giulini comments: "conductors should be humble in everything, especially in our attitude to the composer [and] to his score" (Matheopoulos, 1982, p. 187). He adds: "it is our duty to serve [the composer], and through our performance to give to the people who come to the concert the opportunity to drink this pure water" (Chesterman, 1990, p. 64), pointing also the conductor's responsibility towards the audience. Walter draws a fine line between the composer's legacy and the conductor's involvement: "the re-creation of the other becomes a co-creation [...] an 'I' telling us of a 'he'" (Bamberger, 1965, pp. 193–194). He adds: "this very feeling of egoism gives to the interpretation its directness and its convincing power" (Ibid., p. 195). Despite his declared fidelity towards the composer's message, Boult reports Sibelius's words: "if ever your musical instinct wants you to do something different from my markings, please obey your instinct" (Jacobson, 1979, p. 22). Along these lines, Böhm recalls Strauss's words of self-deprecation: "Gentlemen, [...] play it very quietly, for it is too loudly composed" (Matheopoulos, 1982, p. 113). This contradictory debate partakes of what Stravinsky calls "the dialectics of the creative process" (1942, p. 16), which is an ongoing subject of discussion among practitioners.

A new concept seems to appear in the players' testimonies: their expectation that the conductor would mediate the composer's indications with the possibilities of the orchestra. Ferdinand Prior, for example, expects the conductor to "take tempos that are feasible [...] and yet consistent with the composer's directions" (Blackman, 1964, p. 219). In his book dedicated to orchestra players, Willener (S) remarks: "the instrumentalists of symphonic orchestras [...] are at the same time executors and interpreters, or more precisely co-interpreters" (1997, p. 4),⁶ confirming their role in the interpretative process.

All the manuals encourage conductors to promote new music and emerging composers. Rather than discussing this topic under Score (as supporting emerging composers implies advocating for their scores), this study deals with this topic under Relation to the Composer since manuals instruct students to discover new sound worlds, focusing on the composer's general aesthetics rather than on specific scores. Boulez argues: "I want to create conditions in which the music of our own time can once again be an integral part of concert life" (Matheopoulos, 1982, p. 47), and campaigns against the stagnation of the symphonic repertoire. Other practitioners, however, remark on the impenetrability of new music (Roger Norrington in Wagar, 1991, p. 195 and Peck, 2007, p. 15). Later discussion develops this topic more fully. Referring to the conductor Jean Martinon, Peck (P) notes: "[being] a composer, he was aware of the contemporary music scene around the world and expanded the orchestra's repertoire and vision by introducing several outstanding compositions" (2007, p. 5). He adds, however: "[Abbado's friendly and quietly witty attitude] made him, to us, the ideal conductor to program [...] contemporary music. [...] The tonal edges were smoothed off and replaced with lyricism. It was still bright and exciting but in a civil way" (2007, pp. 14–15). In her research about the Finnish educational system, Konttinen (S) remarks: "the conducting students have studied and conducted as much contemporary music as possible from the very beginning" (2008, p. 115).

2. Relation to the Score refers, for the pedagogues, to the student's possible approaches to the score: marking it or not, rearranging it or not, looking for specific editions, facsimiles or

⁶ "Les instrumentistes d'orchestres symphoniques [...] sont à la fois exécutants et interprètes, ou plus précisément co-interprètes".

manuscripts. The score, as an object, appears to represent for the authors of the manuals not only the reminder of the music but also the locus for students to develop their ideas. Manuals advise the student to play the score on the piano as a way of learning the music and “stimulating the imagination” [excitant à l’imagination] (Fantapié, 2005, p. 174). Several conductors discuss this issue as well, and some of them advocate against this practice, suggesting that it limits the conductor’s imagination to what they can physically achieve on the instrument.

The practitioners widely agree on the necessity of thorough score study. Green proposes: “read the score [...] part by part, to understand the performer’s problems” (1961/1997, p. 170), approaching here the process from the players’ perspective. Fantapié suggests singing the notes horizontally to know the individual parts and vertically to better comprehend the harmony. As an example of analytical process, Figure 3.1 displays Labuta’s synoptic view of Beethoven’s *Egmont Overture*, which provides the student with the main structure of the piece.

Analysis of Beethoven *Egmont* Overture

Design, Dynamic Schemata, and Tonal Structure

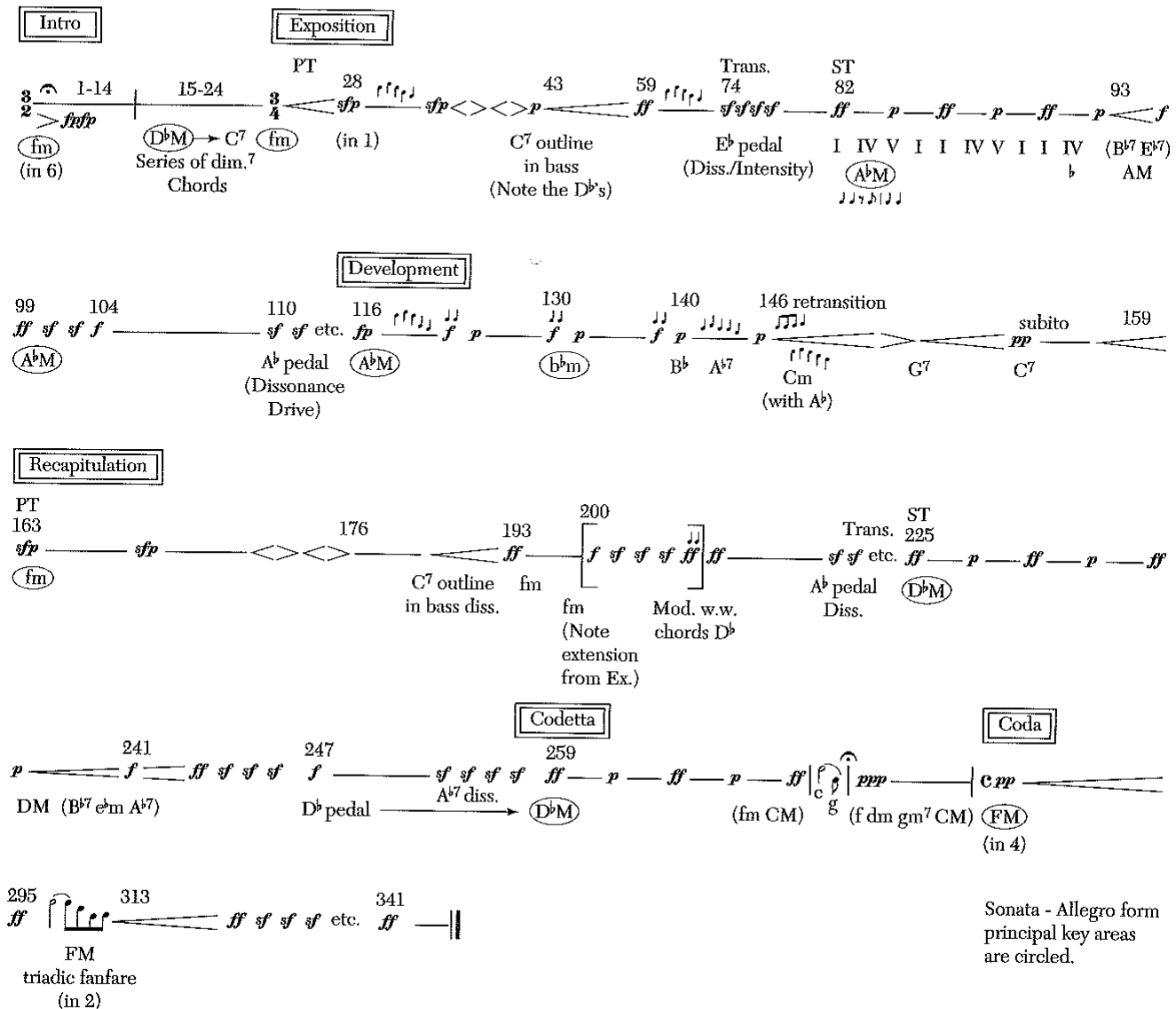


Figure 3.1

Joseph Labuta (1982/2010, p. 92): Summary of Beethoven's *Egmont* Overture

About score study Giuliani (C) notes: "I rethink about [my scores] until they are soaked into my system and I feel at one with them" (Matheopoulos, 1982, p. 168). Catherine Comet further comments: "only one percent of our work is done at concerts. Four percent of our work is done at the rehearsals. The remaining 95 percent is done by the hours and hours you spend at home with the score" (Wagar, 1991, p. 29). Several conductors propose that score study should be adapted to the conductor's personality and to the score's particularities, possibly consisting in the examination of its structure, melodic lines, harmonic blocks, orchestration, or in Schenkerian

analysis. Intriguingly, Slatkin argues: “I don’t do any analysis” (Ibid., p. 264). Some scholars suggest that there exist various degrees of awareness in the performer’s analysis. Possibly explaining Slatkin’s assertion, Leonard Meyer (S) remarks: “the performance of a piece of music is [...] the actualization of an analytical act – even though such analysis may have been intuitive and unsystematic . [...] Analysis is implicit in what the performer does” (1973, p. 29).

Some manuals point to the limitations of the written score. Meier remarks: “a precise notation of the dynamic range [...] is virtually impossible” (2009, p. 128). More generally, Rink (S) argues: “conventional notation by no means captures music’s full complexity” (2002, p. 53), implicitly requiring that the performer fills the gap between notation and sound, resorting to performance practices or musical intuition. Several manuals counsel conductors to take into account in their score analysis the instruments and/or instrumental techniques available to the composer by the time of the composition. However, Ricardo Muti (C) argues: “[conductors] certainly have no right to change the score” (Matheopoulos, 1982, p. 372), whereas other conductors are open to re-orchestrations. It is important to highlight here the difference between the *respect of the score* (which points to the conductor’s sonic implementation of the composer’s written indications, such as tempo, dynamics and articulations) and the *fidelity towards the composer* (which concerns the conductor’s attitude towards the creative artist and his or her musical universe). These two facets may be viewed, respectively, as the *letter* and the *spirit* of the composer’s legacy. The players also address this theme in terms of their expectation that conductors learn, mark and know the scores they conduct, but do not engage with an extensive reflection on the matter.

The next two themes, Relation to Sound and Spirit of the Music, address less definable elements such as tone colour, sound transparency, texture, or meaning and atmosphere of the piece.

3. Relation to Sound seems to represent in the practitioners’ eyes a ceaseless subject of preoccupation. It refers to proper intonation and specific tone colour, or to the balancing of the ensemble, whether between pit and stage in operas, between orchestra, choir and soloists for symphonic works, or within the orchestral sections “so that solo lines are clearly heard in a

natural, unforced tone” (Bernard H. Garfield (P) in Blackman, 1964, p. 189). This theme also addresses the issues of knowing the sonic properties of each instrument, and adapting dynamics to the orchestral sections and their specific dynamic range. Metaphorically, players expect the conductor to “be to the orchestra what the true artist is to his palette of colours” (Gaber, Ibid., p. 200). This theme also refers to the harmonic work on orchestral chords, the conductor’s acquaintance with the trends of orchestral sound worldwide, and their ability to develop their own sound quality.

Concerning the conductor’s specific tone colour, Slatkin comments: “Ormandy would show up, and after the first rehearsal every orchestra sounded like the Philadelphia Orchestra” (Wagar, 1991, p. 268). Several players also pay tribute to Ormandy: “the first time we had Ormandy conduct us, he [...] just sat there not moving, not conducting at all. [...] We ended up sounding like the Philadelphia Orchestra” (Don Ehrlich in Polyphonic survey, 2007). These accounts highlight a phenomenon hardly measurable, but reflect opinions that seem to build consensus among practitioners. Peck adds: “within ten minutes we were sounding like the Philadelphia Orchestra” (p. 62). William Schoen (P) comments: “certain outstanding conductors are [...] able, through the force of their personalities, to achieve a truly distinctive, almost personal sound” (Blackman, 1964, p. 198). In her dissertation, Konttinen evokes these “conductors who can change both the atmosphere of the concert hall and the way the orchestra plays simply by walking in and making [their] presence known” (2008, p. 15). Nakra proposes a physiological explanation to this phenomenon, grounding it in a mimetic process: “people are [...] naturally sensitive to small changes in muscle tensions. The tensing of a muscle and the resultant effects on things such as the force and momentum of an arm are visually perceivable. However, these aspects are very difficult to quantify” (2000, p. 132). This ‘conductor’s sound’ also connects to Barthes’s concept of *grain of the voice* (1977, p. 179), which is not only the product of the singer’s physiological particularities but also of their aesthetic agenda and cultural background.

Transposed into the symphonic arena, the orchestra would not only be sensitive to the conductor’s muscular tension and other corporeal aspects, but also to subliminal messages reflecting their personas and musical expectations. On the other hand, Ripley (P) praises Sinopoli

for adapting the sound to the composer, making “the orchestra sound entirely different from Wagner to Schumann” (2003, p. 85).

The practitioners also expect the conductors to connect their gestures to the sound, to clarify the texture of the music and to achieve great dynamics. Friedman (P) notes: “[dynamics] are the single most overlooked aspect of orchestral performance today, and soft dynamics are the most neglected part of dynamics. It takes a conductor with a vision and a relentless persistence to make a difference in the sound and style of an orchestra” (2004). The players’ increasing interest in the orchestral sound seems to parallel the increasing technical sophistication in sound recording and reproduction and, possibly, the consequent critical ear from the music-lover. The sound of an orchestra may be viewed as an important part of its identity, which conductors are highly praised for bringing out. In addition, it becomes an important element of comparison between various interpretations of the same piece, setting orchestras apart on the basis of their tone colour. Practitioners also highlight the importance for the conductor to adapt the orchestral sound to the acoustics of a hall. Finally, all sources express their expectation that the conductor makes a difference between their inner sound and the real one coming from the orchestra, a topic sitting between Relation to Sound and Mental Construct.

4. Spirit of the Music explores what may live behind the notes, sitting somewhere “between the score, the musical work and the performance” (Rink (S) 2002, p. xi). Rudolf (M) speaks, for example, of “the tenderness of the strings [and] the noble staccato chords” (1950/1995, p. 317). Labuta (M) remarks on the conductor’s search for the “hidden meaning within [the music]” (1982/2010, p. 74). Green (M) incites students to strive for “inspiring performances [...] where the performer’s technique is so superb that we forget that it exists” (1961/1997, p. xvii). These opinions imply the necessity for the conductor to overcome possible barriers in order to convey the spirit of the music and reach the listeners’ hearts and minds. Rudolf and Labuta remark on the conductor’s search behind the written notes. Green highlights the conductor’s physical proficiency, allowing the musical message to travel without obstacle to the listener’s ears. However, Labuta signals the scarce literature on these expressive matters. He notes: “relatively

little bibliography is available to the neophyte conductor concerning interpretation, expression, and feeling” (1982/2010, p. 290).

Referring notably to Beethoven’s metronome markings and Wagner’s radical opposition to Mendelssohn’s fast tempos, manuals consider the search for an appropriate and flexible tempo as taking part in the quest of the musical spirit. They also highlight the necessity of building meaningful tempo relations between the sections of a piece, considering tempo a structural element as well. Fantapié remarks: “without ever losing sight of the work in its entirety, one will look for the tempo of every movement, and place at its heart the best tempo for each theme, each phrase, each motive” (2005, p. 107).⁷ It is significant that Galkin (S) devotes his first chapter to “rhythm, the heartbeat of conducting” (1988, p. 3), ‘rhythm’ here meaning pulse.

For the conductors, too, the Spirit of the Music lies in the subtle choice of, and supple control over the tempo. Eugen Ormandy recalls Brahms’s saying: “can you put metronomic markings to your (heart) pulse? It changes every minute. It’s life itself” (Chesterman, 1990, p. 114). Ormandy adds: “Beethoven was really the first great composer to use metronomic markings and, as you know from history, mostly they are bad. [...] Even on the same day, the tempo may be different” (Ibid., p. 122). Giulini further comments: “it’s impossible to play two bars really in the same tempo. [...] Everything should develop as the totally logical consequence of the dramatic development of the music” (Jacobson, 1979, p. 217). Ormandy and Giulini emphasise the organic and ever-changing nature of tempo, whether attached to the conductor’s physicality or the music’s inner life. Davis recalls Stravinsky’s advice: “the metronome mark is only a beginning” (Ibid., p. 112). Finally, Charles Dutoit notes: “today, perception is much faster because we are spoiled by all the new technology” (Wagar, 1991, p. 72). As will be discussed in *Ethics to Style*, several conductors (notably Boulez, Dutoit and Slatkin) advocate an approach to performance that frees itself from traditions and allows their interpretations to reflect the aesthetics of their time.

⁷ “Sans jamais perdre de vue l’ouvrage dans sa globalité, on va chercher le tempo de chaque mouvement et replacer en son sein le meilleur tempo pour chaque thème, chaque phrase, chaque motif”.

The (secret) meaning of music that conductors are supposed to unveil to the orchestra draws on their expected musical expertise. The difference between the orchestral score (displaying all the musical fabric) and the instrumental part (conveying a limited fragment of it) may account for this expectation, the conductor being the only interpreter having access to the totality of the composer's written message. About musical meaning, Walter comments: "what is best in music is not to be found in the notes" (Bamberger, 1965, p. 194). Karajan suggests: "forget the notes and get a feeling of the music" (Matheopoulos, 1982, p. 240). These opinions implicitly refer to the barrier of the written note evoked earlier. Ashkenazy adds:

If you have something in your soul and mind, you can make music without a great technique. You will probably have horribly bad ensembles, you might have bad balance and so on, which I agree, is not good. But the basic message might still be able to get through.

(Ashkenazy in Matheopoulos, pp. 470–471)

The players often approach this theme in terms of attitudes that they recommend to the conductor: focus on the music, project the music rather than your own personality, give the musical impulse, show your love for music, reserve the magic of the music for the concert. Sidney Cohen remarks: "too often the conductor achieves his goals in advance of the concert; thus the performance itself does not measure up because the best has already been given at rehearsal" (Blackman, 1964, p. 214). Some players connect risk-taking and good music-making, Stephen Stirling regretting that "too many conductors settle for beating time" (Ambache survey, 2001). Buchman argues: "allow the music to speak for itself, rather than loading it with distortions and exaggerations for the sake of individualism" (Polyphonic survey, 2007). As suggested in the beginning of this chapter, players adopt at times a confrontational tone when referring to the conductor. The above quotations remark on two extremes: the conductor's lack of musical commitment and their overriding the music with their own feelings. Undue stress on baton technique represents a third barrier to music. Don Ehrlich argues: "a conductor can have the most elegant stick technique, and yet if there is no poetry behind the technique, there will be no music made" (Polyphonic survey, 2007), suggesting, as Green did, that music should overrule

technique. Although ‘music’ and ‘technique’ are fairly blurred concepts, they can, however, indicate the conductor’s overall agendas.

About interpretative strategies, Peck (P) remarks:

[When Barenboim] performed Mozart piano concerti with the CSO while conducting from the keyboard [an] inspiring interplay [took place] between the soloist and the orchestra. [...] Unfortunately, when conducting the orchestra from the podium he was not always able to achieve this result.

(Peck, 2007, p. 10).

On a similar tone he adds: “when the music [...] had a story like an opera or a symphonic poem, [Levine] was very good at expressing those emotions. But when it was pure music with no built-in-tale, [he made] the performance fast and frenetic, with little emotional content” (Ibid., p. 10).

Peck’s opinions refer to the way conductors construct their interpretations. On this subject William Rothstein (S) remarks: “many performers deliberately construct narratives [...] for the work they play, but – probably wisely – they rarely speak of them in public” (1995, p. 238). The performer’s elaboration of their interpretation, drawing on instrumentality for Barenboim and on narrativity for Levine, highlights two particularities of the conductor’s work: usually, they do not physically perform the works they conduct, and they are expected to share their musical vision in public (including the narratives that they construct) for as much as orchestral rehearsals constitute public situations.

String II: The Conductor’s Self

The second string of the Matrix concerns the conductor as a person and artist, and the relation they establish with themselves when acting as conductors, whether in rehearsals, concerts, or non-musical realms. This string includes Inner State, Mental Construct, Relation to the Self, Working Methods with Themselves, Personal Physicality, and Personal Evolution.

5. Inner State addresses, for the manuals, the conductor's ear contact with such aspects as intonation, dynamics, and sound balance. It also approaches less definable matters, such as the conductor's psychological traits. Conflating such diverse issues under the same theme aims to signal the influence they may exert on each other since, after all, they happen in the same mind, often at the same time. Fantapié argues: "Furtwängler's philosophical-musical attitude, and Toscanini's declared pragmatism may explain a great deal about their functioning modes, not only the psychological ones, but also the technical ones" (2005, p. 380).⁸ For example, concentration may influence the quality of the conductor's listening. Their enthusiasm may determine the dynamic range they elicit from the orchestra.

Each practitioner describes the conductor's inner state in his or her way. However, main trends may be observed, which I gathered in units which I call nebulae. They consist in closely related topics, which maintain, however, an individual identity and constitute an intermediary step between topics and themes. For Inner State, the most important nebula brings together adjectives relating to the conductor's positivity passionate, energetic, lively, dynamic, enthusiastic. Then come topics concerning the conductor's attitude of genuineness. Manuals refer to the conductor's patience and tolerance, their accurate assessment of what they represent for the players, and their ear contact with the orchestral sound in relation to their gestural discourse. The qualities the conductors address the most are passionate, unassuming, pragmatic and uncompromising.

This theme also approaches the conductor's general attitude to life (such as taking risks), or their mental stance during their musical activity (such as being concentrated). Seiji Ozawa refers to the concept of "one-ness between the orchestra, [oneself] and the music" (Matheopoulos, 1982, p. 404). Carlos Kleiber recounts his own experience: "at that moment Kleiber, Alban Berg and Wozzek became one in my mind" (Ibid., p. 454).

⁸ "L'attitude philosophico-musicale de Furtwängler et le pragmatisme affiché de Toscanini peuvent expliquer beaucoup de choses sur leur mode de fonctionnement, non seulement psychologique, mais aussi technique".

The players address the conductor's inner state in terms of musical qualities (such as a good ear and inner rhythmical sense), moral traits (such as humility and sincerity), and relational attributes (such as friendliness, humour, punctuality and charisma). J. Lawrie Bloom (P) recalls: "Solti walks on stage and everyone in the hall is in love with him. [...] He was just so energetic and magnetic. He was the definition of charisma" (Chicago Symphony broadcast, 2007). Scholars, however, tend to question altogether the concept of charisma. Garnett argues:

It strikes me that the role of the conductor is particularly hedged around with mythologies of genius and charisma. The cultural stereotype casts conductors as special people, set apart from ordinary humanity, with special powers not vouchsafed to ordinary mortals.

(Garnett, 2013, online).

The fact that soloists, players, spectators and critics (allegedly, a more informed category of spectators) rave about the charisma of one conductor or another does not constitute, by itself, a proof of its existence. Number is not a valid argument, and history has shown that the singular has often been proven right against the plural. However, this discussion is worth pursuing as it touches upon an important aspect of the orchestral phenomenon, both invisible and disputed.

The *Oxford English Dictionary* defines charisma as "the ability to inspire followers with devotion and enthusiasm". Assuming that 'devotion' and 'enthusiasm' would be agreed-upon concepts, the discussion could then revolve around the possible elements favouring the genesis of charisma, the circumstantial factors surrounding the phenomenon, and the possible artistic outcomes of adherence versus scepticism when it comes to the conductor's charisma. Seeing conductors as 'special people, set apart from ordinary humanity' assumes (if momentarily) that humanity would be divided into two categories: conductors and non-conductors. This, of course, is not the case but it would be worth spending several lines wondering what could indeed make these people special. It seems that being able, for example, to sight-read an orchestral score on the piano, to access through inner hearing the sound of a symphony, to assess intonation issues in complex

harmonic constructs or to memorise hours of music (tempos, melodic lines and instrumental cues) are rare aptitudes which could reasonably qualify a musician as 'special'.

Of course, humanity is not divided into two but in many categories of people, and, as pointed out by Konttinen (2008, p. 48) is inhabited by individuals having personal, but also social, identities. A conductor may also have a life as a patient, student, soldier or tourist. The conductor would then be the follower, and it is the medic, the teacher, the military or the tourist guide who may or may not be charismatic, suggesting that charisma could be attached to the function as much as to the person. The *OED* emphasises the interpersonal aspect of charisma by referring to the leader's followers, leaving to the free will of each individual to accept or refuse to belong to the group of followers. Based on some conductors' out-of-the-ordinary musical capabilities, many players seem happy to define themselves as followers and recognise the charismatic nature of their conductor in the specific circumstances of the orchestral or operatic phenomenon.

It is important, nonetheless, also to examine the point of view of the sceptical observer who would refrain from joining the group of followers. If this observer happens to be one of the players, he or she may choose to switch off the spell the conductor seems to cast on the rest of the orchestra. This does not seem to be to the artistic advantage of anyone involved, and it may be that part of the charismatic conductor's mission would consist of enrolling their players (subliminally or otherwise) and giving them good reasons to join the group of followers. Benjamin Zander (S) argues: "a conductor can [...] easily [...] come to believe that he is personally superior. [...] Yet [...] a leader who feels he is superior is likely to suppress the voices of the very people on whom he must rely to deliver his vision" (2000, p. 67). As stated in Chapter Two, some authors are referred to, in this dissertation, as scholars, even though they may be more widely known as performers. Zander, for example, is primarily a conductor rather than scholar.

However, today's objects being tomorrow's signs, as Peirce would put it, a conductor's genuine behaviour may become emblems for future generations of conductors, who would then display behaviours analogous to their models as a way to suggest similar qualities. Karajan's closed

eyes, Bernstein's exuberant stage etiquette or Boulez's bare hands time-beating would not represent any more outcomes of personal artistic processes, but superficial manners aiming (consciously or not) to convince the observer that a conductor who displays comportments similar to the model also possesses similar qualities. Pragmatism would suggest that, if these procedures help the conductor and the orchestra reach higher musical levels, why not resort to this type of strategies? However, when it is not the case, these strategies act to set up an interpersonal system where the conductor's relation to the self is compromised by the tempting appeal of imitation, inserting harmful noise in the communicational conduit and lowering the artistic genuineness (and standards) of all concerned. It is significant that the players discuss this phenomenon under Relation to the Self, urging conductors not to try and be someone else. It is likely that this kind of personality drift accounts for the scholars' critique of the charisma concept, possibly becoming a self-indulgent or manipulative device, rather than remaining an authentic expression of personality.

6. Mental Construct refers in the manuals to the conductor's inner representation of a piece, "the imaginary performance" (Rudolf, 1950/1995, p. 321). Scholars refer to the conductor's aptitude of "auralising a score – that is, hearing the written music in [their] head" (Rastall, 2003, p. 71). The conductors speak about this mental image and the factors affecting it. Ormandy argues: "[Stokowski] was a great organist, and he had an organ sound in his mind; and I'm a string player, I have a string sound in my mind" (Chesterman, 1990, p. 113). However, remarking on the limits of the conductor's cerebral work, Karajan notes: "it is impossible to look at the score and hear exactly what it will sound like" (Matheopoulos, 1982, p. 240). Jeremy Polmear (P) highlights the downside of the conductor's mental image if it prevents him or her from connecting with the players' input:

The conductor was listening to the 'ideal' version of the music in his head. All would be fine as long as what we were playing roughly corresponded to his inner version, but if there was a significant disparity a pained look would come over his face and he would stop.

Then he would tell us to do something different, and off we would go again, the morale of the orchestra dropping a little each time.

(Polmear, Ambache survey, 2001).

The conductor's mediation between the composer's indications and the players' possibilities goes here one step further, as some players require the conductor to negotiate their musical vision with the players' initiatives.

The practitioners also address the process of memory. Norrington argues: "you can compose the piece when you conduct by memory. With the score you are following someone else's piece" (Wagar, 1991, p. 203). The conductors address various aspects of memory (aural, visual, structural, kinaesthetic and conceptual), and several ways to stimulate it (such as transcribing the score from memory). The pedagogues identify several parameters of music that the conductor may memorise: notes, harmony, tempo, or less tangible aspects such as atmospheres and sentiments.

Some pedagogues question the utility of memorising scores. Rudolf argues: "spending many hours on memorizing [...] could be a waste of time that might be put to better use by probing more deeply into the background of a composition" (1950/1995, p. 324). Meier adds: "the important question is: will memorization result in a better performance?" (2009, p. 342). Fantapié (M) sees in memory an adjuvant to the conductors' mental image rather than an end in itself. He argues: "the role of memory is not so much to mentally absorb [...] scores, but to help *build* the virtual work in time" (2005, p. 41).⁹ It is significant that Fantapié addresses this issue at the beginning of his book, consistent with its overall organisation, whereas Rudolf and Meier, more typically, leave it for the end of theirs. Some players address the dilemma between the comfort and the risk of conducting from memory.

⁹ "Le rôle de la mémoire n'est pas tant celui de se mettre dans la tête les partitions [...], mais de servir à *construire* l'oeuvre virtuelle dans le temps".

7. Relation to the Self: manuals address the conductor's ability for self-assessment and self-demand. Fantapié argues: "relentlessly one must put oneself into question, critique oneself without mercy, being as demanding as one is passionate" (2005, p. 13).¹⁰ Konttinen (S) remarks on the conductor's ability "to observe [themselves] critically while conducting – a skill that [...] develops with experience [and] leads to self-evaluation and awareness" (2008, p. 124). Remarking on the conductor's acceptance of him– or herself, Bernard Haitink (C) notes: "a conductor must learn [...] how to live with himself off the podium" (Matheopoulos, 1982, p. 194), echoing Giulini's 'mental podium' evoked earlier (Matheopoulos, 1982, p. 187). The conductors also remark on the necessity to control their emotions, particularly while conducting. Finally, Petit (M) encourages conductors to develop an awareness of their own subjectivity (2007, p. 117).

The players address the issue of the conductor's self-deprecation and their aptitude to remain themselves in all circumstances, faithful to their artistic beliefs rather than trying to be new at all costs. Craig McNutt remarks: "[the conductor should] not try to be, or conduct like, someone else" (Polyphonic survey, 2007). Joseph Adato adds: "too many conductors get too involved with 'looking good'" (Blackman, 1964, p. 209).

8. Working Methods with Oneself: the pedagogues primarily highlight the necessity for the conductor to anticipate problems that may occur during rehearsals and performances, and to imagine solutions aiming to solve them. They also refer to the critical observation of players and other conductors. Meier emphasises: "the conductor can learn a great deal about details of articulations, dynamics, and style from knowledgeable and experienced orchestra musicians" (2009, p. 129). The issue of knowing other conductors' readings appears to be contentious: some practitioners dismiss this method, which could presumably influence the conductor's vision, while others plead for a critical listening to recordings. Mackerras (C) argues: "the young conductor is well advised to listen to older traditional performances, even if he decides eventually that the traditions are to be ignored" (2003, pp. 72–73). Some conductors also remark on the necessity of first analysing the score before listening to recordings, or to forget the recordings before engaging

¹⁰ "Sans cesse il faut se remettre en question, se critiquer sans pitié et être aussi exigeant qu'on sera passionné".

with the actual orchestral work. Finally, as pedagogues do, some conductors consider that attending concerts and rehearsals belongs to the conductors' methodological panoply. Solti recalls: "[After seeing Toscanini at work] for the first time in my life I realized that talent is only part of the profession. The rest is industriousness, endurance, hard work and constant study" (Matheopoulos, 1982, p. 409).

This theme also includes the conductor's development of nuanced tempo variations (an expansion of the tempo sensitivity addressed in Inner State), their preparation of the orchestral parts (bowings, breathings or misprint corrections), their search for reliable sources to inform their interpretation, and their critical review of their own recorded rehearsals. Wöllner (S) argues: "one possibility for young conductors to enhance their facial expressions lies in detailed video analyses of their own conducting" (2008, p. 265), a topic sitting between, Working Method and Physicality. It is unclear, however, how these observations would lead to their integration by the student. Several conductors and players address the issues of musicological research. Peter Johnson (S) remarks:

If it is obvious that without some detailed knowledge about the work itself the performer is unlikely to generate an exemplary performance, evidence suggests that a differentiation is needed between the types of knowledge pursued by the musicologist [...] and the knowledge performers need to realise a effective interpretation.

(Johnson, 2005)

However, performers rarely omit the latter and Johnson's opinion suggests *de facto* that two complementary approaches (musicological *and* interpretative) are desirable. Along these lines, Dutoit (C) recalls Norrington's un-dogmatic stance towards historically informed performances, "not trying to convince, [just mentioning], the way [he] feels about these things" (Wagar, 1991, p. 73).

9. Personal Physicality brings together topics related to physical actions that conductors execute during performances, rehearsals, or their own individual work. In her article (1988, p. 998), Rector

adapts Ekman's five categories of non-verbal communication to orchestral conducting and classifies conductors' gestures into Emblems (gestures learnt within a social context), Illustrators (gestures learnt by imitation), Regulators (gestures aiming to control the sound), Affective display (gestures showing emotional states) and Adaptors (gestures personal to each conductor). Chapter Four analyses more closely the themes that practitioners develop most (Top Themes), Personal Physicality being one of them. It examines gestures under another classification, empirically drawn from the testimonies: Baton technique, Gestures, and Music. 'Baton technique' comes close to Illustrators and Emblems, and does not differentiate gestures learnt by imitation from those displayed according to a social context. They could have been studied through conducting manuals (a process which exceeds mere imitation) or created for specific musical situations (which happens when a conductor premieres a piece, possibly using unseen gestures to convey unheard music). 'Music' comes close to Regulators but may apply to other parameters than sound, such as temporal flow or musical articulations. 'Gestures' compound Illustrators, Emblems, Affective displays and Adaptors, but do not imply that they are socially mediated, learnt by imitation, unique to their authors, nor necessarily concerned with sound or emotional states. In other words, my classification does not take into account the circumstances of the gestural creation, appropriation or display by the conductor, nor the conductor's intentionality, which are elements difficult to assess from most written testimonies. Further discussion addresses more fully the grounds of my categories.

The relatively small consensus this theme seems to build among the pedagogues does not necessarily mean that they disagree about what constitutes a proper conducting technique. It often indicates that they see it from different angles or address different topics. However, the authors do display divergent opinions too, notably about the use or not of the baton, which some authors strongly recommend and others consider totally optional. Konttinen (S) reports the opinion of the Finnish pedagogue, Jorma Panula: "using [the baton] or not is a personal matter, but [...] if one decides to use it, one must also know why and how to make the most of it" (Konttinen, 2008, p. 193). On this issue, Peck (P) remarks: "we had noticed over the years that the conductors who did not use a baton [...] usually achieved a fuller, rounder tone from the

orchestra” (2007, p. 62). The reason for this phenomenon may reside in the unconscious muscular mimetism suggested by Nakra (2000, p. 132) and discussed under Relation to Sound. The pedagogues also disagree whether it is appropriate to rehearse in front of a mirror. Rudolf argues: “check the mirror to be sure that the gesture appears convincing” (1950/1995, p. 31), while Petit and Fantapié advocate the conductor’s inner perception of their gestures.

Some topics, nonetheless, do reach a consensus: the importance of having both arms and hands complement each other; the use of the eyes as a necessary support to the gestural discourse; and the imperative compatibility between the conductor’s gestures and the music. Other topics that the practitioners raise include: the anticipation through timely gestures of all tempo changes; the importance of mastering asymmetric bars; the necessity of displaying a stable and erect posture that breeds confidence and ensures visibility; and the use of conducting gestures that reflect instrumental techniques. Fantapié (M) proposes: “the gesture is not only conceived according to the score, but [also] in relation to the musicians’ needs” (2005, p. 257).¹¹ Rudolf (M) adds: “[the conductor must] explore [...] the [...] relation between [their] gesture and [the players’ musical] response” (1950/1995, p. xiii), adding an interactive dimension to Fantapié’s remark. Some pedagogues also discuss the directionality of the gestures according to the orchestral geography. Finally, Fantapié adopts a holistic approach and views the conductor’s physicality, as “a whole coordinated ensemble, physical and mental, [...] utilising breathing, and being controlled by the mind: an inner and outer mastered equilibrium” (p. 47).¹²

For the conductors, a good baton technique is expected to be clear, economical and inspired, but not necessarily conventional. John Barbirolli argues: “I do not [...] believe in any standardisation [of the gestures]” (Bamberger, 1965, p. 244). Mstislav Rostropovitch further remarks: “manual technique is not everything. Maybe it is not even thirty-per-cent of the story. What matters is [...] the projection of your personality, and this [...] is like magic” (Matheopoulos, 1982, p. 484). Some scholars have laid critical eyes on opinions invoking irrational beliefs. Garnett argues: “the

¹¹ “Le geste ne se conçoit pas seulement face à la partition, mais [aussi] en fonction des besoins des musiciens”.

¹² “Tout un ensemble coordonné, physique et mental [...] qui utilise la respiration et qui est contrôlé par l’esprit. Un équilibre intérieur et extérieur maîtrisé”.

personal, spontaneous aspects of conducting have largely been consigned to a box marked 'Magic: do not theorize'" (2009, p. 57). Konttinen speaks of the "well-kept and secure secret" surrounding orchestral conducting (2008, p. 16). It is at times problematic to draw a line between the intangible aspects involved in an artistic activity and mythologies, all the more so if this activity connects to its material manifestation – the sound – in such an indirect way. One of the primary reasons for examining leading musicians' opinions is that not only do their recognised artistic qualities provide a validation of their beliefs, but also their success as artists makes them less likely to resort to dubious mythologies to support these beliefs, which may then be acknowledged as genuine attempts to share their experience. Barbirolli and Rostropovitch address here different issues (the standardisation of the gesture and the quantitative importance of physicality within the phenomenon), but they both highlight the importance of the conductor's input, be it in 'de-standardising' the gestures or 'projecting the magic'. Again, these opinions refer to unverifiable aspects of this art. However, the number and the excellence of the conductors who invoke them may grant them legitimacy. Later sections discuss how players perceive these aspects on the receiving end.

David McNeill (S) has researched the connection between gestures, thought and speech. He notes: "gestures can be conceptualized as objects of cognitive inhabitation and as agents of social interaction" (2006, p. 10), highlighting both their conceptual and communicative nature. This ambivalence may explain the conductors' reluctance to engage with formal discussions about gestures, as they both crystallise musical ideas (which may occur on the spur of the moment, escaping the conductor's awareness) and convey these ideas to the orchestra (which implies a specific context to be fully assessed). Finally, several conductors agree on the necessity of expressing the full content and texture of the music through appropriate gestures, involving the entire body.

For the players, the conductor's beat is expected to be clear more than anything else. Schoen remarks: "[a conductor] should show enough respect for his craft to take the pains to acquire a clear and precise beat" (Blackman, 1964, p. 199). Brian Sewell adds: "the orchestral world would

be much better if a conductor had as much technique as any of the players that s/he is directing.” (Ambache survey, 2001). By their choice of words, the players do not only express their expectations from the conductor. They also suggest that these expectations are not always met. However, some conductors did not study any baton technique but “simply got up and did it” (Giulini in Matheopoulos, 1982, p. 172). What is intriguing is that veteran players (notably Peck, Friedman, Ripley, and Dickson) who played under these conductors do not point to any technical shortage of theirs, but rave about their artistry. It could then be proposed that what Schoen and Sewell refer to has more to do with musical intelligibility than baton technique *per se*, and it seems that the one does not necessarily imply the other. Examining how conductors build musical intelligibility, through received stick technique or otherwise, is one of the aims of the performance analysis in Chapter Seven.

The practitioners also address topics such as cueing the instrumentalists in time with regard to their respective instrumental technique, displaying a steady pulse, and conveying phrases, dynamics and textures through gestures. Some discussions revolve around the beating ahead of time. McNutt (P) argues: “the orchestra must come to a consensus as to where they play in relation to the ictus, and the conductor must be consistent in the placement of that ictus and where s/he feels the beat relates to that ictus” (Polyphonic survey, 2007). Some players are in favour of the conductor beating ahead of time while others advocate a strict synchronicity between beat and sound.

The players address issues such as the use of “motions [...] to remind the players of what [conductors] have already told them” (Ripley (P), 2003, p. 81). They also remark on the importance of eye contact, and the visibility of the conductor’s gestures by the entire orchestra, hence the importance of a proper posture. In his study, Wöllner (S) notes: “the general posture of a conductor can [...] influence the musicians’ perception of his or her expressive intentions: an upright body position has a different impact than a bent position” (2008, p. 250).

10. Personal Evolution refers to the commitment to a constant learning attitude and the progressive discovery of one's own style, both issues reaching a wide consensus among the practitioners. Rudolf (M) suggests: "the further you advance, the more you will develop your own technique and will use the gestures that suit your artistic personality" (1950/1995, p. 295). Wöllner (S) adds: "young conductors should develop their own personal conducting style, which cannot be achieved by merely imitating the teacher" (2008, p. 264), referring to the issue of genuineness evoked earlier, when discussing the conductor's charisma. Konttinen (S) further comments: "the most important thing is to develop constantly by heading towards something new" (2008, p. 121). Warren Brodsky (S) notes: "the maturation of professional musicians is seen as a life-long process, requiring specific adjustments to changes in age and environment, [each stage being] unique in structure of musical activity, motivations, and achievements" (2011, p. 3). Brodsky sees the musician's evolution as a natural process, displaying identifiable stages.

The conductors, too, refer to the constant rediscovery of their art, their attitude of ceaseless learning and incessant striving for progress, always looking for the "best ideas [which sometimes] are not inventions, but an effort to avoid previous mistakes" (Karajan in Matheopoulos, 1982, p. 239). In this respect, Ozawa notes: "now I understand what Maestro von Karajan means when he says that it took twenty-five years to achieve this unity" (Ibid., p. 404). Adolph Herseth (P) remembers about Solti: "he would re-study standard old pieces we have done with him many times [...] and come with a completely fresh approach" (Chicago Symphony broadcast, 2007). Peck (P) adds: "[Solti] was never satisfied with what has been, [and] decided to forego the use of the baton. [...] This was an experiment to see if he could achieve a mellower sound" (2007, p. 8). Pointing to the endless re-appropriation of the musical material, Comet (C) remarks on the constant re-learning of scores: "you think that once you have spent maybe 200 hours on a score that you have learned it. Well, that's not true. If you happen to do it again two years later you realize how much you missed the first time and you have to start all over again" (Wagar, 1991, p. 29). The players also discuss the conductor's development of their personal style and highlight the advantage of rising through every step of the ladder, conducting amateur, semi-professional and professional groups.

The next strings address aspects of the phenomenon which observers can assess by inference, starting with the conductor's Musical Knowledge, a more circumscribed concept than Knowledge in the Continuum.

String III: Musical knowledge

This string divides into Instrumental/Vocal Knowledge, Ensemble Experience, Historical/Stylistic Knowledge, Compositional Knowledge and Other Knowledge, the latter addressing topics which the former categories could hardly house.

11. Instrumental/Vocal Knowledge is a theme that all practitioners address. Konttinen (S) argues: “[the conductor] has to know [...] the instruments, how they sound and what is possible for the musicians to play” (2008, p. 121). In addition, some pedagogues address the conductor's active instrumental skills and their capacity to assess the quality of the instruments on which the players perform. The conductors discuss their knowledge of the orchestral instruments and their specific use by certain composers, as well as their technical evolution, characteristics and range. Abbado notes: “all that I have learned about instruments [...] has enriched my gestures as orchestral conductor” (1986/2007, p. 26).¹³ The players address the same issues. Patterson argues: “a conductor with no experience as an instrumental performer has a whole other set of challenges” (Polyphonic survey, 2007). Some players add a new concept: the conductor's acknowledgement of the instrumental limitations due to human possibilities. Referring to Copland's *Appalachian Spring* (rehearsal number 14) Faber (S) emphasizes: “allowing the tempo to slow will make it nearly impossible for the flute to accurately play this passage” (2012, p. 13). Although none of the sources clearly explains why it is important for the conductor to play an instrument, context and adjacent discussions may lead us to believe that it has to do with the conductor's ability to identify (with) the players' difficulties, or more generally with their daily life as instrumentalists.

12. Ensemble Experience is a subject that the manuals rarely approach. It is only in the last pages of his book that Rudolf evokes the importance of chamber music practice in the

¹³ “Tout ce que j'ai appris sur les instruments [...] a enrichi mes gestes de chef d'orchestre”.

conductor's artistic development. With the exception of Labuta, who views ensemble playing as an opportunity to develop the conductor's listening skills, no other manual comments on this theme. Konttinen (S) notes, however: "it is extremely important to have the experience of being an orchestra musician as a background for conducting" (2008, p. 121). She further comments: "conductors who start as orchestral musicians have the advantage of familiarising themselves with a large repertoire, playing under the direction of many different conductors and observing them at work" (Ibid., p. 134).

Three conductors evoke their ensemble experience: Giulini as an orchestra player (viola), and Boult and Abbado as choristers. The latter recalls his choral experience in Vienna, allowing him to observe a musical ensemble from within. It is noteworthy that only these conductors should mention this activity as a significant element of their conductorship. Robert Rohe (P) remarks: "understanding the player [...] is most likely [to happen if] the conductor [...] has played 'in the ranks'" (Blackman, 1964, p. 211). Other conductors, notably Ormandy, Barbirolli and Levine, have developed extensive chamber music careers but none of them mentions this in their testimonies. It is intriguing that the pedagogues and conductors should omit this aspect of the conductor's curriculum. It is in collective music-making that one learns, at first hand, to negotiate musical concepts, work out sound balance or adjust tempos. From the conductors' viewpoint, this omission may have to do with their unawareness of the elements that have built them up (but could help explain why they are who they are). It is more surprising from the pedagogues, who have reflected on the subject, pieced together its elements and are expected to propose to the student a learning path towards qualified conductorship.

13. Compositional Knowledge refers to the conductors' knowledge of the creative process, often as a theoretical knowledge rather than a full-fledged compositional activity. This knowledge may comprise various facets: harmony, counterpoint and orchestration. Some practitioners see in this expertise a requisite for a fuller comprehension of the composer's work. Muti argues: "you cannot really understand the score if you are not able to write a score" (Chesterman, 1990, p. 133). Bernstein further remarks: "I suppose being a composer makes me experience conducting

differently from other conductors. It's not that I understand music better. [...] But my need to identify with the composer is so automatic that his style becomes immediately apparent" (Matheopoulos, 1982, p. 11).

14. Historical/Stylistic Knowledge consists in the conductor's awareness of musical styles and traditions, and the evolution thereof. Manuals highlight the importance for students to know the great conductors, past and present. Fantapié discusses conductors such as Barenboim, Bernstein, Celibidache, Markevitch, Munch, Toscanini, and Furtwängler, mostly in terms of their relationship with the orchestra, their working methods and their personalities. This is a complement to the thorough examination of other conductors' readings mentioned in Working Method with Oneself, but concerns here a more general stance in relation to the history of orchestral conducting.

The practitioners also address the conductors' knowledge of past and present performance practice. Referring to both historical knowledge and score study, Nicolaus Harnoncourt comments: "background knowledge is the key to reading the score. And once you have the key, the score becomes the principal source" (Jacobson, 1979, p. 64). Mackerras adds: "there is still, unfortunately, a very great deal of ignorance regarding [performance practice] – not because the conductors themselves are unmusical, but because they simply haven't read enough" (2003, p. 72). Both conductors highlight the part of the conductor's work dealing with elements external to the score which provide a better understanding of it. Working Methods with Oneself has evoked the conductor's musicological research. This theme sets a more focused purpose for this approach: informing the conductor's stylistic choices.

15. Other Musical Knowledge: the pedagogues approach the conductor's expertise in the clefs and the transposition systems, and their ability to conduct both symphonic and operatic works, implying the conductor's knowledge of both orchestral settings and their respective characteristics. All practitioners address the conductor's ability to run auditions and hire players. Clive Gillinson and Jonathan Vaughan (S) remark: "appointment procedures differ greatly from

orchestra to orchestra. The audition alone can take many forms. It may be played to any number of people, from a single musical director to a select panel or the entire orchestra” (2003, p. 196). This theme also addresses the conductor’s eclecticism, good taste in programming, and ability to analyse and solve musical problems such as those stemming from the acoustics. Peck (P) reports:

[Krannert Center] was a modern concert hall. [...] On the stage it was very mellow. [...] The string players often like this type of hall, as it makes them sound more glamorous and full-bodied. [...] The wind players usually feel a lack of definition in their tone, making it difficult to hear the proper pitches and to find the correct balance.

(Peck, 2007, pp. 101–102)

The players, it may be assumed, expect from the conductor a similar expertise in acoustics, not only as an aspect of their general artistic excellence but also revealing their awareness of the players’ challenges, depending on where they sit and what instruments they play. Levine (P) adds: “few conductors seem to understand that what the audience hears might be different from what they can hear from where they stand” (Polyphonic survey, 2007).

String IV: Interaction with the Orchestra

This string develops three aspects of the conductor’s interaction with the orchestra: Relations with the Orchestra addresses the interpersonal aspect of the orchestral phenomenon; Pedagogy explores the didactic principles conductors apply with the orchestra and their general pedagogical stance; Working Methods with the Orchestra refers to actions that conductors display in rehearsals and the concepts they develop, which exceed the realm of pedagogical principles.

16. Relations with the Orchestra addresses the conductor’s team spirit, their readiness to change their concepts, their accurate assessment of the inner life of the orchestra, and their awareness of the players’ and conductors’ mutual expectations. Within the conductors’ testimonies, a fairly wide consensus of opinion can be found within two topics in particular. First, conductors comment on the partnership between the conductor and the orchestra, based on reciprocity rather than

authority. Leopold Stokowski remarks: “a good conductor is part of the orchestra” (Bamberger, 1965, p. 199). Second, they refer to the conductor’s trust in the players’ musicality. Abbado notes: “musicians may [...] bring a lot to the conductor” (1986/2007, p. 43).¹⁴ Partnership and trust may be seen as two sides of the same coin, the latter feeding the former, and vice versa. A.H. Fox-Strangeways (S) writes for the Observer in 1931: “what a conductor can do for an orchestra is much; what they can do for him is more. Conductors are sometimes born, but more often made; made by their orchestras—whom they make...” (Matheopoulos, 1982, p. 139).

The practitioners address the conductor’s responsibility of setting up a proper working atmosphere, either by the human example they display over time or by the demeanour they adopt during the rehearsals. The players also expect conductors to stimulate the orchestra through their own artistic intensity. Garfield argues: “the most important function of a conductor [...] is to inspire his musicians” (Blackman, 1964, p. 189). Richard Moore adds: “orchestral players look to the conductor for a feeling of confidence in themselves. [...] The human element of the conductor and [...] the proper attitude [are] so important to the player’s ability to give his best” (Ibid., p. 204). According to the players, the conductor should acknowledge their musical qualities, accept their artistic input and trust their professionalism. Don Ehrlich remarks: “we have to have a partnership in delivering the music to the audience” (Polyphonic survey, 2007). He suggests, however: “too little control means no point of view to give to the audience [but] less intensity demanded from us could prolong our careers and help the conductor make music with us over the years” (Ibid.). Ehrlich addresses here two important topics: the musical outcome of the conductor-orchestra relationship and the players’ orchestral careers over the years. In his study about the ageing of orchestra players, Brodsky (S) argues:

¹⁴ “Des séances de travail [au cours desquelles] les musiciens peuvent aussi apporter beaucoup de choses au chef. C’est un enrichissement réciproque”.

Collective efforts should begin to focus on performing musicians who have maintained a professional career well into the fifth decade of their lifespan, [...] extending their phase of active music-making well beyond what was once considered time to withdraw from effective professional activity.

(Brodsky, 2011, p. 3)

Several performers whose opinions are analysed in this dissertation were, indeed, professionally active past the age of fifty. Their accounts represent a valuable source of information coming from veteran and expert orchestra players, and may be instrumental to a better understanding of the orchestral phenomenon.

The players highly dislike being blamed by the conductor. Robert McCosh remarks: “a conductor who admits they too are human gets a lot of points in my book” (Polyphonic survey, 2007). Levine (P) adds: “not only is it basic good manners [for conductors] to admit [their] own mistakes, it will greatly increase [their] moral standing to call us on ours” (Polyphonic survey, 2007). Schutzman further comments: “I’ve often wondered what it is that makes an orchestra respond positively to one conductor and not another [...]. There’s that elusive factor of chemistry, usually apparent from the first five minutes of the first rehearsal” (Ibid.). Peck recalls: “[Solti] and the orchestra had a fine symbiotic relationship that is difficult to explain. Some conductors get along with some orchestras and not others” (2007, p. 7). Although human ‘chemistry’ is, indeed, ‘difficult to explain’, the players remark on elements favouring it (such as admittance of guilt and good manners) or hold it back (such as duplicity or disrespect for the orchestra’s past achievements). The players expect conductors to be demanding. Gary Stucka notes: “[Solti] was always very professional with the orchestra. [...] He was very exacting in his way of insisting for what he wanted” (Chicago Symphony broadcast, 2007). Orchestras highly appreciate conductors who are able to engage with a one-to-one relationship with players and utterly disapprove dictatorial behaviours. Patterson notes: “the Reign of Terror in the orchestra world is over. The autocratic maestro who rules with an iron hand and ends careers with a flick of a baton is no more” (Polyphonic survey, 2007). Konttinen (S) comments: “with unions taking care of the rights of orchestra musicians, [...] there no longer are dictatorial maestros with the right to hire and fire.

Modern symphony orchestras have become self-ruling entities whose institutional activities are based on the idea of co-operation" (2008, pp. 51–52). As previously mentioned, Koivunen argues however: "conductors may be among the most undemocratic leaders in the world. [...] Even the army [...] is more democratic than a symphony orchestra" (2003, p. 67). Along these lines, Ripley (P) recalls Munch's tenure: "we couldn't believe a conductor could be so nice" (2003, p. 84), pointing to the exception and implicitly signalling the rule.

17. Pedagogy is an issue that manuals approach minimally. This may be due to their own pedagogical nature, aiming to teach students how to build their own skills rather than educate potential orchestras. Nonetheless, Rudolf suggests: "each conductor must find a particular way to project feelings, by virtue of personality, by singing the phrase with the appropriate expression, or by hitting on the illuminating word" (1950/1995, p. 337). Labuta adds: "a conductor in rehearsal is above all else a teacher" (1982/2010, p. 98), and expected to act as such. Other pedagogues refer to the verbal instructions and imagery that conductors may propose to convey their musical ideas to the orchestra. This verbal guidance, however, seems to conflict with the restrictions on talking referred to in Relations with the Orchestra.

The conductors see their role as encouraging and demanding educators, who motivate the players whenever possible. Like the pedagogues, they propose images and metaphors. An unnamed player remarks: "[Kleiber] was never at lost for the right words that explained exactly the kind of sound he wanted" (Matheopoulos, 1982, p. 444). The players address the issue of educating budding conductors more than discussing the conductor's pedagogy. They do, however, express their expectations that the conductor be a pedagogue, but scarcely develop what this would mean. As a principle, Ripley suggests: "the most productive approach from the players' standpoint is the formula: 'play through, work out (and then later), play through again'" (2003, p. 80).

18. Working Methods with the Orchestra are sometimes agreed upon and sometimes more specific to the practitioners, in which case they rarely conflict, but rather complement each other.

Pedagogy and Working Methods overlap to a certain extent. However, in the frame of this dissertation, Pedagogy refers to abstract principles guiding the conductor's work with the orchestra, whereas Working Methods concern actions or practical concepts governing their rehearsals.

All pedagogues, and many conductors and players, agree on the absolute necessity for the conductor to plan their rehearsals, crystallising beforehand their interpretative ideas, working methods and musical expectations towards the orchestra. Rudolf (M) remarks: "[conductors must] develop the habit early of knowing exactly what [they] want and getting it" (1950/1995, p. 7). He notes, however: "the manner of doing this cannot be put into any formula" (Ibid., p. 278). Orchestral musicians also expect conductors to have precise musical ideas. In her article (1988, p. 995), Rector (S) points to the verbal, vocal and gestural means conductors may rely on to convey their message to the orchestra. However, the practitioners address methods, attitudes and theoretical stances which do not happily sit in Rector's classification. Therefore, the present study classifies the conductor's working methods, examined later as a Top Theme, along other lines: General, Semi-specific and Specific, each of these divisions subdividing into practical and theoretical topics.

The pedagogues discuss the conductor's ability to work fast in order to maintain the spirits of the group and maximise their rehearsal time. They highlight the musical interest for conductors to elicit an active mutual listening from the players and, for themselves, to compare the orchestral rendition to their inner aural image of it (referred to in Mental Construct). Green remarks on the difference between preparatory work and actual conducting: "marking phrases into the score proceeds differently from conducting them. Conducting deals with the musical aspect; marking deals with the structural aspect" (1961/1997, p. 74). This remark points to the passage from concepts notated on the score to actual gesture. Lidov (S) notes:

A [...] delicate question [...] is whether we should regard the notation as an approximation of a nuanced performance or regard notated, articulate relations and performances as somewhat independent

channels. I often favor the second view and hold that this difference, analogous to the difference between concept and impulses, obtains even in music that could be notated but isn't.

(Lidov, 2005, p. 6)

Green and Lidov highlight here the gap between written instruction and physical performance, and the limitations of the former in informing the latter. As discussed later in this study, musicians often resort to traditions and/or subjectivity to fill the gap.

The pedagogues approach the issue of running efficient rehearsals and propose an additional nuance to the fast work evoked earlier, as efficient work may be slow but ensure depth, whereas fast work may prove inefficient in the long run and sweep too quickly over important musical aspects. Efficiency is also high on the players' agenda, taking several guises: time management, gestural precision and conceptual clarity. Patterson remarks: "it's so much more satisfying for me to help create a conductor's concept when I know what the concept is. [...] Metaphor and abstraction are fine, just not at the expense of clarity" (Polyphonic survey, 2007). Opposing metaphors to clarity is intriguing, as metaphors primarily aim to clarify ideas. What the players may disapprove is obscure or irrelevant metaphors rather than the cognitive process itself, which consists in explaining something through something else. George Lakoff and Mark Johnson (2003) emphasise the fundamental role that metaphors play in the acquisition of knowledge, representing more than poetic or rhetoric embellishments.

The manuals also address the following topics: discussing interpretative or technical issues with the orchestra (which again conflicts with the concept of minimising talking); working in sectionals; improving the musical rendition in real time; and stopping the orchestra as rarely as possible, and only when the conductor knows what to say and how to say it. Konttinen (S) remarks: "constant stopping lowers the level of energy, disrupting both the music and the concentration" (2008, p. 130). The players suggest that conductors develop a memory of what needs to be worked on after the first run-through of the piece, a topic engaging the conductor's Mental Construct.

For the conductors, this theme refers to short- and long-term strategies in order to improve the orchestra and achieve the desired level of excellence. One working method seems to reach a strong consensus among conductors and points to the idea of knowing how and how much to rehearse. This concept is fairly vague and the conductors do not develop any particular criterion for evaluating how much is enough. However, they remark on the necessity for the conductor to acquire this particular knowledge. Casals sees in rehearsals a way of building a community of feeling within the orchestra and an opportunity to rehearse also the emotional side of music. Giulini further comments: "music has to be always an event, also the rehearsal" (Chesterman 1990, p. 68), both conductors considering the rehearsal as a moment of musical exchange in its own right. Concerning methods, André Previn suggests: "listening is a developable talent" (Matheopoulos, 1982, pp. 61–62) implicitly questioning the concept of the 'born conductor'. Mackerras further comments: "the young conductor learns from the reaction of the performers, singers, or players, what works and what does not" (2003, p. 70).

The players' most popular expectation is that the conductor would allow their artistic responsibility and freedom, which is in line with the acknowledgment of the players' musical qualities, but goes one step further. They suggest: "let the musicians [...] carry the performance" (Ray Still in Blackman, 1964, p. 205), and "allow [them] the freedom of individual expression" (Shulman, *Ibid.*, p. 197). Peck pays tribute to Boulez: "on the podium, he encourages and allows the orchestra to express itself musically" (2007, p. 17). He further comments: "[Sir Thomas Beecham] gave the orchestra credit for knowing something, so we responded beautifully to him" (*Ibid.*, p. 61). Recalling a reversed situation, Ruth Ehrlich argues: "one of the worst experiences is where a conductor listens to what you're doing – and then asks you to do it that way! It's as if they can't allow you your own musicianship, but have to take it for themselves" (Ambache survey, 2001). Kontinen (S) addresses the topic of the conductor absorbing the orchestra's concept: "[they] wait to hear what the orchestra has to offer musically before beginning to shape the sound to match his or her own ideas of interpretation" (2008, p. 211). This point of view, however, seems to be at odds with the idea of the conductor coming to the orchestra with his or her ideas clearly established from the first rehearsal.

The players also require the conductor to correct the orchestra in matters of intonation, mistakes or phrasing, and to do this with grace. McCosh notes: “listening and playing in tune improves both individually and collectively. [...] Musicians' ears evolve by having them tune to a bass tonic” (Polyphonic survey, 2007). They also expect the conductor to refrain from talking, remarking that “a conductor's hands are his most important tools. [...] He resorts to words because those tools have failed him” (Buchman, *Ibid.*). Patterson further remarks: “in performance, I get pretty right-brained, and am not thinking in verbal terms. It's better for me to keep it visual. It's also usually a lot more efficient” (*Ibid.*). Patterson draws on the idea that the left side of the brain performs analytical operations (such as linguistic interpretation, he posits), whereas intuitive tasks (such as gesture decoding) would be specific to the right side of the brain.

Later research (Antonio Damasio, 2012) seems to suggest that this brain division is overrated, both functions being performed by both sides of the brain and resulting from different processes rather than different brain locations. Accessing intuitively this cognitive area Bernstein proposes: “no mystery begins to approach the mystery of getting an idea” (Matheopoulos, 1982, p. 10). Damasio suggests, indeed, that the process starts before the subject's awareness of it. Using the conductor/orchestra metaphor, he argues: “the oddest thing is [...] the conspicuous absence of a conductor *before* the performance begins, although, as the performance unfolds, a conductor comes into being. [...] The performance has created the conductor—not the other way around” (2012, p. 25). The idea, it seems, has created the subject's consciousness of it rather than the subject deliberately producing the idea.

The above-mentioned inconsistencies and undocumented assertions within the practitioners' testimonies – or other similar ones – need not obscure what the practitioners actually *mean*. Former discussion has pointed to possible gaps between what is said and what is meant, notably about baton technique (versus musical unintelligibility) and metaphors (versus conceptual clarity). Interpreting the practitioners' words (and sometimes arguable mythologies) is part of the process of better understanding their opinions. After all, musicians are not supposed to be linguists,

philosophers and medical researchers, all at once, but do wish to genuinely express their opinions about their art, using verbal signals as vectors.

The conductor's ability to select players is high on the players' agenda as well. From the players' point of view, this issue belongs to Working Methods with the Orchestra, rather than Other Musical Knowledge, as it appears for the pedagogues and conductors. Players often describe their first encounter with the conductor as their first work session, revealing the conductor's methods and taste, whereas from the conductor's perspective, auditioning players seems to belong to their professional routine, which partakes of their musical knowledge rather than their orchestral activity *per se*. Max Raimi (P) recalls:

The audition was almost a surreal experience. [...] Solti got up to speak [...]: 'My dear, I want you to play that again with more aggression and energy'. So, I played it a little faster and louder. He said: 'NOO, NOO my dear, with aggression and energy'. [...] I was just turning the strings out of my instrument. [...] I expected to see that committee start laughing. And Solti slowly nodded his head and said; 'YEAAAAAHS!' That was my first experience with Sir Georg.

(Raimi, Chicago Symphony broadcast, 2007)

Like Levine (C) (Chesterman, 1990, p. 167), Solti seems to favour musical expression over beauty of sound. This is the kind of aesthetic options players come to discover at their first encounter with the conductor and informs, if subliminally, their later collaboration. About audition procedures, Shulman (P) suggests: "the ideal method is to invite the prospective member into the group and perform from that position" (Blackman, 1964, p. 197). Peck (P) notes: "Fritz Reiner always had to test a new player within the orchestra for musicianship and personality" (2007, p. 2).

The players also require the conductor to properly balance overview and detail. Buchman argues: "spending an hour on thirty bars of music will only get one labeled as a micro-manager. Better to focus on the big picture and trust the musicians to work out the details" (Polyphonic survey,

2007). Faber (S) argues: “allow the piece to breathe and progress in an unhurried and musically organic way” (2012, p. 16). These ‘big pictures’ and ‘organic ways’ are seen not only as aesthetic stances, but also as physical tests. Patterson (P) remarks: “[players] need a chance to work through the pacing, and to figure out how to plan stamina” (Polyphonic survey, 2007). However, pointing again to the exception rather than the rule, Ripley (P) recalls:

Barbirolli] spent an hour and a half [...] doing quite the opposite of what I have been advocating here. He picked and fussed about every detail. [...] When he eventually finished, [...] the entire orchestra rose spontaneously in a standing ovation. [...] Needless to say, it was a fine performance.

(Ripley, 2003, p. 83).

It is worth remembering that Barbirolli himself has emphasised the importance of the rehearsal, if only by downplaying the importance of the performance (Bamberger, 1965, p. 245). This event shows how conductors may balance their inner musical drive against more received pedagogical concepts. It also emphasises the players’ receptivity for off-the-beaten-track methods and the difficulty of setting stable norms for rehearsal techniques. Charles F. Barber (S) remarks: “close study of [the conductors’] work reveals no code, conformity, nor Ten Commandments to be found across their individual approach to rehearsal” (2003, p. 17).

The players also approach issues such as conducting the entire orchestral fabric, not only the melody, not stopping the orchestra too often (and when doing so explaining why), displaying a creative attitude, and running exciting rehearsals. Peck comments:

[Abbado’s] rehearsals could be tedious and his requests were intoned in a soft, flat voice, with no vitality or spark. [However], his non-pushy attitude evoked a lovely sound from the orchestra, with no forcing anywhere and a genteel approach to attacks. He was very civilized, calming down the brass and making the strings more flexible.

(Peck, 2007, p. 14)

Peck suggests here that the conductor's personality affects as much the working atmosphere as the immediate sound they elicit from the orchestra.

The last two strings (General Human Interaction and Distant Horizons) discuss matters of human relations and cultural eclecticism, and explore the conductor's role within and beyond the orchestral realm. These strings not only underline the human aspect involved in orchestral conducting, but also highlight extra-musical qualities expected from the conductor, suggesting that these qualities may help steer the conductor's musical achievements.

String V: General human interaction

The fifth string of the Matrix explores domains that exceed the musical arena. It includes Communication, Psychology and Leadership.

19. Communication appears to be at the core of the conductor's art. Fantapié suggests: "today, conductors' indispensable qualities are thus, above all, their capacity to communicate" (2005, p. 30).¹⁵ The pedagogues address mainly two communicational channels: the gestural messages which the conductor addresses to the players, and the verbal messages delivered to the orchestra during rehearsals or to the audience during concerts. Atik (S) considers the conductor's "clarity of message" as an element of their leadership qualities (1994, p. 25). The conductors, too, speak about their ability to convince (in and out of the orchestral arena), and to share their ideas and rationales. Mid-way between Communication and Relation to the Wider World, they highlight their moral obligation to speak up for ethical causes, to collaborate with the media and to deliver their musical message to as many people as possible. The players expect the conductor to be a good communicator, notably by transmitting their energy, sharing their knowledge, being concise when addressing the orchestra, and communicating with players in a way that is even less tangible than gaze or other subtle forms of non-verbal communication, a way that may be considered almost telepathic.

¹⁵ "Aujourd'hui, les qualités indispensables d'un chef d'orchestre sont donc avant tout sa capacité à communiquer".

20. Psychological Skills: psychology as a term is almost one hundred and fifty years old and the science it designates has developed progressively, pervading first the academic world, then the social fabric, “making psychology a household word” (Levant, 2003, p. 1) and influencing people’s general mode of thinking. The orchestral arena is no exception. Psychological Skills explores what common sense considers as such rather than the social and cognitive science it designates. It refers to the conductor’s ability to connect with individuals and groups, to assess their specific mindsets and particular sensitivities, and to understand, or intuitively infer, how their psyche works and is best addressed.

The pedagogues discuss three main avenues: the conductor’s general sense of group psychology; the more focused idea of the psychology involved in orchestral conducting; and the interpersonal aspect of psychology when it involves individuals (whether musicians or board members). The conductors approach the psychological aspect inherent in music and music-making. They advocate a careful touch when it comes to human relations. Chailly argues: “musical attributes are only half of a conductor’s panoply. The other half are human, psychological qualities—a flair for mass psychology in particular” (Matheopoulos, 1982, p. 501). The players remark on the conductor’s necessary perceptiveness, for example by reading the players’ attitudes and facial expressions, or in managing rehearsal time.

21. Leadership approaches mainly two kinds of leadership: musical and human, and meets a wide agreement among the practitioners. Musical leadership envisages the musical authority that conductors exert over the orchestra through their professional excellence, be it their artistic vision or physical proficiency. Human leadership concerns all social and personal relationships, private and public, that conductors may encounter as leaders. It also refers to the general approach to leadership that they are expected to deploy in the frame of their artistic status, be it with the orchestra, the press, the audience, or the political world. This aspect parallels the theme of communication, and connects the conductor’s capacity to lead with their communicational skills.

Atik (S) remarks: “considering that the conductor is often perceived as an ideal of the charismatic leader, the absence of research in the area is surprising” (1994, p. 22). In his article, he proposes three types of leadership: the charismatic leadership (revolving around the persona of the conductor), the transactional and transformational leadership (referring to the conductor’s motivational abilities), and followership (examining the leader-follower relationship). What Atik calls ‘transactional leadership’ forms part of the conductor’s Working Methods with the Orchestra and highlights the conductor’s ability to motivate the players and bring out the best of them, whereas ‘followership’ seems to belong to Relations with the Orchestra and includes the teamwork the conductor instils in the orchestra. McCaleb (S) identifies, in addition, the alternating leadership within a musical ensemble (2012, p. 50), which may also apply, if marginally, to orchestral conducting in cases of a soloist’s presence or a concertmaster’s strong personality. It may also occur between the players under the general umbrella of the conductor’s leadership. McCaleb sees transactional leadership as pointing to a regime of sanction (positive or negative) attached to the follower’s achievements, whereas “transformational leadership strategies emphasise the personal development of the followers” (Ibid., p. 50), notably by taking into account their self-esteem.

The conductors refer to their organisational skills and their ability to federate the orchestra around their aesthetic ideas, imposing their musical taste on to the audience as well. They also discuss the careful use of authority, ideally stemming from the moral example they give and their musical knowledge. The players see the conductor’s accurate assessment of the inner life of the orchestra as partaking of their leadership. Gillinson and Vaughan (S) remark:

The life of an orchestral musician can be highly rewarding, challenging, and exciting, but is just as likely to be frustrating, exhausting and unfulfilling. [...] In order to understand [...] at which end of the spectrum a player’s life might fall, one must understand not only the individual’s particular circumstances and attitude [...] but also the artistic, financial and political background in which he or she operates.

(Gillinson and Vaughan, 2003, p. 194)

As may be expected, the conductor represents, for the players, much of this artistic background. Judith Herbert (P) remarks: “a fantastic conductor gives you the freedom to listen, makes big demands on you, but doesn't stifle you” (Ambache survey, 2001).

This theme also addresses the conductor's general stance as a leader, finding the right balance between “dictatorship” and “anarchy” (Brian Sewell (P), Ambache Survey, 2001). Ripley (P) comments: “[the conductor must] be careful how [to] use power” (2003, p. 82), and “inspire [players] to forget the differences among [them]” (Ibid., p. 89). As part of their leader status, conductors are expected to stand their ground and achieve success. Gaber (P) argues: “[the conductor] must possess the superior ability of crystallizing the talent and discipline of [...] the orchestra, and generate its energies for the ultimate achievement—fine music-making.” (Blackman, 1964, p. 200)

String VI: Distant horizons

The last string includes Attunement to One's Time, examining how conductors connect to modern life, and Relation to the Wider World, exploring how they take part in social, political or philosophical issues.

22. Attunement to One's Time consists in the conductor's knowledge of new technologies in general and more specifically in operas, and their acquaintance with modern recording techniques. Some pedagogues point to the advantages that recordings represent, whilst others focus on their possible drawbacks. Fantapié argues: “recordings [...] preserve only imperfectly the magic of the moment. They do, however, preserve the flaws...” (2005, p. 216).¹⁶ Conversely, John Rushby-Smith (S) remarks: “the possibility of retakes enables artists to take risks they would never dare take on the concert platform, often with breathtaking results” (2003, p. 178). Karajan views his recordings, of which he took on the production and mixing, as contributing to the improvement of the orchestra. He notes: “the constant filming has changed the sight of the orchestra [but also] the sound, because [during recordings] everybody is giving his utmost”

¹⁶ “Les enregistrements [...] ne conservent qu'imparfaitement la magie de l'instant. Les scores oui...”.

(Chesterman 1990, p. 17). Mid-way towards Adaptation, players highlight the conductor's necessary ability to adjust their working methods to recording sessions.

Considering the sociological aspects of recordings, Johnson (S) notes:

Perhaps it is because recordings are so much part of our daily lives that we routinely accept them in lieu of the live performance. [...] They provide an alternative mode of musical production, of proven value for performers and their audiences, and for scholars and composers.

(Johnson, 2002, p. 197)

The increasing presence of recordings on the market and our cultural landscape may have contributed to the standardisation of artistic values as well. Johnson further remarks: "we need to resist the facile option of assuming that a given recording presents 'the work itself' in any authoritative sense" (Ibid., p. 209). However, composers did yield to the temptation of recording their own works as a way to establish an exemplary interpretation. Galkin (S) remarks: "more and more frequently since the advent of the long-playing record, a significant trend has developed in which a composer conducts the first recorded performance of his work" (1988, p. 17).

23. Relation to the Wider World explores the way conductors relate to the social fabric. Two topics come to the fore: the conductor's relations with the audience (taken in a larger sense than merely the spectators of the concert hall, and including the conquest of new publics); and their understanding of sociological, economical and political matters. In this respect, Fantapié remarks: "[the conductor] cannot ignore the context in which he finds himself: publicity, public relations, press, administration, [...] leave and retirements, taxes, the world of disc and video, etc." (2005, p. 52).¹⁷ Concerning the conductors' relationship with the audience, it is their general sentiment that "music brings to mankind a very solemn and lofty message, [which] may explain the worldwide love for music" (Walter in Chesterman, 1976, p. 25). Karajan considers his filmed

¹⁷ "[le chef d'orchestre] ne peut ignorer le contexte dans lequel il se trouve: la publicité et les relations publiques, la presse, l'administration, [...], les problèmes [...] de congé et de retraite, les impôts, le monde du disque et de la vidéo, etc."

concerts to have helped him spread this musical message around the world and reach new publics. Several conductors reflect on their communication with the audience. Ashkenazy highlights the unpredictable nature of the conductor-public relationship: “[the conductor] has to communicate with the audience through a hundred people, and it is very difficult to pinpoint why some can and some cannot.” (Matheopoulos, 1982, p. 471). Comet further comments: “in the final analysis, you never know why a concert works or doesn’t work” (Wagar, 1991, pp. 31–32). In his sociological study, Willener remarks: “the tastes of the listeners are part and parcel of the [artistic] ‘situation’ with which all musical producers must deal” (1997, p. 20).¹⁸

Commenting on his duty towards the audience, Boulez argues: “an artist must be able to speak for his time” (Maestro, 1982, p. 49), prioritising the conductor’s communication with their contemporaries over their compliance with received traditions. Abbado adds: “music reflects and describes its own epoch” (1986/2007, p. 45). This holds true whether in the way the music is composed or in the way it is performed. Muti further comments: “music is more than just a pleasure. It is a very potent civilizing force” (Matheopoulos, 1982, p. 375). Levine (C) reflects on his obligation towards the public: “conveying to any receptive listener all the levels—or as many as I can—of the impulses, feelings and ideals which the composer has expressed in musical terms, is my responsibility as a conductor” (Ibid., p. 283). Levine highlights here the complexity of the composer’s aesthetic and affective message, and emphasises the conductors’ duty in conveying this message to the audience. He also points, if subliminally, to the listener’s role in being ‘receptive’ to the conductor’s delivery. Scholarly studies have investigated the three poles mentioned by Levine: impulses (bodily knowledge) feelings (affective knowledge) and ideals (mental knowledge), all possibly combining into the aesthetics of a composition. DeChaine (S), for example, argues:

A traditional understanding of musical meaning dictates that a piece of music or a particular musical experience doesn’t make us feel—rather, it makes us think, and it’s the thoughts that cause our emotional response.

¹⁸ “Les goûts des auditeurs font partie de la “situation” [artistique] avec laquelle les producteurs de musique [...] doivent compter”.

But is the route really so indirect? Could there be some deeper, more intimate circuit connecting music and memory, thought and feeling? I suggest that the notion of a deep connection points to the power of *affect* to fuse our bodies and our senses and our minds. In advancing such a claim, I take issue with those who view the affective power of music as consummately ideological and, hence, underplay the role of the body.

(DeChaine, 2002, p. 85).

The players expect the conductor to deliver outstanding performances and “give the audience a reason to listen, regardless of the complexity of the music” (McNutt, Polyphonic survey, 2007).

Rohe also remarks: “[the conductor] must be active in the field of personal relationship with the community” (Blackman, 1964, p. 213). Solti went one step further, seeking international recognition. Herseth recalls the conductor’s words: “you really want to be world-famous? You need to travel around the world” (Chicago Symphony broadcast, 2007).

Reflecting on the conductor’s interaction with society, Patterson (P) comments:

As orchestras continue to evolve and develop, musicians have to learn more and more skills that have nothing to do with playing an instrument. We have to be conversant in labor law, skilled at negotiating, judicious about using our increasing power in governance, competent at reading a financial statement — the list goes on and on. The same is true of the conductor. Stellar musicianship, great stick technique, and dazzling on-stage charisma are all great, but a successful conductor must also know how to ‘work’ a party, pull off a convincing board presentation, make a case in a development call, and stage an engaging radio or TV interview, often all in the same day: [...] a bewildering array of off-stage duties that a 21st-century music director faces.

(Patterson in Polyphonic survey, 2007)

The last two themes differ from the others in that they do not seem to blend happily in any of the previous strings. Rather, they intersect with them. From Work Ethics to Stylistic Stance refers to the way conductors relate to their work (choice of score editions and/or performance practices,

favourite conducting style, concert rituals, human and professional intercourse with players) and connects these factors to the artistic outcome. Adaptation to the Musical Reality intersects with Personal Physicality, Working Methods with the Orchestra, Working Methods with Oneself, and Relation to Sound, all of which requires the conductor's adaptation to circumstances such as the soloists' concepts, the acoustics of the concert hall, the characteristics of the orchestra, the complexity of the piece or the orchestral setting.

A. From Work Ethics to Stylistic Stance addresses the issue of authenticity. Referring to the conductor's dilemma between the inaccessible ideal of authenticity and a more personal reading of the music, Rudolf (M) remarks: "the quest for authenticity, despite its utopian nature, remains a worthwhile challenge. [However], utilizing information about a composer's intentions need not lead to impersonal music making" (1950/1995, p. 357). This issue has been addressed earlier. However, what is emphasised here is the direct impact which the conductor's ethics have on the aesthetic outcome. The manuals also approach this theme in terms of inviting the student to reflect on good and bad traditions and to avoid getting into a rut. However, little is said about what would possibly constitute good or bad traditions, nor what would be a good path leading to stylistic authenticity or a bad one leading to the daily grind.

Speaking here as a pedagogue, Esa-Pekka Salonen argues: "the greatest danger in this profession [...] is to get stuck on a formula of a kind. [...] This is a completely unfamiliar thought when thinking about the essence and the spirit of art" (Konttinen, 2008, p. 165). However, Konttinen (S) points out: "there are such strictly followed traditions [...] where every beat pattern has been taught exactly the same way to every conductor [that] there is often a strong resemblance between [...] the way they look" (Ibid., p. 167). She further comments: "the musical and gestural processes [consist in] finding a way to cut loose from how things have always been done" (Ibid., p. 223). Norrington (C) adds: "it is a challenge to have musicians change a bit – to make them play in a way that will suit them and yet also make the music recognizable to me" (Wagar, 1991, p. 196).

Players also comment on the conductor's work ethic. Peck suggests: "proper style and proper approach must have precedence over the performer's innate feelings" (2007, p. 100), suggesting the conductor's task of assessing, in a documented way, the composer's style. On the other hand, Don Ehrlich (P) exhorts the players to join the artistic path that the conductor proposes: "[Mendelssohn's] Italian Symphony sounded great no matter how it felt. We need to pay attention, even if what we find contradicts what we want to think" (Polyphonic survey, 2007).

B. Adaptation to the Musical Reality reflects the conductor's flexibility. Emphasising the inherent instability of live performance and the conductor's real-time adaptation to unexpected situations, Nakra remarks: "the thing that makes live performances most powerfully expressive, aside from accuracy and musicianship, is the set of real-time choices [conductors] make to create a trajectory through the range of interpretative variation in the music" (2000, p. 25).

The Adaptation theme constitutes a consensual topic among manuals and conductors. However, each practitioner explores differently which elements are to be adapted to what circumstances. Peck (P) recalls his experience as a soloist: "it is not often that one has a conductor of such sensitivity as a colleague. Even if I changed each performance in certain ways, Giulini was always there, and immediately adjusted the accompaniment to fit the solo" (2007, p. 13). Don Ehrlich (P) further remarks: "[conductors must] adjust to [the orchestra] playing as much as [the orchestra] adjusts to their beat" (Polyphonic survey, 2007). Referring to general movement analysis, Carol-Lynne Moore and Kaoru Yamamoto (S) suggest: "the unique movements of a given individual may appear quite ambiguous [but] once a private code has been decoded, the perceived meaning will be accurate most of the time" (1988, p. 116). This decoding process sheds light on the adaptive process assisting players in comprehending the specific gestural vocabulary of each conductor, and constitutes the orchestra's adaptive part of the phenomenon which exceeds the realm of this study. However, it forms part of what McCaleb calls the 'inter-reactions' between players (2012, p. 115), which are also at play between the conductor and the orchestra, each party being, as it were, adaptive to the other's level of adaptability.

The end of Chapter Two reviewed major characteristics of each source as identified through the Visible Action Continuum. The next section aims to discern their main traits through the Matrix.

Characteristics of each source

Four concepts are instrumental in reading Figures 3.4 to 3.6. The Diversity of a theme indicates the number of topics this theme houses and is a measure of its complexity. The Consensus Value of a theme is the surplus added to its Diversity as a result of the agreement it reaches among a given group of practitioners. The Diversity of a theme plus its Consensus Value constitutes its Weight, which thus indicates the pervasiveness of this theme within a given group of practitioners. The Average Consensus Rate is the proportion between Diversity and Weight, and shows (in relative terms) the degree of agreement the practitioners reach about a given theme. These concepts are further developed below when the process of quantification is discussed.

1. The manuals

As shown on Figure 3.2, four themes (Top Themes) appear to be prominent in manuals: Personal Physicality, Relations with the Orchestra, Working Methods with Oneself, and Working Methods with the Orchestra. Diversities and the Weights display important quantitative variations, for example between Personal Physicality and Compositional Knowledge, or between Relations with the Orchestra and Ensemble Experience. The themes also display a wide diversity in terms of Consensus Values, for example between Adaptation and From Ethics to Style.

Adaptation forms a nebula of closely related topics. Some of them point to a certain type of adaptive attitudes, such as conductors adapting their gestures to the orchestral setting, or their tempo and orchestral forces to the acoustics. Fantapié (M) remarks: “the care that Beethoven took in choosing the number of instrumentalists in relation to the hall in which the work was to be played [shows] that for the composer himself there was not only one response” (2005, p. 165).¹⁹

¹⁹ “le soin que Beethoven apportait au choix du nombre d’instrumentistes en fonction de la salle dans laquelle l’oeuvre allait être jouée [montre] que pour le compositeur lui-même il n’y avait pas qu’une seule réponse”.

Meier (M) notes other parameters requiring the conductor's adaptability: "the size of the string section depends on [...] the availability of string players, the financial strength of the orchestra, and available space on stage or the orchestral forces" (2009, p. 151). Faber (S) notes:

"[Copland's] original scoring [for *Appalachian Spring*] called for thirteen instruments because of the small size of the pit at the Library of Congress" (2012, p. 1).

About conceptual adaptation, Meier remarks: "a soloist and conductor [...] hopefully will be able to coordinate their views amicably" (2009, p. 299). Conflicts between conductors and soloists do occur. It is only necessary to recall the historic disagreement between Bernstein and Glenn Gould about Brahms's first piano concerto performed at Carnegie Hall in 1962, which ended up with Bernstein's public disclaimer about the artistic outcome of this collaboration. These sorts of event may have prompted the pedagogues to raise this point. Rudolf also argues: "[conductors] must adapt [their] gestures to the responses and needs of the players" (1950/1995, p. 297).

THEMATIC STRINGS : DIVERSITY, CONSENSUS AND WEIGHT

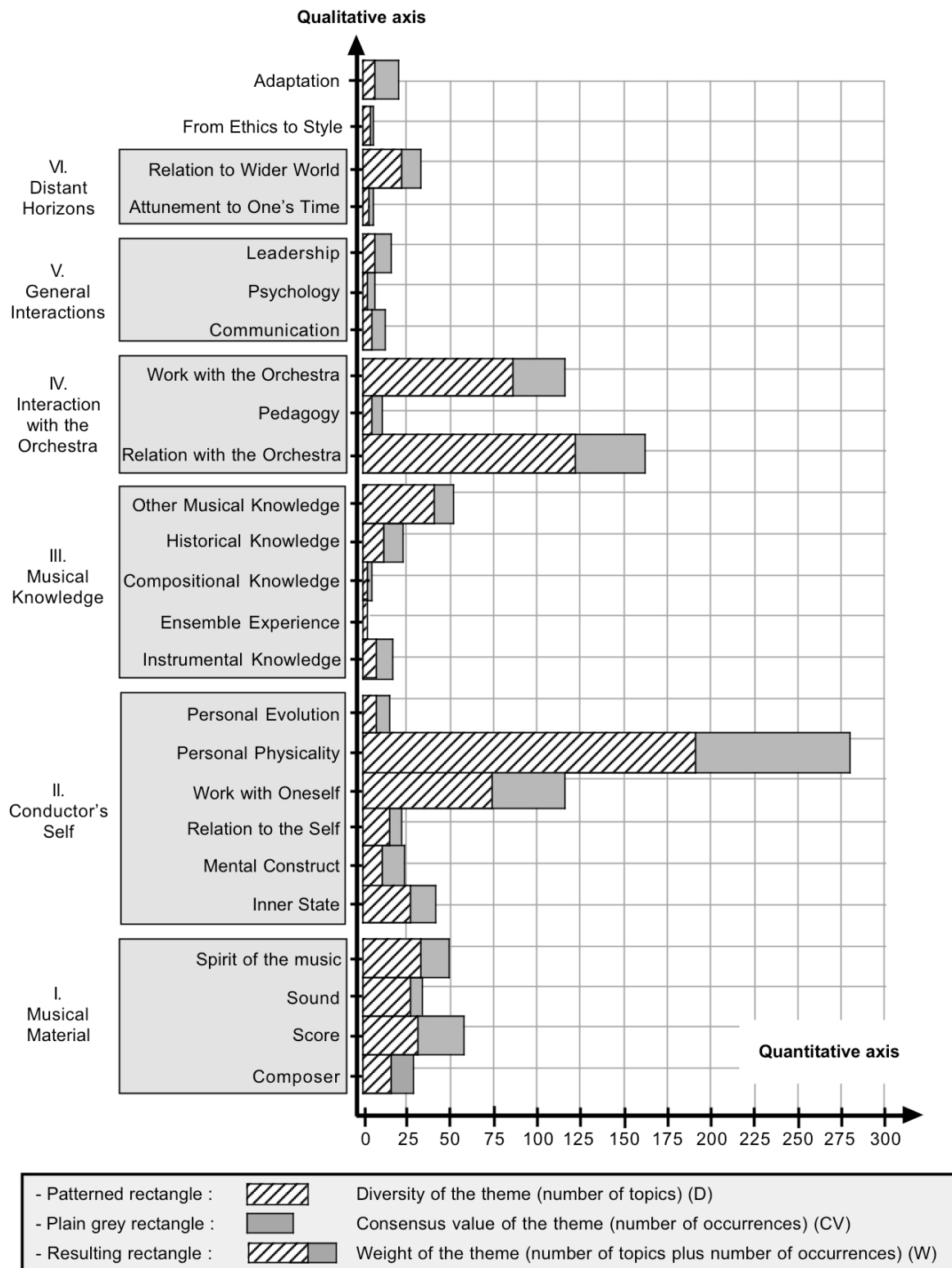


Figure 3.2
Thematic String Matrix: manuals

2. The conductors

Figure 3.3 shows the Matrix analysing the conductors' testimonies. The Top Themes, whose tips sit to the right of the dotted line, are more numerous than for the manuals: ten instead of four.

There is also less of a gap between the Top Themes and the other ones, which makes it problematic to draw a clear line between top and non-Top Themes. By itself, this fact is indicative of the conductors' tendency to approach the phenomenon from multiple angles with comparable intensity.

The difference between manuals and conductors concerning personal physicality is striking and confirms the small amount of Action on the conductors' Visible Action Continuum. The conductors address Inner State much more than the pedagogues. Working Methods with the Orchestra and Relations with the Orchestra seem equally important to both groups of practitioners. Finally, it is worth noting how little consensus conductors build around their Working Methods with themselves, compared to their Relation to the Score, the study of which, they say, constitutes the major part of their preparation. These aspects are further examined in the next chapter.

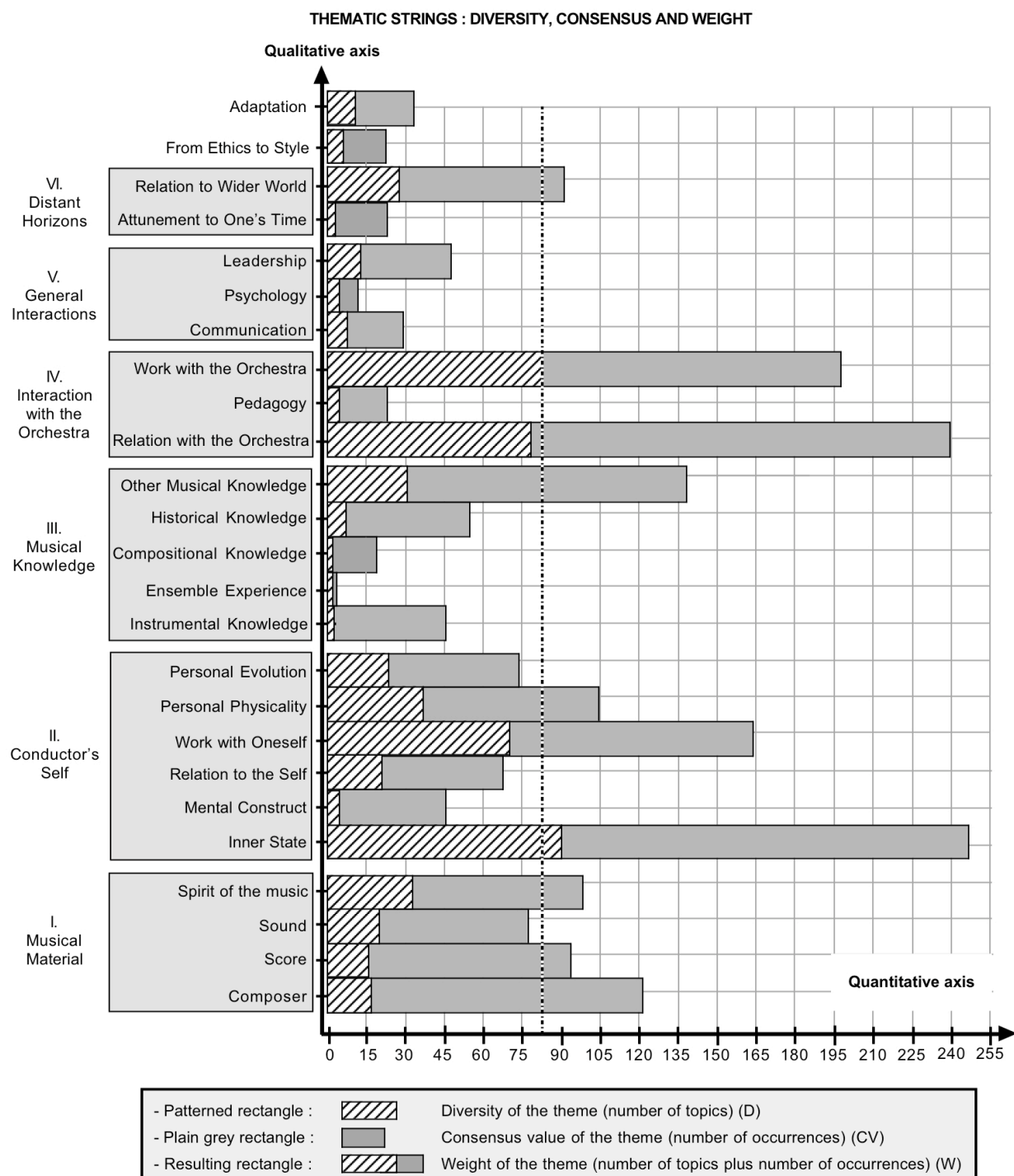


Figure 3.3
Thematic String Matrix: conductors

3. The players

Figure 3.4 identifies the players' four Top Themes (three of which are in common with the pedagogues): Relation to the Orchestra (second in line for manuals), Work with the Orchestra (third for manuals), Personal Physicality (first for manuals), and Inner State. They build a fairly

wide consensus. No theme seems to have escaped the players' attention, although about one quarter of them are only minimally addressed.

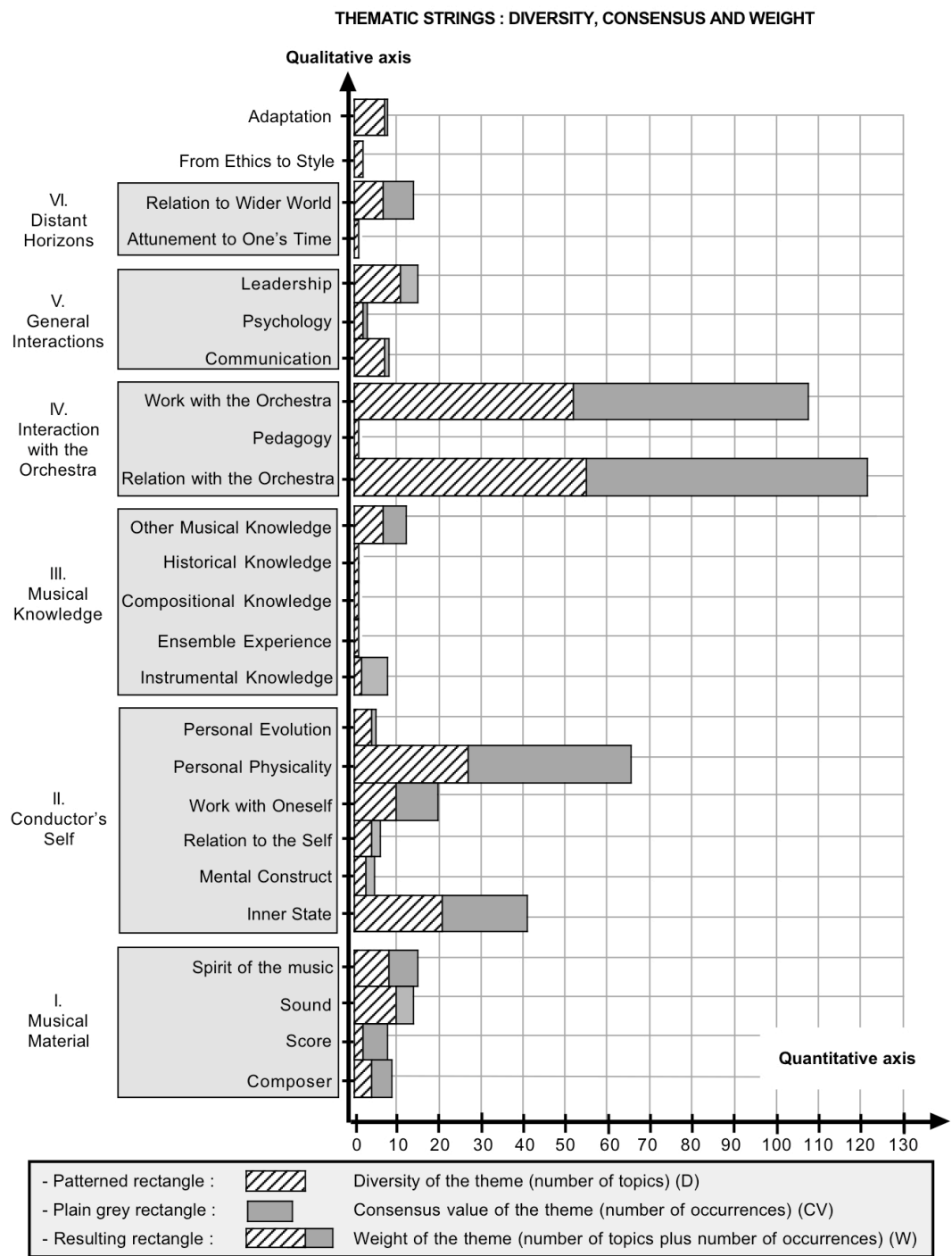


Figure 3.4
Thematic String Matrix: players

Conclusions

Chapter Three has explained the principles of the Matrix in further detail, proposing a linguistic analogy to topics, themes and strings, respectively words, sentences and paragraphs. The first string (Musical Material) addressed the conductor's knowledge of the composer's life and aesthetics, and their mediation between the composer's indications, their own opinions and the players' possibilities. It also discussed the promotion of new repertoire (Relation to the Composer). The practitioners have remarked on the limitations of the written score, examined score study and evoked the possibility of re-orchestrating works according to new instrumental possibilities and concert hall characteristics (Relation to the Score). This chapter then explored the orchestral sound in terms of tone colour, balance between sections and results of the conductor's gestures (Relation to Sound). Finally, this study developed the issue of tempo choices, musical meaning (narrative or other), interpretative strategies and stimulating performances (Spirit of the Music).

The Conductor's Self dealt with aspects of the conductor as a person or artist. The practitioners have addressed the conductor's aural contact, rhythmical sense, and less palpable aspects such as psychological qualities and the disputed notion of charisma (Inner State). They have examined the conductor's memory and inner image of the sound (Mental Construct). This string has also dealt with the conductor's abilities for self-assessment (Relation to the Self), their anticipation of issues likely to arise during rehearsals and performances, and their analysis of recordings and critical observation of players and conductors as learning paths (Working Methods with Oneself). The practitioners also emphasised the conductor's preparation of the orchestral parts, their development of nuanced tempo variations, their analysis of their filmed rehearsals and their involvement in musicological research. This chapter has discussed the use of the baton, the work in front of a mirror, and the conductor's gestural discourse and gaze (Personal Physicality). Finally, it has addressed the conductor's evolution over time, their necessary learning attitude and discovery of their personal style (Personal Evolution).

The conductor's musical knowledge constitutes the third string of the Matrix, which has dealt with their praxis as instrumentalists and theoretical expertise in vocal and instrumental matters (Instrumental/Vocal Knowledge), their experience in collective music-making (Ensemble Experience), their knowledge of the creative process and various aspects of it, such as harmony, counterpoint and orchestration (Compositional Knowledge), and their awareness of music history, performance practice and musical styles (Historical/Stylistic Knowledge). The practitioners have also addressed the conductor's knowledge of transposition techniques, acoustical issues, and hiring procedures (Other Musical Knowledge).

The next string of the Matrix is Interaction with the Orchestra. It has dealt with the partnership between conductor and orchestra and many nuances thereof (Relation with the Orchestral), with didactic principle (Pedagogy) and rehearsal techniques, which address aspects such as efficient and well-paced work sessions, implementation of the composer's indications, restrained use of verbal explanations and acknowledgement of the players' opinions (Working Methods with the Orchestra).

General Human Interaction has analysed the conductors' communicational capabilities (Communication), their acquaintance with the inter-relational aspect of their profession (Psychological Skills) and their status as leader and various facets thereof, such as their ability to federate the orchestra around their artistic vision, and their organisational and motivational capabilities (Leadership). Distant Horizons addressed the conductor's openness to aspects of modernity, such as machinery in operas and recording technique (Attunement to One's Time), and their interaction with the social fabric, such as their relation to the audience or interest in other art forms and cultures (Relation to the Wider World). The practitioners have discussed issues attached to the working spirit as affecting the orchestral artistic outcome, such as the concept of musical authenticity and their refusal for music-making to get into a rut (From Ethics to Style), and the conductor's adaptability to acoustics, to the orchestral level and style, and to the soloists' conceptions (Adaptation).

Chapter Four: A closer look at the main sources

There are many ways to disagree about a subject. One of the primary aims of this study is to understand the divergent opinions expressed about orchestral conducting. It is then helpful to understand in what register these opinions differ. 'Dogs are always white – No, dogs are always black' is a blunt opposition of beliefs. This kind of disagreement does not often occur with regard to orchestral situations. Some practitioners do recommend studying the score on the piano, rehearsing beat patterns in front of a mirror, listening to recordings as a way to learn a piece or rearranging scores, while others oppose these ideas. However, there are many more concepts that the practitioners develop in their testimonies and about which they agree to a certain extent and disagree to another. 'Dogs are white in Belgium, but black in England' is a restriction to the opposition expressed above, and reorients the discussion towards a larger subject, having to do with the exploration of both countries. 'Dogs are big – No dogs are small' channels the discussion towards the observer's subjective evaluation of bigness and smallness. 'I love dogs – I hate dogs' possibly opens the question of actions driven by sentiments. 'I love dogs – I love cats' situates the discussion in the realm of positive feelings towards animals. Finally, 'Every day at 7 a.m. I feed my dog – Every day at 7 a.m. I run around Hyde Park' reflects a choice of lifestyle, which is instrumental in assessing personal priorities.

The above-mentioned (simplistic) examples overview several types of opposites. It is helpful to develop an understanding of diverse registers of disagreements to better evaluate the frame in which they operate. Giulini's choice of not working in front of a mirror is more fully understood when knowing that he conveys this opinion in an interview dealing with the conductor's transmission of the full musical content of a piece to the orchestra and the audience. In this particular frame, he mentions not understanding how people can work with recordings in front of a mirror. On the other hand, Rudolf advises the student conductor to check the mirror and ensure that their gestures are convincing, and does so in his conducting manual. Their words express a disagreement, but they could also reflect a difference of echelon regarding the conductor's personal evolution, Giulini possibly having reached a point where checking his gestures in the

mirror is not necessary any more. Giulini and Rudolf could also represent two different styles, Giulini favouring an inner perception of sound and gesture whereas Rudolf advocates the out-to-in cognitive trajectory.

Examining disagreements often results in the acquisition of new knowledge. In order to convey the circumstantial factors surrounding these disagreements, this chapter (the longest of the thesis) proposes a closer look into each main source, identifying their Top Themes, deriving their Key Topics and analysing their specificities. It suggests main qualities and chronological evolutions between sub-groups.

Chapter Two and Three discussed the orchestral phenomenon at the level of the topic. Chapter Four now explores what larger structures (themes and strings) reveal about the process.

The manuals

“A conductor’s general behaviour and attitude communicate important information to the orchestra before a word is spoken or an upbeat is given.”

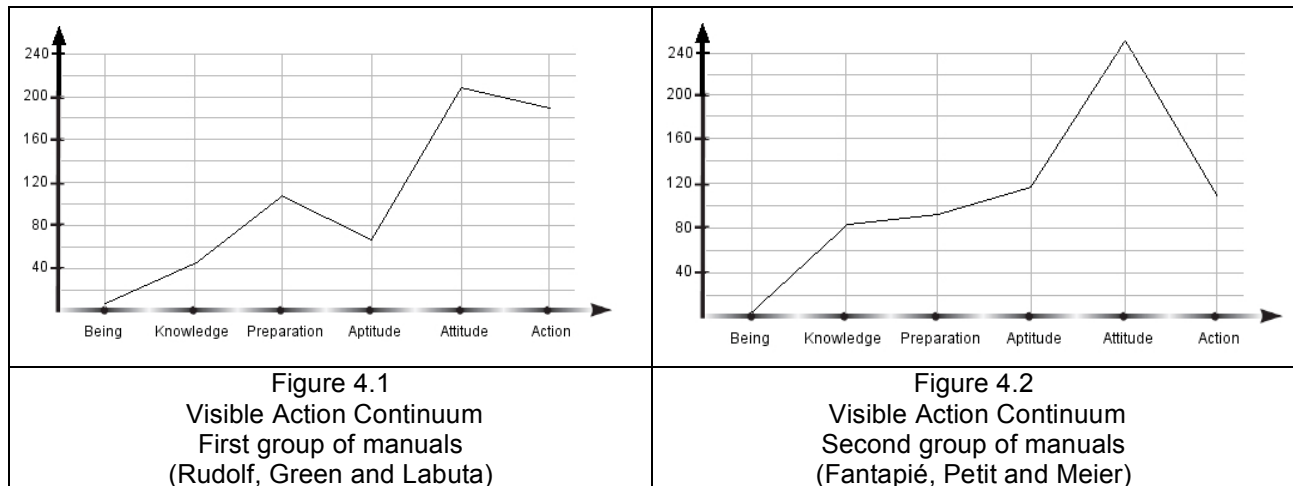
Gustav Meier (2009, p. 344)

This section further analyses the manuals through the Continuum and the Matrix.

Comparison between the two sets of manuals through the Continuum

When merging together the graphs of the first three manuals on the one hand (written between 1950 and 1982) and the last three on the other (written between 2005 and 2009) it appears that the two blocks display significant differences between their respective emphases on Aptitudes, Attitudes and Actions (see Figures 4.1 and 4.2). Action seems consistent with the number of pages the first three manuals devote to beat patterns (546 out of a total of 962 – more than a half) as opposed to the last three (221 out of a total of 1,023 – less than a quarter). Pointing notably to Rudolf’s book, Geoff Luck (S) intriguingly asserts: “the content of conducting manuals

tends to focus more on conveying emotional expression rather than temporal information” (2011, p. 168). Beat patterns aim precisely to convey this temporal frame, which Rudolf does quite substantially. Luck may, then, refer to the expressive information *within* the temporal frame, an idea which Bernstein develops in ‘The Art of Conducting’ (*The Joy of Music*, 1954, pp. 126–158) and which this study discusses in Chapter Five.



The manuals comment very little on what a conductor is supposed to be in terms of psychological profile, philosophical stance, or human qualities. The pedagogical agenda of these texts may account for the authors’ reluctance to predefine who is to become a conductor and who is not, implicitly refusing to engage with the notion of the ‘born conductor’. Rather, they seem to imply that one *becomes* a conductor through the work one accomplishes. Both trends are visible on Figures 4.1 and 4.2, as they highlight Preparation but underemphasise Being. Manuals do, however, address the conductor’s Being in exhorting students to be competent musicians, effective leaders and hard workers.

All American authors and Petit agree on the regular progression between Being, Knowledge, and Preparation, considering the conductor’s work as paramount, prevailing over their knowledge and their personal profile. Fantapié appears to think otherwise and prioritises Knowledge. He remarks:

As I arrive at this stage [of my book], I realise that I do not know any more whom I address. Is it young conductors to whom I have spoken too lengthily about details that they already know, or curious music-lovers that too many technical examples could have discouraged?²⁰

(Fantapié, 2005, p. 372)

The ambivalent nature of the conducting manuals may be seen as a result of the hybrid status of their authors as conductors (addressing a wide readership) and pedagogues (addressing student conductors). As pointed out by Garnett, “many scholarly writers on conducting are themselves also practitioners, negotiating between [their] obligations” (2009, p. 44). Chapter Five further examines this hybrid status through Bernstein’s ‘The Art of Conducting’, a didactic document presented by a fully-fledged conductor.

Preparation is higher than Aptitude in Figures 4.1, as early manuals seem to focus more on the act of acquisition than on the result of it, whether in terms of Knowledge or Aptitudes. Later pedagogues seem to place Attitude at the top of a conceptual *crescendo* substantially descending back towards Action. This may suggest that the new paths to excellence reside more than in the past in the conductor’s Attitude towards music and players, rather than in their Actions.

All manuals seem to consider that the conductor’s Attitude is a priority. Fantapié makes this particularly evident, which seems to corroborate the overall organisation of his book, starting with the relational aspect of the orchestral phenomenon. The conductor’s attitudes may include matters as diverse as their approach to scores, players, themselves, concert habits, musical traditions, and marketing.

The difference of Attitude and Action between Figure 4.1 and 4.2 suggests an evolution in pedagogical thinking, which may reflect a shift in the conductors’ practice as well. It is probable

²⁰ “Parvenu à ce point [de mon livre], je me rends compte que je ne sais plus à qui je m’adresse. A de jeunes chefs, à qui j’ai trop longuement parlé de détails qu’ils connaissent? Ou à des mélomanes curieux qu’auront pu rebuter trop d’exemples techniques?”.

that early manuals have elicited reactions from later ones, leading younger authors to seek new paths of thinking rather than repeating what has been written earlier. The authors of early manuals may have felt the pedagogical needs to establish a recognised baton technique. However, after these standards have been set and disseminated, and “basic patterns [...] universally accepted” (Meier (M), 2009, p. 18), the next generation of manuals seems to have engaged with new ways of building the conductor’s excellence, not least because the first generation of manuals remained in print and accessible. Action is nonetheless significantly addressed in both figures. Given the stress the pedagogues put on beat patterns, the next section discusses their graphic representations and possible issues related to these graphics.

All books study beat patterns, but the space they allocate to this issue varies between 300 pages for Rudolf (more than a half) to 96 pages for Meier (less than a fifth). Additionally, the visual representation of the baton trajectory differs substantially between authors, Petit doing without any graph at all. These differences raise the question of the relationship between the graphics (signifiers) and the conductor’s physical action (signified).

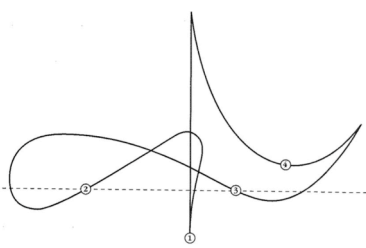
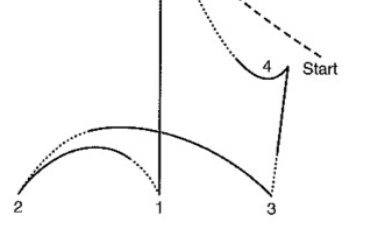
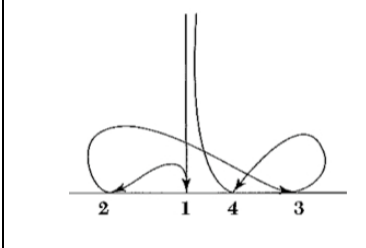
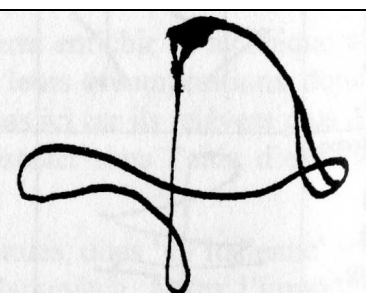
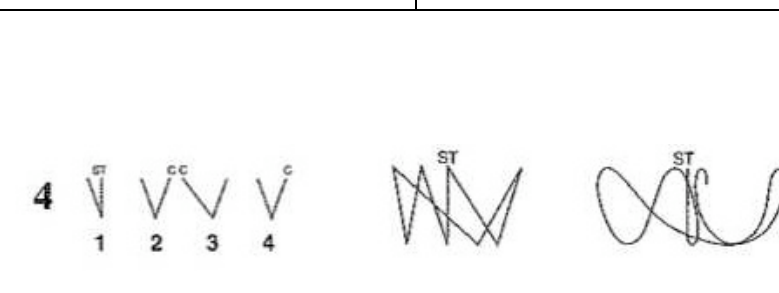
		
4/4 in Rudolf's manual	4/4 in Green's manual	4/4 in Labuta's manual
		
4/4 in Fantapié's manual	4/4 in Meier's manual	

Figure 4.3
Beat patterns in conducting manuals (4/4)

Figure 4.3 presents a 4/4 legato beating in five of the six manuals. According to these graphs, Labuta seems to disagree, on the one hand, with Rudolf about the place of the third and fourth beat, and, on the other, with Green about the height of the fourth beat, whereas Rudolph and Fantapié appear in accordance regarding the lower beating field for the first beat. Green seems to consider that the movement starting the beating belongs to another space than the beating itself. She also aims to capture the speed and energy of the conductor's gesture, which Rudolf and Labuta do in some of their graphs. Meier proposes two designs representing the movement of the baton: a standard beating (centre) and a *legato* beating (right), both starting at the ST point (as in 'start'). On the left side of his graph, he displays a new notational system that provides a unidirectional representation of the beat pattern. Rather than depicting the shape of the conductor's gesture, it matches the left-to-right directionality of the score, starting at the extreme left with ST and proceeding rightwards for each count, initiating each gesture from the letter c (as in 'count').

Considering the variations of beat patterns among manuals and their different graphic representations, it is intriguing that Konttinen proposes that, over time, “beat patterns [...] have changed little, if at all” (2008, p. 190). On the contrary, Gunnar Johannsen and Teresa Marrin Nakra argue: “[the conducting] technique is based on precise system of gestures that has evolved its symbolic meanings over approximately 300 years, and has been well documented in pedagogical texts” (2010, p. 265). Indeed, it seems unlikely that beat patterns would change from author to author but not from period to period. What Konttinen may allude to is the stability of what Edward Venn calls “the acontextual and acircumstantial abstraction” (2003) related to time signature (generically a cross for a 4/4, a triangle for a 3/4 and up-and-down movement for a 2/4). Beat patterns may thus owe their similarity to their deficiency of properly representing the conductor’s *real* gesture. As Bernstein points out (1954, p. 137), these geometrical shapes are rarely performed as such, and the video analysis supports this idea. The historical stability of the conductor’s gestures (claimed by Konttinen) and the apparent precision of the graphics representing them (claimed by Johannsen and Nakra) are both misleading. The conductor’s gestural system appears neither precise nor unequivocal in real-life situations, partly due to its symbolic nature, requiring interpretation (thus subjectivity) to be fully comprehended. The graphic representation of this system is not *well* documented either (as alleged by Nakra). It is *substantially* documented by a host of sources, which diverge, however, in their representations. Labuta argues: “many traditional conducting diagrams are misleading” (1982/2010, p. 23), without explaining, however, which diagrams are misleading and in what way.

In his dissertation (2008), Lee compares the manuals of Rudolf, Green and the Japanese conductor Hideo Saito, and merges the diagrams of their respective beat patterns in order to achieve a more accurate representation of the conductor’s gestures in a given musical context, adding features to indicate the conductor’s energy flow. He also aims to adapt textbook “conducting gestures [...] to interpret challenging sections of [music]” (Lee, 2008, p. 12), trying to fill what Slatkin calls the “big gap between the academic world and the professional world” (Wagar, 1991, p. 261).

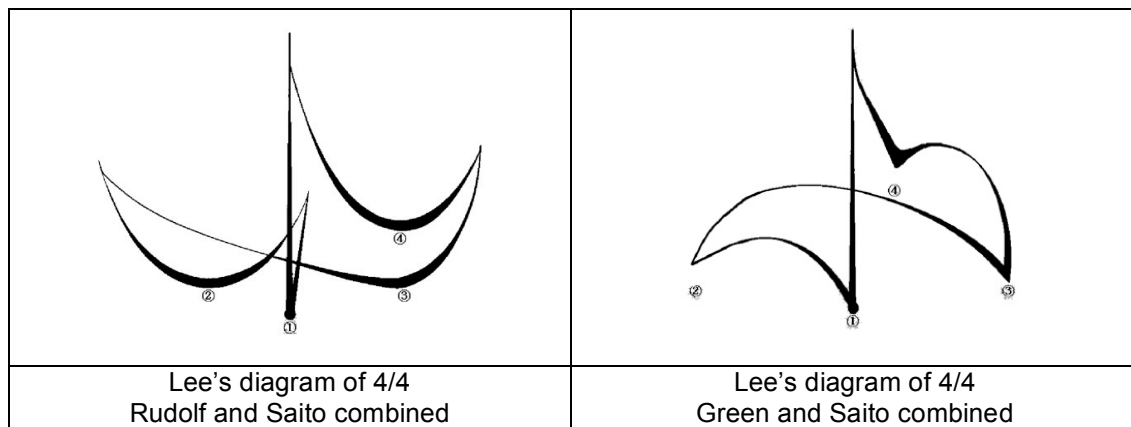


Figure 4.4
Lee's diagrams of beat patterns in 4/4

In her book (2009, pp. 142–143), Garnett, too, compares several textbooks including Rudolf's, Green's, and Saito's. She emphasises the spatial metaphors on which the conductor's arm movements may draw, constructing their meaning not only from the shape of the gesture but also from its size (bigger is louder), their distance from body (more distant is louder), and their speed, regardless of the musical tempo (faster is bigger thus louder). The above graphics may hardly convey these parameters. Chapter Five further discusses the visual representation of the conductor's gestures through Bernstein's diagrams.

The manuals address score analysis and describe rehearsal techniques in uneven proportions as well. Rudolf and Green barely touch upon these issues, except for some marginal comments and personal considerations, whereas later manuals seem to fill this gap, providing deeper analytical insight and covering rehearsal techniques more systematically. The manuals also display various opinions about the best way to physically express certain musical articulations and phrasings.

All the pedagogues agree, however, on the value of the left hand, the importance of eye contact, and on the difficulty of handling fermatas, cues, tempo changes and accompaniment (including recitatives). Some books more than others approach the psychological aspect of orchestral conducting, provide practical information about clefs and transposition, as well as ear and hand training. Finally, all books comment on some seminal repertoire works such as Beethoven's *Egmont Overture*, Tchaikovsky's Sixth Symphony, Debussy's *Prélude à L'Après-midi d'un Faune*,

or Stravinsky's *Rite of Spring*, which suggests the existence of a recognised pedagogical corpus of orchestral works, spanning over a period of a century.

Having reviewed differences of opinions between manuals through the Continuum, the next section examines them through the Matrix.

Comparison between the two sets of manuals through the Matrix

The four most diversified themes group together the vast majority of the topics, but build a small consensus among manuals, whereas Adaptation builds the largest consensus of all themes.

When further analysing the differences of Average Consensus Rate between themes, it appears that the more substantial a theme, the thinner the agreement around it, and vice versa. Manuals seem to agree on circumscribed matters, such as Adaptation and Communication, but complement (and sometimes contradict each other) on more manifold subjects, such as Relations with the Orchestra. Figure 4.5 aims to represent these trends graphically.

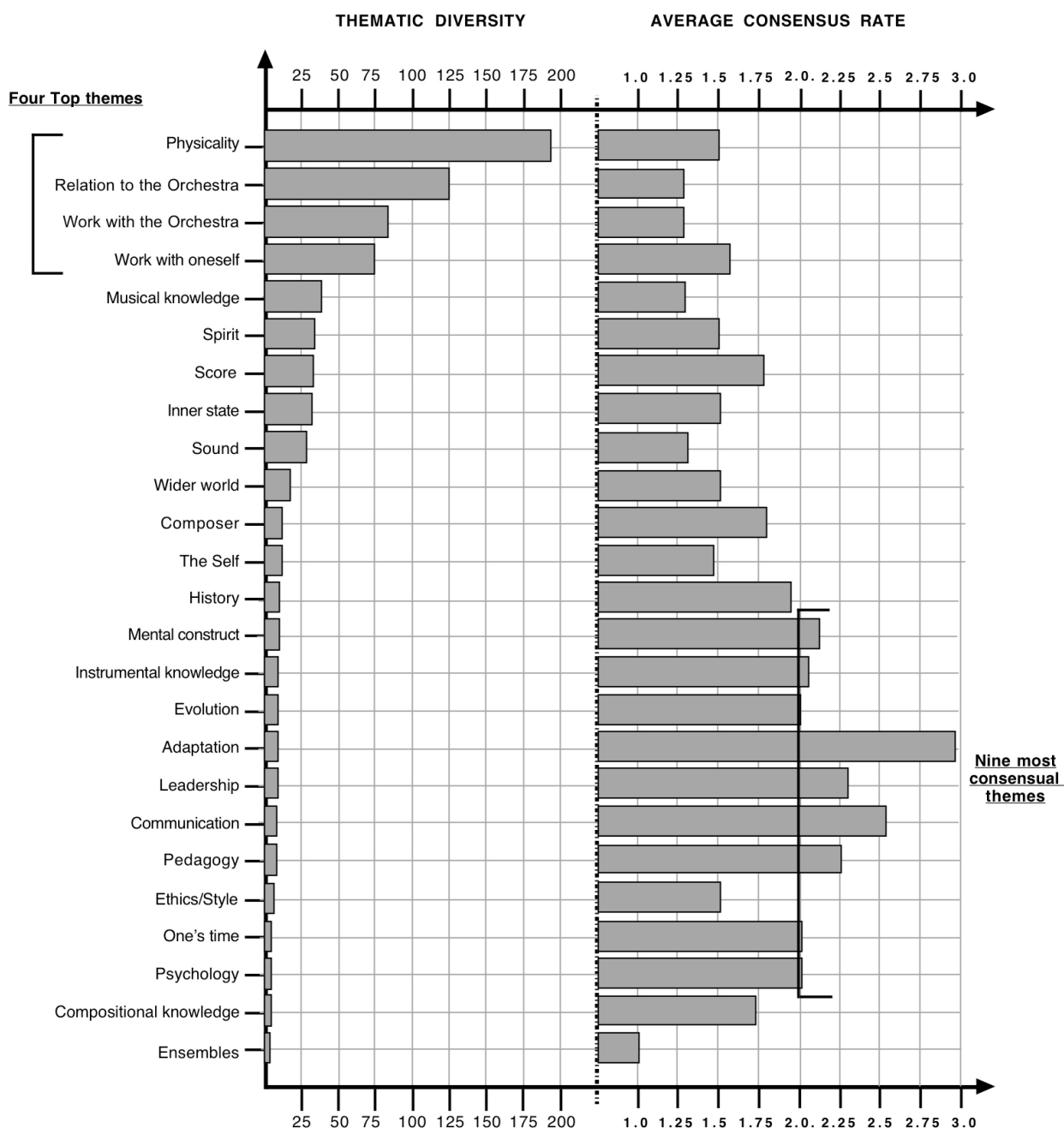


Figure 4.5
Thematic Diversity and Average Consensus Rate: manuals

A certain randomness seems to prevail in Figure 4.5, as there is no discernible pattern connecting the Diversity of a theme to its Average Consensus Rate. However, more globally, none of the four most diversified themes displays an Average Consensus Rate approaching the one displayed by the nine most consensual themes.

The conductor's adaptability has been identified as a highly consensual topic. Conducting itself seems to display similar traits. Its practice and pedagogy have evolved over time, adapting to the

wider world, for example concerning aspects related to social changes, public relation procedures or public taste. The manuals of the first generation approach Relations to the Composer in ways that are specific to each author (Average Consensus Rate = 1.1), whereas the later group seems to find a higher degree of consensus about this theme (Average Consensus Rate = 2.1).

Conversely, the pedagogical role of the conductor appears consensual for the first series of manuals (Average Consensus Rate = 2.2) whereas the second group displays individual opinions about the matter (Average Consensus Rate = 1.0). The change in the professional relations between the conductor and the players may account for later pedagogues depicting less than in the past the conductor as the players' pedagogue.

Further comparison between the first generation of manuals (Figure 4.6) and the second generation (Figure 4.7) shows that later texts discard altogether the theme of the conductor's Ensemble Experience. Personal Physicality, Working Methods with Players and Adaptation to the Musical Reality (pointing to visible aspects of conducting) decrease significantly over time. Conversely, Relation to Score, Relation to Sound, Relation to the Self, and Working Methods with Oneself (addressing the conductor's inner sphere) increase over time. These two trends may be indicative of the pedagogues' overall approach to this art, stressing less and less its apparent aspects, but increasingly its invisible ones. The expansion of Relations to the Wider World seems to be a modern trend, leading conductors towards eclecticism and social commitment. Seven themes are evenly presented in all manuals: Spirit of the Music, Mental Construct, Personal Evolution, and Other Musical Knowledge possibly designate the requisite for high-level musical achievements; Communication, Leadership, and Attunement to One's Time refer to the conductor's leading figure.

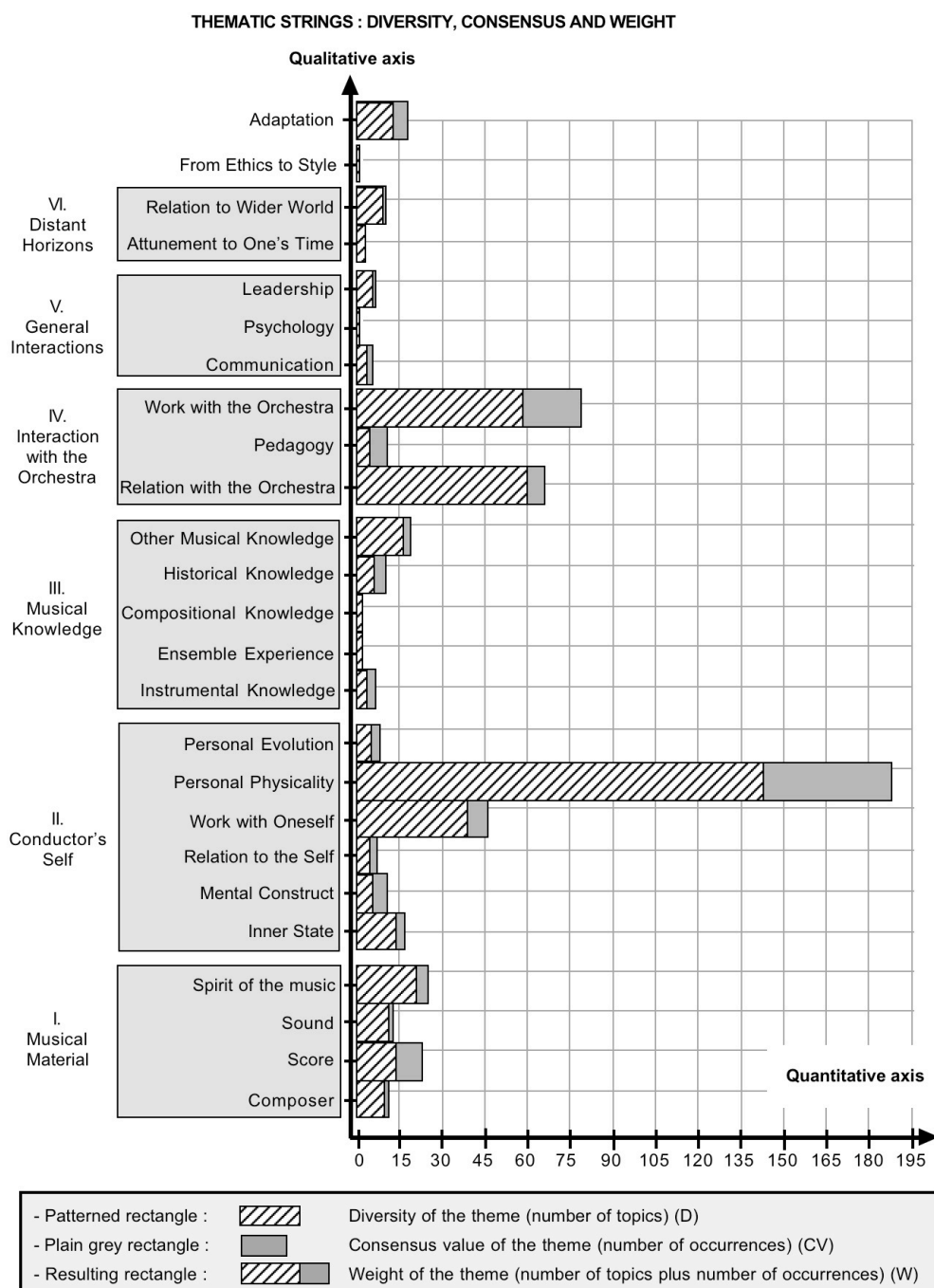


Figure 4.6
Thematic String Matrix: first set of manuals (Rudolf, Green and Labuta)

THEMATIC STRINGS : DIVERSITY, CONSENSUS AND WEIGHT

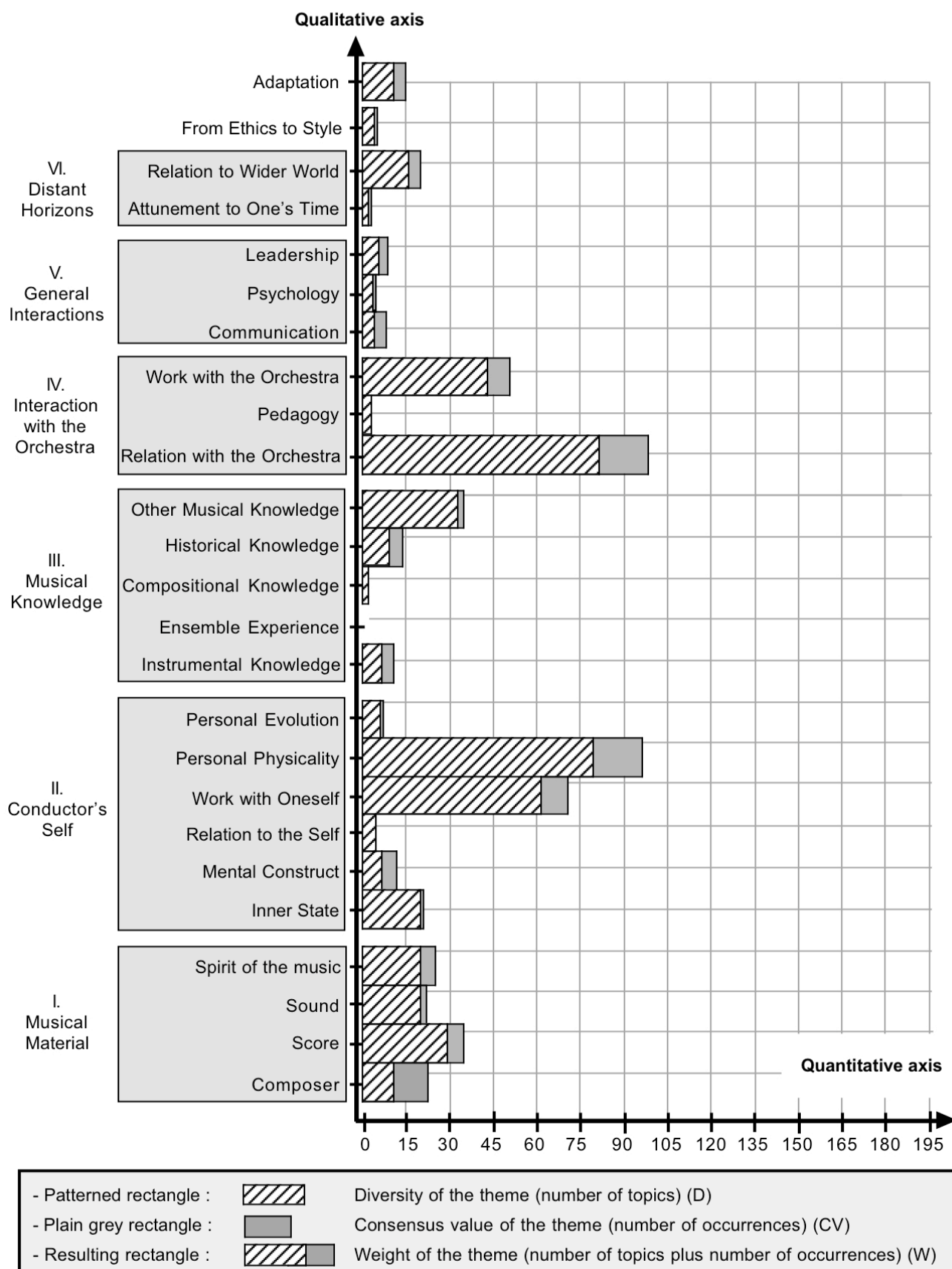


Figure 4.7
Thematic String Matrix: second set of manuals (Fantapié, Petit and Meier)

The last comparison concerns topics that have disappeared from, or appeared in manuals. Rudolf remarks: “the physical aspect of conducting has changed in the course of our century” (1950/1995, p. 413), as did the conductors’ overall approach to their art. Over time, far more topics have appeared than disappeared, which indicates that the pedagogical reservoir of ideas has expanded. For example, discovering the composer’s intentions and knowing how to balance a programme (for a concert or a season) have developed into more specialised concepts, respectively engaging with historically informed performances and marketing the orchestra with full awareness of the public’s taste. Some issues, however, did disappear from manuals, such as the practice in front of a mirror (which may indicate a shift in the pedagogues’ technical approach to conducting) and the conductors’ verbal guidance (which may have to do with the overall standardisation of the beat patterns evoked earlier (and of the symphonic repertoire discussed in later sections) and thus the lesser need for verbal explanations).

Topics that have appeared in later manuals echo the general evolution of thinking regarding orchestral conducting: creating a personal and recognisable sound, adapting the orchestral forces to the repertoire, experimenting with various orchestral settings, working on all parameters of music (sonic, emotional and structural), and engaging with a thorough reflection about interpretation and performance practice. Other issues testify to the evolution in social and human relations between the conductor and the orchestra: displaying trust and fairness towards players, being an enabler rather than a doer, and developing an awareness of how musicians perceive the conductor. The increasing societal interest in concepts and vocabulary concerning communication and psychology, whether within the orchestral arena or more generally in society, may have encouraged the authors of later manuals to develop their pedagogy along these axes more substantially than their predecessors.

The physical wellbeing promoted in contemporary lifestyles and the growing interest of Western society in Oriental philosophy and corporality also find a traceable echo among later authors. More than in the past, pedagogues think about conducting in terms of reconnecting senses (audition, vision and kinaesthesia), and remark on the conductor’s inner perception of the

gesture. They highlight the general corporeal condition necessary to engage with what Jonathan Dunsby (S) calls the “physically taxing activity” involved in musical performances (2002, p. 225). He remarks: “there is [...] an undoubted connection between performance and the performer’s physical and mental well-being. [...] Western music makes considerable mental demands, for example of the memory and the ability to concentrate” (Ibid., p. 225).

Stable concepts in both generations of manuals

Many topics reaching a high agreement among manuals are historically stable and belong to the pedagogues’ Top Themes. On the contrary, no topic in Ensemble Experience, Compositional Knowledge or Psychological Skill builds such a consensus, which makes these themes not only less popular in the authors’ eyes, but also historically unstable. Compositional Knowledge, for example, seems to appeal very little to all pedagogues. Over time, the composer-conductor has become the exception rather than the rule, and manuals seem to promote the conductor’s knowledge of the composer’s creative process more than his or her fully-fledged compositional activities. The next section examines the pedagogues’ four Top Themes of the Matrix identified in Figures 4.6 and 4.7.

Quantitative concepts

So far, this study has used the Matrix mostly qualitatively, through the distribution of topics into themes. This section explores the Matrix quantitatively to help assess which themes practitioners stress, and in what way. As proposed in the Introduction, a theme is said to be diversified (D) when it gathers numerous topics. It reaches a high Average Consensus Rate (ACR) when these topics meet a wide agreement among practitioners. It displays a heavy weight (W) when a theme gathers numerous topics *and* reaches a great consensus. This consensus reflects the practitioners’ collective opinions, affects the significance of a theme within a particular group, and possibly impacts on what the practitioners do individually in reaction to these collective opinions. The numbers (fairly reader-unfriendly, admittedly) displayed in the Top Themes tables nevertheless constitute useful indicators of the popularity that a theme enjoys among a particular group of practitioners and help read the larger structures derived from the models (Themes and

Strings). These numbers highlight the general trends of a group and are instrumental in pointing out essential differences between groups. Thus, quantifying the data of an individual testimony helps characterise this testimony; compiling these data with those provided by other testimonies within the same group helps identify the general trends of this particular group; comparing these compiled data helps highlight differences between groups, and possibly infer causality for these difference.

The reason for tracing Weight and Average Consensus Rate has to do with the dominant colour of a subject. The more people share a belief, the more powerful this belief is. In a musical community, if six conducting manuals support an idea, this idea is more pervasive than if only one manual supports it. It does not mean that this idea is truer or more pertinent, it only means that more people believe in it, and this is likely to shape the field accordingly.

Four Top Themes

Four themes stand out from the rest of the Matrix as far as weight is concerned: Working Methods with Oneself, Working Methods with the Orchestra, Relations with the Orchestra and Personal Physicality. They constitute the Top Themes and are analysed in greater depth in the following sections.

I. Working Methods with Oneself concerns the conductor's personal work, and divides into *long-term* and *short-term* strategies. Long-term strategies develop over the years (e.g. development of tempo memory and inner ear). Short-term strategies are more circumstantial (e.g. video analyses of one's working sessions with the orchestra), but may partake of a long-term project (e.g. video analysis may help conductors find their working style), in which case they are considered under this label. Each category further subdivides into issues directed towards the conductor's self and his or her personal development (e.g. engaging with musicological research about a composer or a genre), and issues applied more directly to a specific work (e.g. analysing the harmony of a composition or comparing various recordings of the same piece).

Long term [D=40;ACR=1.6;W=64]		Short Term [D=34;ACR=1.6;W=53]	
On the self [D=29;ACR=1.7;W=48]	On the music [D=11;ACR=1.5;W=16]	On the self [D=17;ACR=1.8;W=30]	On the music [D=17;ACR=1.4;W=23]
(please see Appendix 2, Table 2.1 for the full content of the table)			

Table 4.1
Working Methods with Oneself in both sets of manuals
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

As suggested by Table 4.1, manuals advise students to mostly activate long-term strategies directed towards their own development. At times, these strategies seem to reach a high level of musical or intellectual abstraction (e.g. finding an appropriate learning method, anticipating the problems likely to occur in rehearsals and concerts and their solutions, or comparing the structural image of a piece to its linear image). All columns and sub-columns display a similar Average Consensus Rate, suggesting a stable agreement among pedagogues. This may have to do with the common agenda of conducting textbooks: to provide the student with a personal working method.

II. Working Methods with the Orchestra compiles topics from *general* points to *semi-specific* ones (displaying some elements of detail), and *specific* ones (displaying additional elements of detail). Each of these three categories subdivides into practical and theoretical matters.

General [D=4;ACR=2.3;W=9]		Semi-specific [D=34;ACR=1.5;W=50]		Specific [D=48;ACR=1.2;W=57]	
Practical [D=2;ACR=3.5;W=7]	Theoretical [2] [D=2;ACR=1.0;W=2]	Practical [D=17;ACR=1.6;W=28]	Theoretical [17] [D=17;ACR=1.3;W=22]	Practical [D=37;ACR=1.1;W=41]	Theoretical [D=11;ACR=1.5;W=16]
(please see Appendix 2, Table 2.2 for the full content of the table)					

Table 4.2
Working Methods with the Orchestra in both sets of manuals
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

It is important to highlight that not only specific matters, but also general ones (such as the ill-defined concept of planning the rehearsal) define a field of exploration that may be beneficial for the conductor's work. They may translate, further down the road, into more specific steps, some of them engaging the players' action (e.g. correcting intonation issues), others concerning the conductor's behaviour (e.g. favouring specific over general comments). It is significant that the

number of issues increases from general to specific, emphasising the pragmatic aspect of the conductor's work. The higher stress on practical issues versus theoretical seems to confirm this trend. The three main columns display a constant increase of their Diversity and a constant decrease of their Average Consensus Rate, confirming the tendency evoked earlier: the more diverse a theme, the less consensual.

III. Relations with the Orchestra addresses more interpersonal matters than those proposed in Working Methods. These topics, however, set the artistic, psychological or physical frame for the implementation of the Working Methods.

Awareness [D=19;ACR=1.5;W=29]		
Psychological [D=7;ACR=1.4;W=10]	Musical [D=7;ACR=1.7;W=12]	Physical [D=5;ACR=1.4;W=7]
(please see Appendix 2, Table 2.3a for the full content of the table)		

Table 4.3a
Relations with the Orchestra in both sets of manuals: Awareness
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

As proposed by Figures 4.3a and 4.3b, some issues are related to the conductor's *awareness* of orchestral life and describe the receptive part of the relation, whereas the *interaction* constitutes the active part of it. Awareness divides into: (1) *psychological awareness*, gathering issues such as the conductor's consciousness of the players' expectations towards them; (2) *musical awareness*, concerning the conductor's evaluation of the players' technical and musical challenges, and their mindfulness of the orchestra's level and taste when programming a concert or a season; and (3) *physical awareness*, referring to the conductor's perception of everything corporeal, such as the players' fatigue and efforts, or their visual perception of the conductor.

Interaction [D=97;ACR=1.3;W=133]				
Positiveness [D=15;ACR=1.5;W=23]	Flexibility [D=5;ACR=1.4;W=7]	Teamwork [D=42;ACR=1.4;W=57]	Musical [D=28;ACR=1.2;W=35]	Physical [D=7;ACR=1.6;W=11]
(please see Appendix 2, Table 2.3b for the full content of the table)				

Table 4.3b
Relations with the Orchestra in both sets of manuals: Interaction
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

The interaction part subdivides into the following five columns: (1) conductors' *positivity*, such as their enthusiastic and encouraging attitude (2) their *flexibility*, such as their willingness to change their concepts or collaborate with soloists (3) their *teamwork* attitude, such as setting the work spirit or promoting cooperation (4) their *musical* involvement such as sharing their musicianship or developing the orchestra's dynamic range, and (5) *physical issues* such as sparing singers' voices during rehearsals or taking the players' comfort to heart.

The proportion between *Awareness* [D=19;W=29] and *Interaction* [D=97;W=133] is indicative of the pedagogues' action-oriented approach, confirming the pragmatic aspect noticed in Working Methods. The primacy of teamwork over musicality shows the manuals' primary concern to guide future conductors into setting an appropriate work spirit, which will then lead to convincing musical achievements.

IV. Personal Physicality is the most investigated theme by manuals. It presents topics dividing into (1) *general issues*, including baton technique, gestures and music, and (2) *specific issues*, displaying the same categories, treated with more details and contextualisation, plus a corporeal classification: body, hands/arms and head. This corporeal classification is consistent with the one proposed by Wöllner (S) in his study of the conductor's body in relation to the quality and quantity of information each of the body parts seem to convey to players (2008, p. 249). He notes: "the conductor's arms are generally in the uppermost focus of attention" (Ibid., p. 250), rather than their gaze, facial expression or general posture.

This theme displays the widest range of subcategories, each of them exploring the conductor's physicality under a different angle. Hatten (S) defines human gesture "rather inclusively as any energetic shaping through time that may be interpreted as significant" (2006, p. 1). His definition highlights both the phenomenological nature of the gesture (unfolding in time) and its semantic nature (interpreted as significant). Konttinen (S) proposes three categories of gestures: technical, musical and expressive (2008, p.76), coming close to my own classification and capturing the semantic potentiality evoked by Hatten. Nakra also reflects on expressive gestures and locates

part of the semantic content of the gesture in the way it modulates from an assumed norm (2000, p. 113). In orchestral conducting, as in other artistic fields, modulation from the norm would then be the key to understanding expressivity. The expressive element in beat patterns is documented and formalised in several conducting manuals. However, Konttinen remarks, “the technical and the expressive/interpretative [gestures] are very difficult to separate from one another” (2008, p. 77). It may be hypothesised that the un-standardised norms of the art of conducting makes it difficult to discern the deviations from these norms and clearly distinguish between expressive and non-expressive gestures. Lisa Billingham (S) argues: “expressive aspects can be shown through body posture, intent and gesture” (2009, p. 90), resorting to behavioural additives to clarify gestures.

Focusing on the degree of formalisation of a gesture, Garnett (S) proposes:

The distinction between the ‘structural’ and the ‘expressive’ elements of conducting technique lies not in processes by which they construct their meaning, but in the degree to which they are systematically formalised. There is a common repertoire of experiential metaphors that underlies both.

(Garnett, 2006).

Garnett emphasises here the common grounds on which the conductor’s right hand (structural) and left hand (expressive) build their respective meanings.

Konttinen divides gestures along pedagogical lines as well: ‘*educational gestures*’ and ‘*working gestures*’ (2008, p. 113). It seems likely that the conductor’s gestures would evolve along their work with the orchestra, progressing from *educational gestures* into more crystallised and nuanced *working gestures*. However, none of the manuals distinguishes gestures according to these parameters.

Various attempts have been made to represent the conductor’s gestures. Nakra (S) approaches this issue from a technical angle with the development, in 2000, of the Conductor’s Jacket

(recording and measuring the conductor's physiological signals) and the Gesture Construction (analysing and interpreting these signals). However, she also highlights the importance of the human mind to evaluate both the resulting data and the conductor's performance as a whole. As shown in Chapter Five, Bernstein displays the drawings of the conductor performing the beat patterns rather than the beat patterns being performed (as is usually the case in conducting manuals), hence focusing on the subject rather than the object.

Table 4.4 addresses very general issues, but sets nonetheless a conceptual frame for the conductor's approach to physicality and the implementation thereof.

General [D=20;ACR=1.6;W=31]		
Baton technique [D=8;ACR=1.8;W=14]	Gestures [D=9;ACR=1.3;W=12]	Music [D=3;ACR=1.7;W=5]
(please see Appendix 2, Table 2.4 for the full content of the table)		

Table 4.4
Personal Physicality in both sets of manuals: General
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

General topics [D=20] are scant compared to specific ones [D=252], attesting the authors' concern to provide student conductors with practical expertise. Their subcategories are also less numerous: (1) *Baton technique* addresses what is commonly considered as the conductor's technical and codified discourse; (2) *Gestures* explores matters that reach beyond the strict frame of baton technique and address the conductor's more person-specific behaviour; (3) *Music* establishes possible connections between the physical and the musical aspect.

Tables 4.5a and 4.5b separate *Specific* topics into Specific A (baton technique, gestures and body) and Specific B (hands/arms, head, music) only to provide more clarity on the page. They display categories coming close to the ones proposed by Garnett (2009, p. 21): facial expression and gaze behaviour (head), posture (body), gestures (hands/arms)

Baton technique and *Hand/arm*, although anatomically close, differ in their focus. Baton technique concentrates on the task to be accomplished (the rendition) and focuses on clarity and

flexibility, while Hand/arm centres on the conductor's corporeal involvement in accomplishing their gestures (the rendering) and explores substantially the use of the left hand. Treating these two categories as one, and exploring the overall role of both arms, Wöllner (S) remarks: "the conductors' arms achieved significantly higher ratings for amount of [musical] information" than their head or entire body (2008, p. 256), whereas their facial expression excels in conveying expressivity. Through context it may be understood that 'musical information' refers to temporal and quantifiable information, whereas 'expressivity' refers to the ill-defined deviation from the norm mentioned above and the personal involvement of the conductor.

Specific A [D=84;ACR=1.4;W=119]		
Baton Technique [D=54;ACR=1.4;W=77]	Gestures [D=17;ACR=1.2;W=21]	Body [D=13;ACR=1.6;W=21]
(please see Appendix 2, Table 2.5a for the full content of the table)		

Table 4.5a
Personal Physicality in both sets of manuals: Specific A
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Specific B [D=88;ACR=1.5;W=130]		
Hand/Arm [D=23;ACR=1.5;W=35]	Head [D=3;ACR=3.0;W=9]	Music [D=62;ACR=1.4;W=86]
(please see Appendix 2, Table 2.5b for the full content of the table)		

Table 4.5b
Personal Physicality in both sets of manuals: Specific B
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

On the role of the left hand, referred to as the non-dominant hand, Thüring and Penny Bräm (S) remark:

In books on conducting [...] the use of the non-dominant hand has usually been mentioned in a more general way, giving the impression that it is up to the individual conductor to develop gestures that will show other aspects of the music, such as sound texture, foregrounding of instrumental voices, density, atmosphere, and expression.

(Bräm and Bräm 2000, p. 146)

Paul Kolesnik (S) further comments: “there is a clear need for a uniform process that could be applied toward analysis of both indicative and expressive gestures” (2004, p. i).

In addition to proposing a repertoire of left-hand expressive gestures, informed by deaf language signs, Bräm and Bräm comment on the readability of such gestures: “[the fact that some] gestures are polysemous [...] does not mean that any one handshape can be substituted for another” (2000, p. 148). If a polysemous gesture is, indeed, capable of carrying different meanings, it may be assumed that context would permit a finer understanding. Moore and Yamamoto (S) suggest the existence of homonymic and synonymic gestures: “a given movement often has many meanings, depending on the context in which the behavior occurs and the background of the person observing the action. [...] On the other hand, the same meaning may be carried in many different movements” (1988, p. 90). Wöllner (S) adds:

It is plausible that several conductors employ different gestures that might result in comparable effects on an orchestra. [...] One conductor might also employ a variety of different gestures for repeated performances of the same passages in music. An experienced conductor has a repertoire of different gestures for specific situations, such as in a rehearsal in which one particular gesture does not cause the intended result and other gestures are necessary to communicate his or her intentions.

(Wöllner, 2008, p. 251)

Wöllner’s concept of rehearsal versus performance gestures comes close to Konttinen’s notion of educational versus working gestures and rests on the idea that the gesture and its significance evolve with time, according to the work process.

Bräm and Bräm propose a repertoire of conducting gestures using the left-hand for expressive purpose. Figure 4.8 displays a selection of four such gestures.

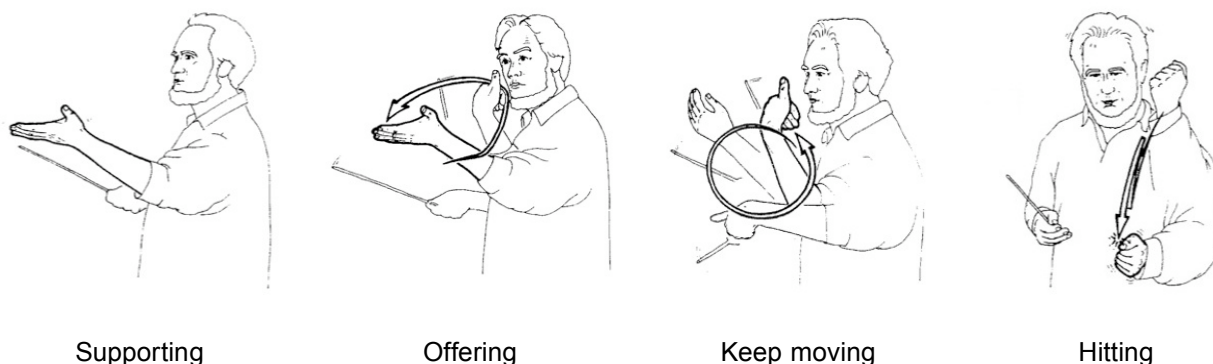


Figure 4.8
Bräm and Bräm: left-hand expressive gestures

Commenting on the shortage of information concerning the non-dominant hand, Wöllner remarks: “most conductors would [...] agree that the gaze and general facial expression are vital for effective conducting, though conducting manuals are less specific in this respect” (2008, p. 250). He adds: “facial affective behaviour should be implemented in curricula of conducting training” (Ibid., p. 265). Garnett argues in addition: “the range of embodied metaphors that the conductor’s basic vocabulary can draw upon allows it to remain expressively inexhaustible” (2006), possibly further informing the overall development of the conductor’s gestural discourse.

After studying the pedagogues’ Top Themes, this dissertation lists below (in bold) the ten topics that the manuals address the most. These topics are referred to as Key Topics. They may be viewed as the essence of the pedagogues’ opinions about conducting and provide useful material for later comparisons with the conductors’ and the players’ Key Topics. No hierarchy may be established easily between these ten topics, as all manuals address them all. Although some manuals develop some topics more than others, as may be traced by the number of pages that pedagogues devote to a given subject, it is beyond the scope of this study to further classify topics on these grounds, once it has been identified that a given topic has been studied in a given source. I place the Ten Key Topics within the general structure of the Matrix in order to contextualise them within the themes and strings to which they belong.

Ten Key Topics

I. Musical Material

1. Composer

2. Score

Study / analyse the score

3. Sound

4. Spirit of the music

Flexible tempo with an informed/meaningful purpose

II. The Conductor's Self

5. Inner state

Passionate/energetic/positive/tonic/dynamic/enthusiastic

6. Mental construct

Build your inner image of the piece

7. Relation to the self

8. Working methods with oneself

9. Personal Physicality

Distribute/complement appropriately the roles between both arms

Use your eyes as much as possible

10. Personal Evolution

III. Musical knowledge

11. Instrumental/vocal knowledge

Know the techniques and possibilities of orchestral instruments and voice

12. Ensemble experience

13. Compositional knowledge

14. Historical/stylistic knowledge

Know music history/styles/traditions

15. Other musical opinions/knowledge

IV. Interaction with the Orchestra

- 16. Relation with the Orchestra
- 17. Pedagogy
- 18. Working methods with the Orchestra

Plan/prepare your rehearsal time

V. General human interaction

- 19. Communication
- 20. Psychological skills
- 21. Leadership

VI. Distant horizons

- 22. Attuned to one's time
- 23. Interaction with the wider world

A. From work Ethics to Stylistic Stance

B. Adaptation to the musical reality

Adapt your conducting to the circumstances

The conductors

“The first and most important thing you have to learn is communication, how you explain what you want, not always verbally, but through gestures.”

Pierre Boulez (Matheopoulos, 1982, p. 33)

This section highlights the particularities of each group of conductors through the Continuum and the Matrix and analyses the conductors' Top Themes and Key Topics.

Group A

The first group starts with Bruno Walter. It includes conductors from European traditions (Austro-German, Spanish, British, Ukrainian, Hungarian and Italian) and ends with Leonard Bernstein, the first American-born conductor that this study analyses.

As remarked by Jeremy Siepmann, “the greatest conductors [of the past] were almost without exception great composers” (2003, p. 114). However, Galkin notes: “reports about orchestra conductors, [...] early in the nineteenth century, [...] began to describe in detail the qualities of virtuosi [conductors] while frequently neglecting consideration of the music performed” (1988, p. xxiv). Conductors of Group A may be seen to belong to the first generation of conductors who were not also composers. Their twenty-three testimonies include two reports by Ormandy, Karajan and Solti, three by Walter and Giulini, and four by Boult. These multiple testimonies are analysed in Chapter Five as particular case studies.

Visible Action Continuum

In order to avoid giving undue emphasis to conductors who provide two or more testimonies, this chapter compounds all testimonies from the same conductor into a larger whole. This method avoids granting certain topics a greater emphasis simply because they are reiterated by the same conductor.

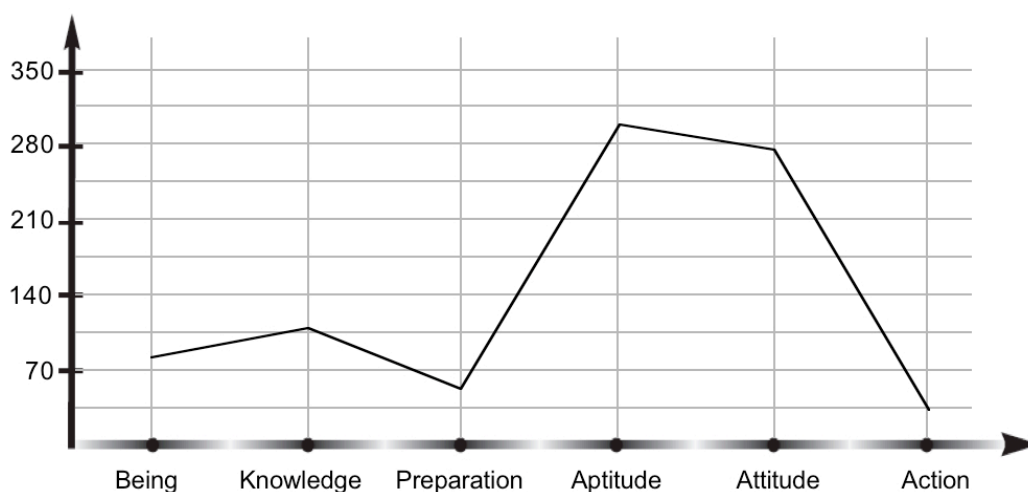


Figure 4.9
Visible Action Continuum: conductors, Group A

Under Preparation Walter remarks on the difference between the instrumentalist's and the conductor's education:

With the instrumentalist, the double function of execution and supervision forms an undivided and concurrent process. [...] His own ear will reach his own hand [...] mostly unconsciously. [...]. With the conductor, the striving for the same aim takes a much more complicated form [...] and must be pursued by him on circuitous paths.

(Walter in Bamberger, 1965, p, 160).

Bernstein refers to the conductor's constant integration of new elements: "the moment you find one thing new, it makes other things look new too, because it alters the relationship to everything else" (Matheopoulos, 1982, p. 13). Concerning Attitude, Karajan comments on his detached approach to conducting: "the real art of conducting is to realise that music comes implicitly, by itself. But it takes a long time to know and accept this" (Ibid., p. 223). This alludes both to the risk of over-conducting and to the conductor's awareness of this risk. About Actions Barbirolli suggests: "conducting at the performance is the least important part of the business of conducting" (Bamberger, 1965, p. 245). Konttinen also remarks on some conductors considering rehearsals as "the 'real' work of conducting" (Konttinen, 2008, p. 15).

Thematic String Matrix

Figure 4.10 analyses the Matrix of Group A. It displays an emphasis on Inner State (which also constitutes a Top Theme for the players), as well as on Relation with the Orchestra and Working Methods with the Orchestra (which constitute Top Themes for all sources). This group addresses all themes, some of them only minimally (such as Ensemble Experience).

String I: Musical Material

Spirit of the Music includes, for this group, ensuring rhythmic exactness, developing a wide expressive palette and pursuing the beauty of the sound to convey more fully the meaning of the music.

String II: The Conductor's Self

Inner State centres mostly on the conductor's personal traits: sincerity, flexibility, loyalty, strong will, wide culture, and enthusiasm. This theme also addresses the conductor's acceptance of criticism and inner calm while conducting. Eric Clarke (S) remarks: "the sounds of a performance have the potential to convey a wealth of information [...] ranging from physical characteristics related to the space in which the performance is taking place, to less palpable properties" (2002b, p. 190). These factors constitute a challenge to the conductor's listening abilities, and need, in addition, to be negotiated with their inner sound (addressed in Mental Construct).

Mental Construct finds a wide agreement among conductors of this group and revolves around the idea of building an inner image of a piece. Walter argues: "it is only very gradually [...] that [the conductor's] ear learns to listen and collate the actual sound with the standard set up by his imagination" (Bamberger, 1965, p. 167).

Relation to the Self refers to the conductor's evaluation of their performance. Highlighting the importance of self-evaluation, Bernstein regrets that "sessions of Bernstein-watching-Bernstein were not filmed too" (Matheopoulos, 1982, p. 21), which would help him assess not only the quality of his performance but also his self-evaluative capabilities.

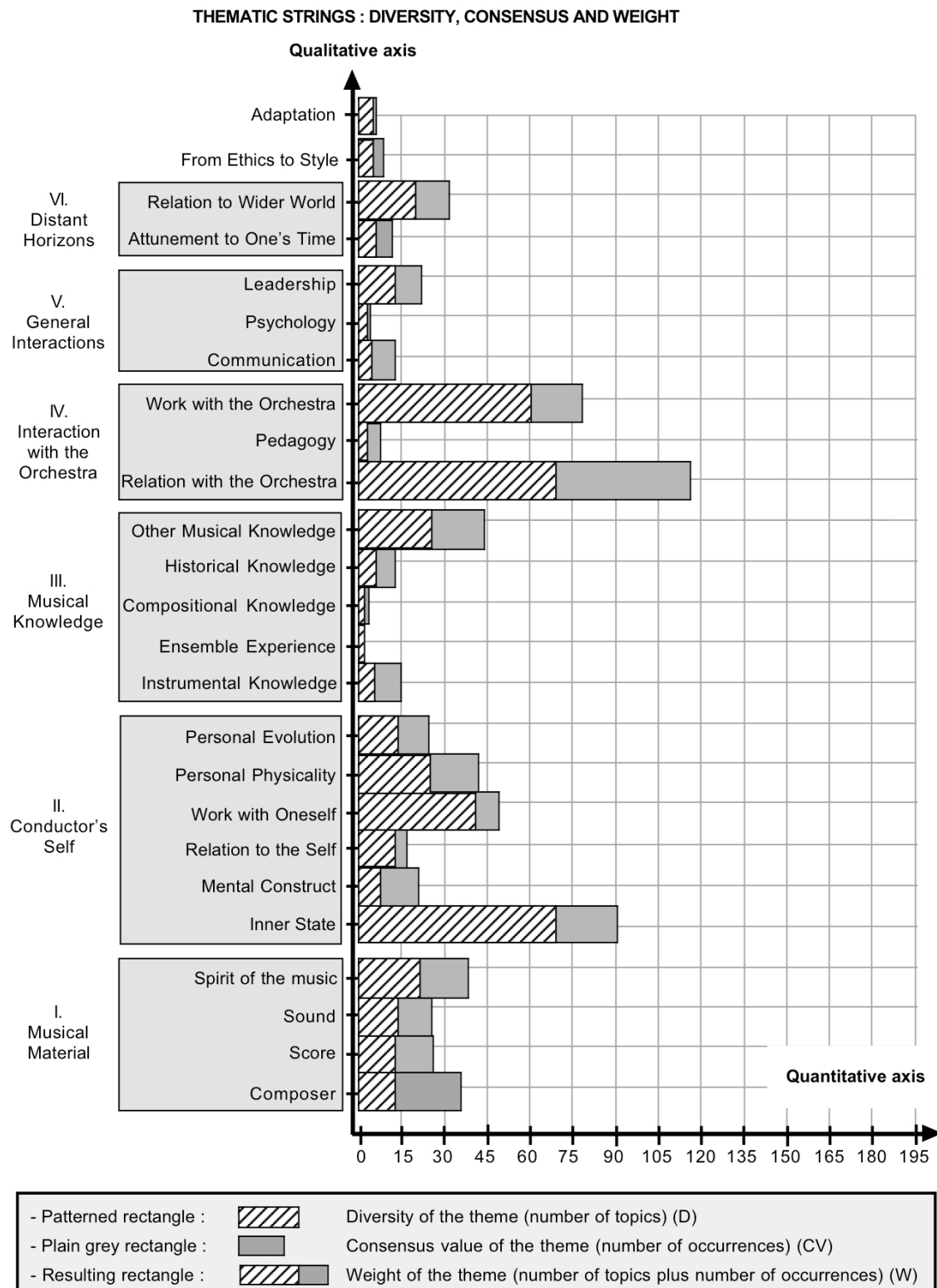


Figure 4.10
The Thematic String Matrix: conductors, Group A

Working Methods with Oneself builds almost no consensus among the conductors of this group, not because they disagree on issues but because they address different ones. This theme encompasses topics such as exploring all possible sentiments that music may express and

developing an awareness of the conductors' own feelings towards the orchestra. It concerns also methodological stances such as concentrating on the organic whole rather than the details, and evaluating one's work by the quality of one's performance. Bernstein argues: "[the orchestra] plays only as well as you can conduct" (Matheopoulos, 1982, p. 8). Other topics include ignoring any bias about composers and compositions, and constantly examining the music from several angles. Solti recalls: "it took a very long time for me to perceive another G minor Symphony from the one I was conducting" (Ibid., p. 418).

Personal Physicality refers to conducting technique and the conductors' ability to conduct with the intensity of their eyes. Wöllner (S) remarks: "observers judged the intended expressiveness best in conditions that showed the conductors' heads" (2008, p. 256), meaning here their gaze. About technique, Walter remarks: "the deepest musicality cannot make up for a lack of material correctness and technical precision" (Bamberger, 1965, p. 162). However, he also suggests that conductors "while conducting, [should] never think of the movement of hand and baton, only of the playing of the orchestra. [...] It is one's musical intentions [...] that should [...] be translated into movements" (Ibid., p. 165-166).

String III: Musical knowledge

Historical/Stylistic Knowledge refers to the conductor's *understanding* of music history, besides their *knowledge* of it. This implies identifying logic and patterns in music history, in addition to knowing the course of events. This theme also addresses the psychological environment of a composition, in addition to its historical context.

Other Musical Knowledge addresses the issue of the conductor's reflection on the sociology and philosophy of music, and the phenomenon of orchestral conducting.

String IV: Interactions with the Orchestra

Relation with the Orchestra addresses the conductors' concern of drawing the best out of their players, if necessary through "loving care and impulsive intensity [...] combined with unceasing

industry” (Walter in Bamberger, 1965, p. 175). Walter also describes the conductor’s influence over the orchestra as “the most obscure [...] direct influence [achieved] by virtue of his inner musical intensity and the sheer power of his personality” (Ibid., p. 174). Giulini recalls his work under Walter: “nobody felt he was ‘conducted’. Even I had the impression of playing the Brahms first [symphony] as though it were written for orchestra and twelfth viola solo” (Matheopoulos, 1982, p. 171). Irrational as they may appear, these opinions relate to the charisma phenomenon discussed earlier and are hardly verifiable, had it not been for the number of players and spectators expressing their esteem for such conductors. Other topics include the inspirational role of the conductor, who, during “performance [...] operates upon the highest and most demanding level” (Ormandy in Bamberger, 1965, p. 254). This idea conflicts with Barbirolli’s belief of the performance being the least important part of the conductor’s work.

Working Methods with the Orchestra addresses the careful pacing of rehearsals, the balancing of precision and inspiration during work sessions, and the difficulty for the conductor to both lead the orchestra and listen to it at the same time.

Strings V.: General human interactions

Communication is high on Bernstein’s agenda: “nothing exists unless I can share it” (Matheopoulos, 1982, p. 9).

Leadership refers to the conductor’s ability to convince. Walter comments: “how to handle people [...], how to influence musicians by word, or by gesture, or by looks. Here, his human qualities have very much to say in this question” (Chesterman, 1976, p. 22).

String VI: Distant horizons

Interaction with the Wider World advocates an open attitude towards life and a thorough observation of it, as well as an active interest in other arts and cultures. Boult and Bernstein’s interests in linguistics and Karajan’s fascination with oriental philosophies are examples of the conductors’ wide-angle cultural approaches.

From Work Ethics to Stylistic Stance points to the conductor's treatment of interpretative traditions. Pablo Casals recalls how challenging it was for him to convince players to let go of their bad musical habits (Bamberger, 1965, p. 149).

Adaptation to the Musical Reality addresses the conductor's adaptability to acoustics.

This study now presents salient traits of Group B and a comparison with Group A. Later sections propose a comparison between all groups of conductors.

Group B

The second group of conductors spans from Margaret Hillis, the first female conductor this study analyses, to Carlos Kleiber. It expands geographically to Australia with Charles Mackerras and the former USSR with Mstislav Rostropovitch. New European nationalities are represented too: the Netherlands with Bernard Haitink, Sweden with Herbert Blomstedt, and France with Pierre Boulez. The profiles of the conductors also display more diversity with regard to their artistic credentials and their pedagogical commitments. Four common points with Group A are: (1) the early age of the conductors' debut (typically, in their mid-twenties); (2) their activity both as operatic and symphonic conductors (3) their knowledge of a stringed instrument or piano, or both, and (4) their interest in composition, whether as practising composers or as a way to better understand the composer's artistic process.

Visible Action Continuum

Group B presents the following graph.

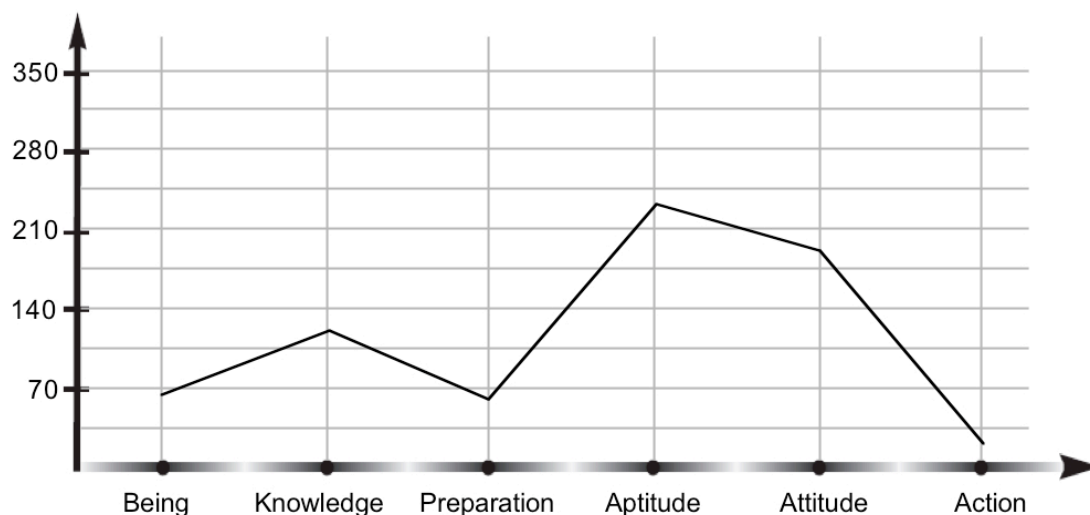


Figure 4.11
Visible Action Continuum: conductors, Group B

Figure 4.11 displays many similarities with Figure 4.9 (Group A). However, some changes may be observed. Each conductor of Group B addresses, on average, more topics than the conductors from Group A. At the same time, they draw this information from a smaller reservoir of topics. This suggests the conductor's individual development of a more nuanced discourse about conducting but, at the same time, a collective conceptual standardisation of this art. This standardisation may echo the conductors' concern to ensure efficient work with the orchestra. Galkin proposes: "in today's age of jet travel, conductors are able to fulfil the responsibilities of titular leadership of two or more orchestras simultaneously" (1988, p. xxxii), a situation that may encourage conductors to promote globally accepted strategies (gestural and conceptual), that could be activated in a minimum rehearsal time.

The second change between both groups of conductors concerns the greater emphasis Group B puts on Knowledge and Preparation, in spite of the above-mentioned reduction of the overall conceptual reservoir. This higher level of Knowledge and Preparation could be the key to ensure more efficient work, all the more necessary since orchestras improved over time and the spectators' expectations developed accordingly. Galkin remarks: "because in the professional world rehearsal time is extraordinarily expensive, and therefore very limited, orchestral musicians

have become excellent sight-readers” (Ibid., p. 41), expecting the conductor to display a high level of proficiency and a thorough preparation.

Fred R. Blanks (1974, pp. 57–63) and Leon Botstein (2012, p. 19) highlight the standardisation of the symphonic repertoire, which seems to parallel, to a certain extent, the standardisation of the conductors’ interpretative ideas. Botstein remarks: “the typical concertgoer can look forward to hearing repeatedly the same hundred or so works on instrumental concert programs year in and year out” (Ibid., p. 19). Blanks adds: “everything the public holds dear is great music, the converse does not apply – much great music goes unrecognised [...] as such by the same public” (1974, p. 62). This may explain the conductors’ commitment in the public’s musical education, further discussed under Relation to the Wider World. The next section analyses Group B through the Matrix.

Thematic String Matrix

Figure 4.12 makes fairly visible the quantitative difference evoked earlier. Top Themes are less apparent compared to Figure 4.11. Work with Oneself is more present than before in the conductors’ testimonies, whereas Ensemble Experience has disappeared.

It is helpful to remember that the Matrix is designed to categorise aspects coming into play in the orchestral phenomenon. It does not claim to indicate in what order things happen in the conductor’s mind. It appears from the testimonies that these aspects are interconnected, at times inducing one another (as may be the case with communicational skills favouring leadership), other times happening almost simultaneously (such as the conductor’s aural perception and their physical response to it). In order to induce this connectivity between themes of the same string, the thematic analysis for Group B proceeds by main strings rather than themes.

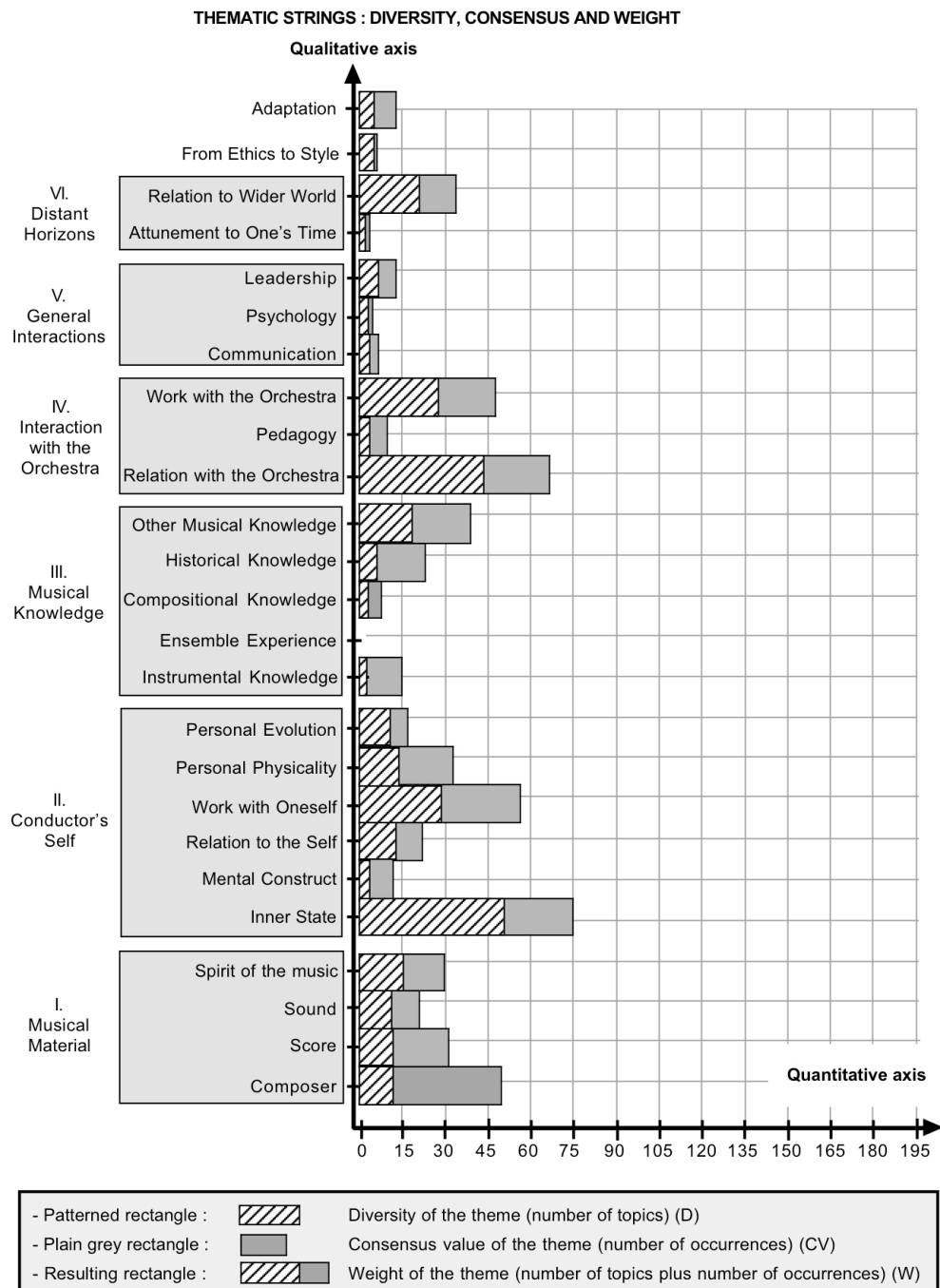


Figure 4.12
Thematic String Matrix: conductors, Group B

String I: Musical Material

As shown on Figure 4.12, all four themes of this string develop a comparable diversity. Matters concerning composers and their aesthetics reach by far the largest consensus. The conductors of this group concur in prioritising these two issues: understanding the composer's creative process and keeping a critical eye on the composer's peculiarities. Mackerras argues: "the phrase is so long, high, and difficult that it is virtually impossible to meet Mozart's requirement of not only a

fermata but also a diminuendo” (2003, p. 69). More generally, he regrets that “many composers’ have a tendency to over-orchestrate [...] against one voice” (Ibid., p. 75).

About sound carrying no other meaning than itself Boulez argues: “how marvellous [it is] to hear *La Mer* without having to think of the sea!” (Matheopoulos, 1982, p. 34). Lorin Maazel also advocates “against the superimposition of philosophical or intellectual ideas on the music” (Ibid., p. 315). Finally, reflecting on the relationship between music-as-composed and music-as-played, Previn argues: “the music is invariably greater than [...] any performance of it” (Ibid., p. 57), placing the conductor’s work in an inaccessible artistic utopia. Hellaby (S) however, suggests that “a musical work *only* exists in performance” (2006, p. 14), taking the work at its face value. This debate revolves around a pivotal aspect of this dissertation: the visibility (or audibility) of the musical phenomenon. Previn advocates (and Hellaby contests the idea) that there is more to a work than meets the ear, the work-as-concept deserving a legitimacy of its own.

String II: The Conductor’s Self

This string displays themes with unequal proportions as much for their diversity as for their weight, and addresses primarily the following topics: remaining faithful to one’s beliefs, choosing one’s repertoire according to one’s tastes and aptitudes, listening to music critically, and being able to learn quickly.

Haitink addresses the conductor’s persona: “of course I’m not modest! If I were, I wouldn’t be a conductor! [...] Inside every conductor there is this power thing, something that wants to dominate” (Matheopoulos, 1982, p. 194), which contrasts with the conductor’s humility and partnership spirit evoked earlier. Addressing the issue of self-assessment, Davis recounts the challenge he took on in accepting the post of running Covent Garden: “one of the reasons [...] was to find out whether I could cope with power and still go on being myself. That’s really inviting the Devil to supper” (Ibid., p. 150). This wide array of beliefs reflects the complex way the conductors relate to themselves, sometimes challenging their own limits.

Concerning the conductor's personal work, Blomstedt remarks: "it is part of you when you just do it without thinking how you acquired it" (Wagar, 1991, p. 10). Mid-way between the conductor's self-assessment and personal evolution, Mackerras recalls: "[the English National Opera] and I improved together" (Matheopoulos, 1982, p. 330), emphasising the partnership between the conductor and the orchestra, and the common evolution that this partnership enables.

String III: Musical Knowledge

Presenting a fairly consistent Average Consensus Rate, except for Instrumental Knowledge about which conductors concur more, the favourite topics under this string are the conductor's ability to properly assess the quality of an orchestra and the difficulties of a given work, and their expertise in programming a concert or a season.

String IV. Interaction with the Orchestra

This string shows a rather consistent Average Consensus Rate as well. On the transmission of musical style, Mackerras comments: "it is amazing how many different interpretations you get, [...] simply because of the conductor's emanation, the unconscious projection of his personality, and the effect this has on the players" (Ibid., p. 322). Davis comments on the conductor-orchestra bond: "you get it wrong because you haven't found the pulse of that particular group" (Ibid., p. 148). Previn further remarks: "if orchestras like you, they play well. If they don't, they are difficult" (Ibid., p. 67). Nine years later, he adds: "you can see it happening within the first ten minutes of the first rehearsal and that is what is so mysterious. I never know what predicates it. I've discussed it with my colleagues and none of us know. We just accept it" (Wagar, 1991, pp. 226–227). Half-way between the conductor's relations with the orchestra and their working methods, Davis proposes: "[music] will be all the more beautiful for coming out of them rather than merely obeying your instructions" (Matheopoulos, 1982, p. 154). Players have previously emphasised their request for musical freedom. Davis presents here a conductor's perspective on the matter.

String V: General Human Interaction

Maazel refutes the value of psychology in his private life: “I have never been psychoanalyzed, or anything like that. I’ve never seen any reason for it. I don’t want to spend an hour on a couch” (Ibid., p. 305). It is not unlikely that this stance would also colour Maazel’s intercourse with players and orchestras.

String VI: Distant Horizons

Conductors address under this string their acquaintance with public taste and their willingness to conceive their programme accordingly. They also discuss the mastering of several languages, whether to assist them understand opera librettos, to facilitate their contact with orchestras worldwide or as stepping stones towards the cultures these languages encapsulate. Mackerras remarks on lack of political support for classical music: “some countries and some governments [...] regard opera as being a hobby for the rich, and [...] think all classical music is elitist.” (2003, p. 78). Davis addresses this issue from the other side: “the whole business of music is trying to persuade everyone who’s listening that they are where they should be at any given moment” (Jacobson, 1979, p. 108).

The last two strings are From Work Ethics to Stylistic Stance and Adaptation to the Musical Reality. Regarding work ethics, Previn argues: “the absolute adherence to any musical law is unnecessary” (Wagar, 1991, p. 218). It would lead, Harnoncourt suggests, to “performing [music] in only one way” (Jacobson, 1979, p. 56). Harnoncourt adds: “[conductors] don’t have the key to translate the language of Bach from his time to ours. [...] Whatever you do is twentieth century” (Ibid., p. 56). The discussion of whether the performer “should [...] try to honour the composer’s intentions, and if so how can they be ascertained” (Rink, 2002, p. xi) is widespread among scholars. Johnson suggests: “the performance [becomes] the intellectual property of the performer and not the mere presentation of the work” (2005). The conductors of this group defend the idea that retouching scores may be acceptable, notably if the conductor undertakes a thorough study of the composer’s style and the instrumental possibilities available at the time of the composition.

About the conductor's adaptation to the acoustics, Davis remarks: "you have to play the acoustics which isn't there" (Jacobson, 1979, p. 115), referring to a certain type of sound production players and singers may adopt to compensate for the acoustics of the hall: short playing/singing for reverberating acoustics; sustaining the sound for dry acoustics.

Before engaging with the closer study of Group C, it is helpful to highlight some general characteristics appearing in this group. The relation to the composer reaches an important consensus and concerns mainly the conductors' desire to promote new music, which contrasts with the standardisation of the symphonic repertoire evoked earlier. Additionally, the conductors advocate thorough research about composers, their lives and styles. However, the conductors belonging to Group B also defend their right to display personal views about the music.

Another double-sided opinion comes to the fore: balancing a clear conducting technique with a purposefully unclear one, intending a special musical haziness or aiming to challenge players' attentiveness and prompt their mutual listening. Nakra describes this as a

sudden lack of information, [which] is eye-catching for the musicians, and requires minimal effort from the conductor. The quick change between information-carrying and non-information-carrying states could be an efficient way of providing an extra cue ahead of time for the musician.

(Nakra, 2000, p. 82)

This strategy "not only keeps the energy level in the music high, but also keeps the attention with the conductor so that if a change is imminent then he has everyone's attention" (Ibid., p. 112). This non-intrusive strategy may also be seen to parallel a new type of leadership, being of a softer kind and leaving a wider artistic space to the orchestra.

Group C

The third group of conductors starts with Claudio Abbado and ends with Simon Rattle. All conductors of this group are still alive, except for Claudio Abbado. The geographic expansion

noted for Group B continues for Group C with Seiji Ozawa and Zubin Mehta, respectively from Japan and India. The French-born American conductor, Catherine Comet, is the second woman conductor this study analyses. However, Michele Edwards (S) remarks: “despite a host of obstacles [...] women have long been conductors” (2003, p. 220), but their fair recognition, notably in books compiling conductors’ interviews, seems to be a pending issue. It is significant that Wagar, who published Hillis’s and Comet’s interviews, is also a female conductor.

Several common threads seem to run through this group of conductors. Except for Ashkenazy, who is primarily a pianist, all the conductors of this group have studied orchestral conducting, eight of them studied piano, five are prize-winners of international conducting competitions, three studied composition but none of them is a practising composer. Finally, a number of them commit themselves to education, conducting student orchestras or giving master classes, and have taken public humanitarian stances by conducting fundraising concerts or making their opinions known about humanitarian causes.

Visible Action Continuum

Conductors of this group develop Aptitude and Attitude almost to the same extent, whereas previous groups emphasised Aptitude much more. Additionally, Action is here at its lowest level. Finally, Being appears here on a lower level than Preparation, contrary to the two previous graphs, which seems to indicate that later groups are less interested than earlier ones in describing who they are as persons and what they physically do.

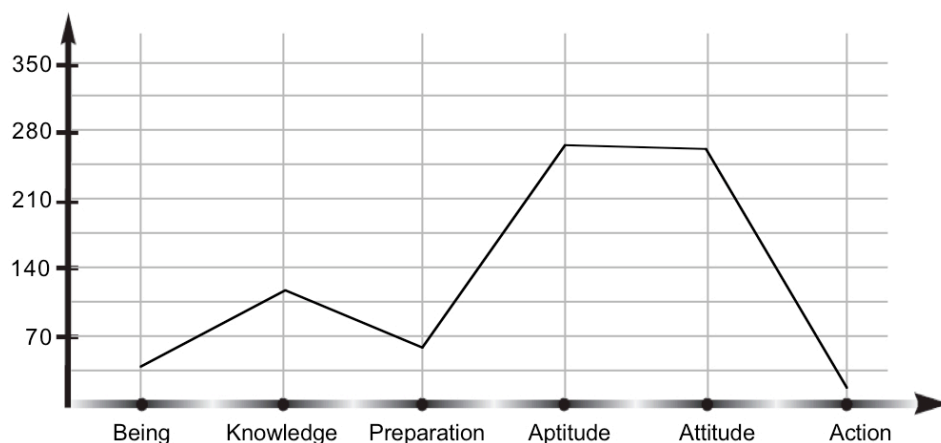


Figure 4.13
Visible Action Continuum: conductors, Group C

The conductors of Group C seem to increase their reservoir of ideas, which may indicate the beginning of a de-standardisation of the conducting art, including the renewal of the symphonic repertoire and the rethinking of interpretational traditions, avoiding a situation in which “Mozart, Bach, and Monteverdi all sound like Mahler being played in 1950” (Norrington in Wagar, 1991, p. 200). Robert Philip (S) remarks: “the trend from the 1930s onwards was towards greater uniformity of style and standards across the world. By the end of the twentieth century it was often difficult to tell the difference between orchestras” (2003, p. 214). Hellaby notes, however:

For the listener, the type of sound that was common in 1980s period-instrument performance of eighteenth-century music, featuring constrained, vibratoless tone, short and steeply contoured phrases, a limited dynamic range and generally fast tempos, was symbolic of an ethos of subservience to a perception of style”

(Hellaby, 2006, p. 21).

Both opinions suggest evolving trends as far as standards of orchestral sound are concerned, but also subversive trends, so to speak, challenging the main ones. It is likely that these two stances will produce different types of conductors, possibly explaining differences of point of view about this art.

Under Being Muti asserts: “[being a conductor] is a combination of many mysterious things, with those that are very explicable” (Chesterman, 1990, p. 140). It has been proposed in the Introduction that the Visible Action Continuum helps discuss the invisible part of the phenomenon, and partly explain its alleged mystery. Collating testimonies provides a frame and, by their plurality, offers some legitimacy to their (sometimes irrational) beliefs. This plural voice does not, however, constitute an explanation. Chapter Seven puts this invisibility under test by examining closely two conductors’ public performances, highlighting elements that may seem invisible but become less so when explored systematically (and in artificial conditions), whereas players and spectators may absorb these elements only subliminally.

Mehta approaches Knowledge in terms of transmission of expertise: “the master-to-disciple relationship is the only way of passing on knowledge” (Matheopoulos, 1982, p. 349). Being born in India, Mehta may refer, if subliminally, to the guru-disciple relationship. He may also refer to the pedagogical usage in Europe before the advent of public conservatoires when the only possible way for young artists to acquire their skills was to be accepted among the disciples of a master. Mozart studied with J.C. Bach, Beethoven with Haydn, Brahms with Schumann. In the conducting arena, Walter studied with Mahler, Boult with Nikisch. However, when conservatoires were established, and in spite of this institutional umbrella, they seem to have hosted the same type of relationship: Stravinsky and Boulez report having studied respectively with Rimsky-Korsakov and Messiaen rather than being students of the Moscow or Paris conservatoire, Boulez even criticising the latter for its closed-mindedness.

Referring to the conductor’s Preparation, Dutoit argues: “it really takes around twenty years to learn this profession after you start conducting” (Wagar, 1991, p. 68). Under Aptitude he remarks: “you need intellectual control of the material in order to let your emotions and sensitivity take over” (Ibid., p. 70). Abbado advocates an open minded Attitude towards new music:

When you will hear for the first time a music that seems unintelligible, do not reject it, thinking that it is ugly. I never closed the door to what I could not understand. I always tried to learn how to listen, certain that this music, the same way as a language, was speaking to us of our time, our history and of ourselves.²¹

(Abbado, 1986/2007, p. 45)

Under Action Ozawa suggests: “there are no rules and regulations at all about conducting” (Matheopoulos, 1982, p. 399).

²¹ “Quand vous entendez pour la première fois une musique qui vous semble incompréhensible, ne la rejetez pas en pensant qu’elle est laide. Jamais je n’ai fermé une porte devant ce que je ne pouvais comprendre. J’ai toujours essayé d’apprendre à écouter, certain que cette musique, comme une langue, nous parle de notre temps, de notre histoire et de nous-mêmes”.

Thematic String Matrix

Figure 4.14 displays several characteristics. All four themes concerning Musical Material seem to come to a relative balance regarding their diversity and weight. Inner State and Relations with the Orchestra are quantitatively comparable, as are Working Methods with Oneself and Working Methods with Musicians. This may suggest that conductors of this group grant a comparable importance to their state of mind and their relations with the orchestra, and to their personal working methods compared to their working methods with players. Instrumental Knowledge has never been as prominent compared to Compositional Knowledge. The fact that no conductor of this group is a composer may explain this situation. However, an important consensus is reached around Compositional Knowledge, suggesting that most conductors of this group agree on the necessity to know *about* composition. Other themes display a high consensus, which seems to indicate that, all in all, conductors of Group C find more common ground with each other than conductors of previous groups would do.

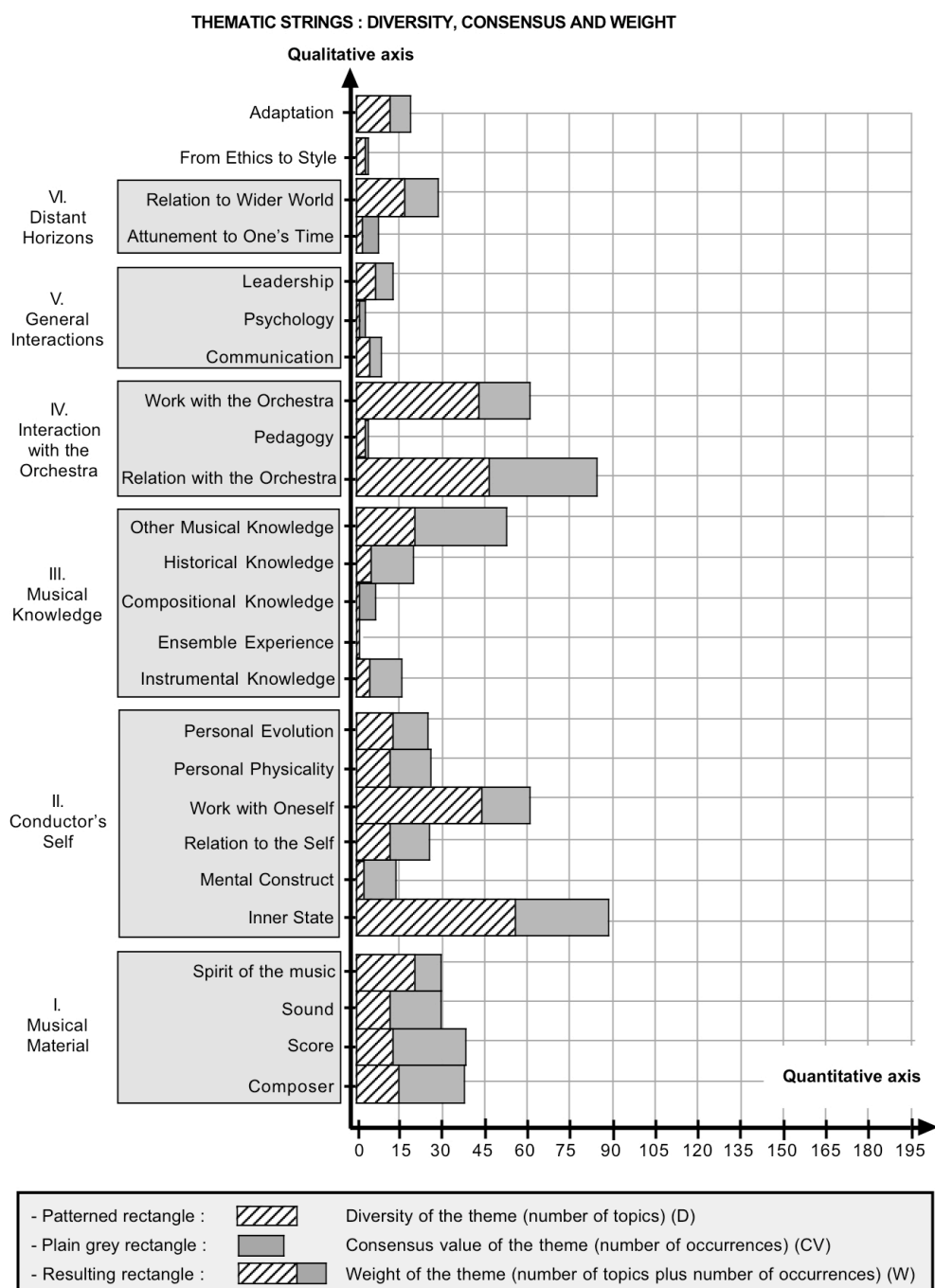


Figure 4.14
Thematic String Matrix: conductors, Group C

String I: Musical Material

Relation to the Composer: James Levine expresses his respect for composers: “it is difficult beyond any description for a poor performer [...], a person who is not the sort of genius the composer was, to be able to do justice to [his or her music]” (Chesterman, 1990, p. 157). Several studies in the last twenty years have addressed the subject of genius and the difficulty of circumscribing this concept. In his book *Genius and the Mind: Studies of Creativity and Temperament in the Historical Record* (1998), Andrew Steptoe addresses various facets of this

subject: the genetics of genius, the creative and temperamental aspects involved in being a genius, the nature and nurture aspect of the matter. Levine refers more specifically to the composer's creative capabilities, which the re-creative artist seems to have chosen not to activate. Notwithstanding this, the conductor is expected to understand, absorb and convey the composer's message.

Relation to the Score approaches the issue of the fidelity to the score. Roy Howat (S) notes:

Although scores are the most fixed point of reference for our classical repertoire, far from being absolute, they rest on sand, and what we scientifically trust least, our musical feeling, remains the strongest and final link to what the composer sensed and heard before subjecting it to notation.

(Howat, 1995, p. 3).

In other words, it is the performer's intuition which mediates the composer's written instruction and gives the work its final substance. Janet M. Levy (S) remarks: "however much a performer seeks to understand and convey what a composer intended, music [...] cannot 'speak for itself', [and] we might choose to listen to 'Norrington's Ninth' [...] rather than Bernstein's or Toscanini's" (Ibid., p. 150).

Relation to Sound revolves around adapting the sound to the musical style, notably by specific bowings, phrasings and articulations, by the treatment of inner voices, by increasing the dynamic palette or through vibrato techniques. Some conductors seek to connect their orchestral sound to the sonority of the sung words. Compared to previous groups, Group C is more specific about how to create a specific sound.

String II: Conductors' Self

This string displays a wide variety of Diversities and Average Consensus Rates, in contrast to Musical Material.

Inner State: the conductors of this group, according to the interviewers' comments, appear charismatic and cordial. They seem flexible, loyal, intense, and emotionally well-balanced.

Working Methods with Oneself shows the conductor's inclination to wait the necessary time before conducting important repertoire pieces and to conduct only pieces they feel attracted to. This contrasts with the idea of building of a vast repertoire, which Personal Evolution addresses. Fairly common also is the idea of the conductor being open to suggestions.

Personal Physicality constitutes the conductors' everyday concerns but also represents an expertise to be sharpened over time. The conductors highlight the necessity of remaining in good bodily condition and developing strong physical stamina. Ozawa sees the body as a passage to the mind:

We use body so much to balance nerve. [...] If you are physically stiff or tense, then your ears are not really open. [...] For conducting, you must be more than just physically relaxed. The nerves and muscles in your head, all those nerves around the ears must also be relaxed, so that your ears can open up to the sound. And one of the hardest things to learn is how not to close your ears while moving your hands.

(Ozawa in Matheopoulos, 1982, p. 386)

On the contrary, Slatkin does not engage with any reflection about corporeality. He argue: "I don't think about where the arms and hands are. I have no interest in all of that" (Wagar, 1991, p. 262).

He adds:

If we have the music inside our bodies, it doesn't matter if the first beat is not quite straight down. It doesn't matter if the left hand doesn't operate quite as independently as we would like it to. What is important is that the essence of the music be conveyed through your gestures.

(Slatkin in Wagar, 1991, p. 271)

The performance analysis, and more specifically Bernstein's conducting, confirms this approach to corporeality, which would be mostly dominated by the conductor's feelings.

Personal Evolution addresses the conductor's search for excellence. Slatkin remarks: "most of the outstanding conductors learn the elements that make them outstanding by themselves" (Ibid., p. 261). He highlights here the principle of discovery as an incentive for progress, emphasising uniqueness as the resulting reward. Garnett also suggests that "all directors do things that are [...] uniquely theirs and [...] that make them interesting as artists" (2009, p. 107). Slatkin goes one step further, suggesting that these things would not only be theirs but also self-taught.

String III: Musical Knowledge

Instrumental and Vocal Knowledge emphasises the connection between the conductor's instrumental knowledge and their gestural discourse, and the impact of the latter on the players' performance.

About Compositional Knowledge Simon Rattle argues: "the whole tragedy of the conducting scene now is that virtually none of us are composers. We should be but we are not. And it shows. You get a glossy style of surface conducting" (Matheopoulos, 1982, p. 510). Rattle's opinion appears at the fulcrum of various trends identified earlier: the standardisation of the conducting art, the orchestral sound and the symphonic repertoire, and the general absence of composers among leading conductors.

Norrington notes under Historical and Stylistic Knowledge: "[in the past, the audience] listened to music through their feet. They understood this music because they danced it" (Wagar, 1992, p. 201). Close to Spirit of the Music, this topic may possibly affect the conductor's tempo, shape their gestural discourse, influence their way of handling repeats or enhancing musical articulations.

String IV: Interaction with the Orchestra

This string displays a fairly consistent consensus. Relation with the Orchestra refers to the mutual appreciation between the conductor and the orchestra. Muti reminisces: “both [the Philadelphia Orchestra] and I decided on this marriage after a long, seven-year love affair” (Matheopoulos, 1982, p. 374). The conductors of this group also address the players’ physical comfort and financial stability.

Working Methods with the Orchestra addresses the chamber music spirit that the conductors develop within the orchestra to stimulate the musicians’ intense mutual listening. Elaine Goodman (S) notes: “the information communicated between ensemble performers is [...] constantly relayed in sound and through eye contact” (2002, p. 156). Luck adds: “when attempting to synchronize their performances with each other, musicians can utilize auditory cues from other ensemble members” (2011, p. 163). These opinions seem to validate the conductors’ encouragement of the players’ direct interaction.

Although the conductors give a priority to expression versus technique, they also mention that technical advice to the players is part of their mission. Rattle adds: “working with an orchestra really boils down to setting up an atmosphere where something can happen” (Matheopoulos, 1982, p. 518). Conductors commit themselves to rejuvenating the way players think about music and evaluating adequately when to improvise in concerts. Konttinen (S) comments: “several conductors [...] prefer [...] to leave open the possibility of doing something quite different in the performance” (2008, p. 15).

String VI: Distant horizons

Under Relation to the Wider World Mehta highlights the conductor’s moral responsibility to speak up for humanitarian causes: “conducting Beethoven is not enough. People like us must make a stand sometimes in our lives” (Matheopoulos, 1982, p. 358).

As it did for the pedagogues' four Top Themes, this study examines now the ten Top Themes that conductors develop.

Stable concepts among all groups of conductors

Ten Top Themes

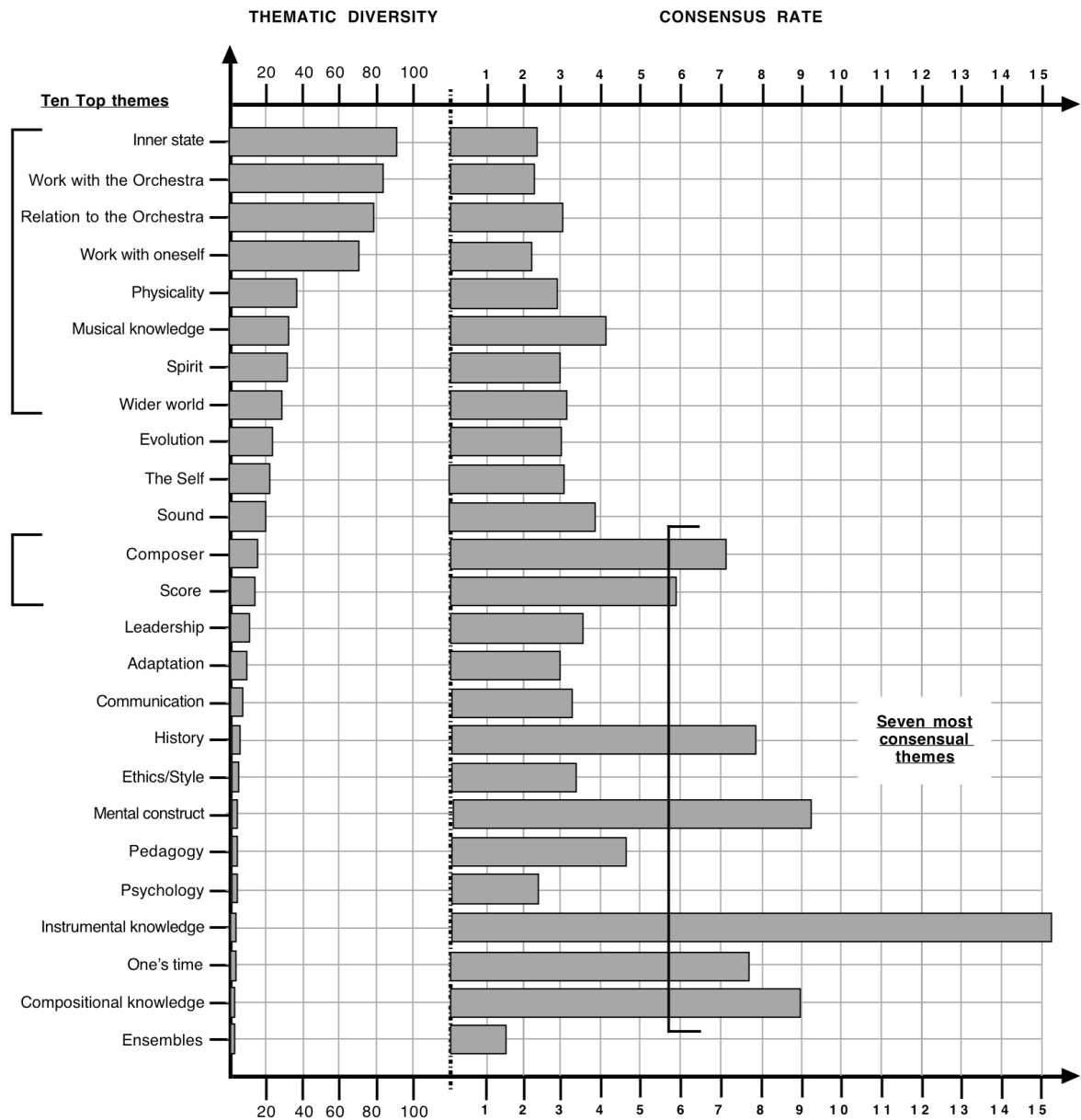


Figure 4.15
Ten Top Themes: all conductors
Thematic Diversity and Thematic Consensus

As shown by Figure 4.15, the conductors' Top Themes are more numerous than the pedagogues' but less diversified. Figure 4.15 also displays a strong irregularity of the Average Consensus

Rates but, by and large, confirms the overall trend observed earlier: the smaller the diversity, the bigger the consensus. The seven most consensual themes are also the less diversified.

I. Relation to the Wider World articulates around two axes: musical and non-musical materials, the former subdividing into issues related and non-related to the audience.

Musical [D=16;ACR=3.4;W=54]		Other [D=11;ACR=3.5;W=38]
Audience [D=9;ACR=2.2;W=20]	Other [D=7;ACR=5.9;W=34]	
(please see Appendix 3, Table 3.1 for the full content of the table)		

Table 4.5
Relation to the Wider World: all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Conductors seem to develop more musical subjects than non-musical ones, and slightly more issues connected to the audience than not connected to it. It is worth noting the small consensus conductors reach about topics related to the audience, in spite of their fairly low diversity. This emphasises the highly subjective relationship that they establish with the public. A nebula could be observed: building new audiences, imposing their repertoire on the audience, and respecting the audience. Although different in content, they may be seen to belong to the wider nebula of interactions with the audience.

Some topics point to traits that certain conductors possess, such as a knowledge of several languages and an interest in literature and linguistics. This study does not imply that these traits are necessary in order to be a good conductor. However, they could contribute, ever so slightly, to the assessment of the conductor's general persona and may be helpful in informing their work (for example when studying operas in foreign tongues or when connecting the composers' creative process to their literary source of inspiration).

This study does not consider the promotion of music as related exclusively to the concert-goers. In her chapter 'Educational Programmes', Sue Knussen addresses the conductors' commitment to educational endeavours, notably by pointing to Bernstein's Children's Concerts (2003, p. 244).

Conductors may also shape the public's taste. Galkin argues: “musical directors are affecting the compositional awareness of entire communities by selecting the works to be performed, in effect teaching the public about styles old and new [...] and thus influencing the course of music history” (1988, p. xxxi).

II. Relation to Score divides into *general* and *specific* topics. As shown in Table 4.6, the former category subdivides into *attitudes* and *methods*, whereas the latter displays only *methods*.

General [D=11;ACR=5.3;W=47]		Specific Methods [D=5;ACR=9.4;W=47]
Attitude [D=5;ACR=6.4;W=27]	Methods [D=6;ACR=3.3;W=20]	
(please see Appendix 3, Table 3.2 for the full content of the table)		

Table 4.6
Relations to Score: all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Examination of the conductors' testimonies reveals a new concept as far as grouping opinions is concerned. This study has previously identified *nebulae*, gathering opinions belonging to a meaningful subgroup. A new concept, the *cluster*, may be applied when several conductors comment on the same topic, but in their own specific way. Conductors substantially comment on score analysis. However, some of them point to structural analysis, others emphasise orchestration or refer explicitly to Schenkerian analysis. These approaches constitute *clusters* around score analysis, as they designate the *same thing* but present *different facets* of it.

III. Spirit of the Music divides into four categories, *meaning* (Table 4.7a) and *rhythm/tempo*, *sound*, and *others* (Table 4.7b). 'Meaning' divides into five subcategories: *feeling/sentiment*, *life experience*, *metaphysics*, *movement/story*, and *attitude vis-à-vis meaning*.

Meaning [D=13;ACR=2.8;W=36]				
Sentiment/Feeling [D=2;ACR=10.5; W=21]	Life experience [D=1;ACR=1.0; W=1]	Metaphysics [D=1;ACR=2.0; W=2]	Movement/Story [D=4;ACR=1.3; W=5]	Attitude vis-à-vis meaning [D=5;ACR=1.4; W=7]
(please see Appendix 3, Table 3.3a for the full content of the table)				

Table 4.7a
Spirit of the Music (Meaning): all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Meaning, it should be stressed, does not refer necessarily to a narrative. It emphasises the intrinsic signification that music may carry. It may span from unfathomable sentiments to actions described by the music. These actions may point to dancing or, indeed, concern narratives. One topic, ‘giving a spirit to an interpretation in a few rehearsals’ may be seen to sit on the borderline between two Top Themes: Spirit of the Music and Working Methods with Players.

Tempo/Rhythm [D=3;ACR=8.3;W=25]	Sound [D=6;ACR=2.7;W=16]	Other (style/structure/liveliness) [D=8;ACR=2.0;W=16]
(please see Appendix 3, Table 3.3b for the full content of the table)		

Table 4.7b
Spirit of the Music (Tempo/Rhythm, Sound, Other): all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

The control over the tempo and the pacing of the performance are two *clusters* displaying slight inner nuances. Tempo is qualified as having to be cautious and flexible, having to match the overall structure or the sung words. The pacing of the performances refers to musical tensions, climaxes and releases, or formal coherence. It may also relate to the choice of tempo as a structural element, but is more often articulated in terms of the effect the tempo has on the sonic material and the musical expression. The *melos* mentioned in the Sound category points to the Wagnerian concept of the long overall line of a piece. The traditional staging in operas provides an interface with Work Ethics/Stylistic Stance, as it speaks of the stylistic component of traditions.

IV. Personal Physicality divides into *general topics* (Table 4.8a) and *specific topics* (Table 4.8b). General topics subdivide into *baton technique*, *gestures*, *music*, and *movement/energy*. Specific topics subdivide into *baton technique*, *gestures*, *hands/arms*, *head/face/eyes*, and *music*.

Personal Physicality constitutes the seventh most important theme for conductors while being number one for conducting manuals and number three for players.

General topics [D=17;ACR=1.8;W=31]			
Baton technique [D=2;ACR=1.0;W=2]	Gestures [D=5;ACR=2.0;W=10]	Music [D=1;ACR=2.0;W=2]	Movement/energy [D=9;ACR=1.9;W=17]
(please see Appendix 3, Table 3.4a for the full content of the table)			

Table 4.8a
Personal Physicality (General): all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

The above table displays two columns with little diversity (Baton Technique and Music) and two columns with a higher diversity (Gestures and Movement/energy), containing topics that build a large consensus: expressing oneself through clear and natural gestures (CR = 5) and developing physical stamina (CR = 7).²² Several other topics reach some agreement among conductors, but most do not build any consensus at all. Although this table refers to general points which could, by virtue of their generality, reach a high consensus, it seems nonetheless that conductors are quite divided when it comes to comment on their physicality.

Specific topics [D=20;ACR=3.3;W=65]					
Baton technique [D=4;ACR=7.3; W=25]	Gestures [D=6;ACR=2.2; W=13]	Body [D=2;AC.R. =1.0;W=2]	Hands/arms [D=4;ACR=2.3; W=9]	Head/face/eyes [D=3;ACR= 3.3;W=10]	Music [D=1;ACR=7 .0;W=6]
(please see Appendix 3, Table 3.4b for the full content of the table)					

Table 4.8b
Personal Physicality (Specific): all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Among the specific topics, a first cluster concerns a proper baton technique, which conductors qualify as supple, economical, beautiful, inspired, agile, or organic, depending on their artistic agenda. A second cluster relates to the relationship between the conductor's body and the music the orchestra plays, and develops a fairly nuanced vocabulary: the conductor may convey the *music*, the *sound* or the *texture*, which they may *communicate*, *express* or *mould*, using their

²² CR refers to the consensus rate of a specific topic (signaled in the tables by the figures between parentheses), differing from the ACR (Average Consensus Rate) relating to an entire theme.

hands, eyes, faces or entire body. As suggested earlier, the division of tasks between arms (the right arm allegedly beating time and the left arm showing cues and musicality) raises antagonism between conductors.

V. Relation to the Composer (Table 4.9) displays the highest Average Consensus Rate of all Top Themes (ACR=8.2) and articulates around three main ideas: *the conductors' attitude towards the composer, the composer as a person and an artist, and the creative process*.

Conductor vis-à-vis the composer or composition [D=8;ACR=8.8;W=62]	Composer as a person and artist [D=3;ACR=3.0;W=9]	The creative process [D=6;ACR=8.5;W=51]
(please see Appendix 3, Table 3.5 for the full content of the table)		

Table 4.9
Relation to the Composer: all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

The most popular topic of this theme is *being the composer's advocate*, which displays various degrees of intensity among conductors, some seeing their role as the composer's servant.

Conductors belonging to Group A are by far the ones promoting this topic the most. However, it seems to conflict with the idea of *keeping a critical sense towards composers*, which conductors belonging to Group B address substantially through stances such as their possible non-respect of the composer's tempo markings and their right to balance the composer's indications with their own sensitivity. Clarke (S) argues:

[for some scholars] what makes a *performance* expressive is what the *performer* brings to the piece beyond what the composer has specified in the score. [...] A problem with this approach is that it regards the score as 'the piece' in a kind of disembodied, ahistorical fashion, apparently divorced from any of the cultural assumptions about how the notation might be understood and interpreted.

(Clarke, 2004, p. 84)

Clarke claims that the interpretative tradition to which a score belongs informs what is written on the printed page, adding important information that is not written. The performer's mediation may then consist of applying the traditions as they understand them.

Group B stresses knowing the composers' lives and psychology in order to better understand their music, which is consistent with their advocating a thorough knowledge of the composers' idioms, all of which coincides with the overall inclination of this group towards historically informed performances.

VI. Other Musical Knowledge (Table 4.10) is organised on five axes: orchestras; music (general and specific); conductors and conducting; philosophy and psychology; and other.

Orchestras [D=3;ACR=11.0;W=33]	Music [D=12;ACR=6.4;W=65]		Conductors and conducting [D=7;ACR=2.9;W=20]	Philosophy and psychology [D=4;ACR=2.0;W=8]	Other [D=2;ACR=6.5;W=11]
	General [D=6;ACR=8.8;W=53]	Specific [D=6;ACR=2.0;W=12]			
(please see Appendix 3, Table 3.6 for the full content of the table)					

Table 4.10
Other Musical Knowledge: all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Several clusters appear here. The hiring of players is a constant concern for conductors of all groups and takes into account the players' individual qualities (technical and artistic), the social qualities necessary to integrate the group harmoniously, and the timbral quality of the playing, expected to meet the conductor's concept of sound. Assessing a piece is high on the conductors' agenda too, and is based on various criteria: difficulty, quality, and appropriateness for a given ensemble. The conductor's assessment of the orchestra concerns the specific characteristics of an orchestra and their possible shortcomings (whether technical or stylistic). It is worth noting that the conductors' interest in these two kinds of evaluations (about pieces and orchestras) have progressively increased between Groups A, B and C, as did their concern about musical programming. This may suggest that the marketing necessities evoked earlier have prompted

conductors to develop these evaluative capacities, gradually establishing criteria for assessing orchestras and programming concerts and seasons.

The conductors remark on the benefit of practising choral, symphonic and operatic repertoires, and on their necessary receptiveness to various styles and genres, all of which is a testimony to their musical eclecticism. Additionally, their ability to premiere new pieces may be viewed as the know-how of promoting new composers. The conductors are attentive to balance the technical, historical, relational, and stylistic aspects of their activity. Finally, the conductors reflect on the specificity of orchestral conducting, and more generally on the philosophy, psychology, and sociology of the musical phenomenon as a whole.

VII. Working Methods with Oneself (Table 4.11) divides into *short-term* and *long-term* strategies, both subdividing into strategies turned towards *the self* or towards the *music*. Approaching the idea of long-term strategy, Konttinen (S) suggests: “*conducting gestures* [are] not only the concrete gestural movements made while conducting in front of an orchestra, but also all those gestures involved in the processes of becoming and being a professional conductor” (2008, p. 47). Although she does not mention what these gestures are, I hypothesise that she may refer to the daily gestures and attitudes building gradually the persona of the conductor: hiring musicians, visiting concert halls, studying scores, selecting musical editions, bowing parts, observing other conductors, or rehearsing gestures in front of a mirror.

Short-term strategies [D=36;ACR=2.2;W=79]		Long-term strategies [D=27;ACR=2.5;W=68]	
On the self [D=21;ACR=1.8; W=38]	On music [D=15;ACR=2.7; W=41]	On the self [D=24;ACR=2.3;W=55]	On music [D=3;ACR=5.3;W=13]
(please see Appendix 3, Table 3.7 for the full content of the table)			

Table 4.11
Working Methods with Oneself: all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Some topics exceed the division between short- and long-term strategies (*) and between *the self* and *music* (**):

- Looking at a musical work from different perspectives and acknowledging various possible interpretations (*).
- Assessing conducting and interpretative issues (**).
- Anticipating problems, whether practical, acoustic or relational (*) and (**).
- Avoiding scores in C, so as to see the score as musicians see their parts (*).

Table 4.11 displays significantly more short- than long-term strategies (in contrast to manuals), both categories showing a comparable Average Consensus Rate. Topics concerning the self are by far more numerous than those concerning music. The conductors highlight the necessity of balancing physical and mental approaches to conducting. Clarke (S) argues: “[in a] performer’s mind [...] we must remember that the mind is neither driving the body nor confined within the head” (2002a, p. 69). Johnson (S) further suggests: “performance stands as a permanent challenge to the ancient dichotomy of ‘heart and brain’ which [...] is best regarded in terms of alternative modes of thinking about and experiencing the same thing” (2005). The conductors recommend allying intellect with sensuality, instinct with knowledge, rigour with spontaneity, and technique with artistry. They also comment on their bird’s eye view of a work, employing expressions such as *large picture*, *organic form*, *general shape* (as opposed to *details*), or *general goals* (as opposed to *specific means*). As a corollary, conductors also highlight the *instantaneous formation* of the musical concepts, as a way to acquire this view. With more dynamic overtones, conductors also speak about defining clearly the *direction of the music*, establishing the *climaxes and anti-climaxes* of a work, and identifying the *general tension* of a piece, all of which feeds into what Garnett calls the *metalanguages* that conductors use to describe conducting (2009, p. 44), and into what McCaleb refers to as the “‘borrowed’ terminology” musicians use to talk about music (2012, p. 73). Conductors also refer to the sonic envelope of a piece as its *sound quality* or its *colour*. However, some conductors point also to the importance of examining details as well.

The idea of learning from other conductors shows a constant increase between Groups A, B and C, and supports the belief that knowledge about conducting is expanding and becomes available

to later generations through the legacy of former ones. The conductors also promote a “hands on” attitude, considering that the real experience of conducting is the prime source of progress.

VIII. Working Methods with the Orchestra (Table 4.12) addresses issues proceeding from general to semi-specific and specific. It articulates, for each category, on a practical and a theoretical/abstract axis.

General [D=2;ACR=11.0;W=22]		Semi-specific [D=34;ACR=2.1;W=73]		Specific [D=45;ACR=2.3;W=102]	
Practical [D=1;ACR=21.0;W=21]	Theoretical/ abstract [D=1;ACR=1.0;W=1]	Practical [D=16;ACR=2.8;W=45]	Theoretical/ abstract [D=18;ACR=1.6;W=28]	Practical [D=31;ACR=2.5;W=77]	Theoretical/ abstract [D=14;ACR=1.8;W=25]
(please see Appendix 3, Table 3.8 for the full content of the table)					

Table 4.12
Working Methods with the Orchestra: all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Table 4.12 displays a strong numerical increase from *general*, to *semi-specific* and *specific* topics, highlighting once again the conductors’ focus on precise topics rather than generic ones. They also seem to stress the *practical* aspect, as far as the weight of the theme is concerned, rather than *theoretical/abstract*, suggesting the same ‘hands-on’ concern.

The working methods conductors use with the orchestra combine various registers of opposites: heart and head, seeming effortless and technical difficulties, authority and mildness, discipline and inspiration, demanding and respectful attitude, action and observation, precision and elasticity, technical proficiency and musical expression, power and partnership. Gillinson and Vaughan (S) remark: “some conductors have the reputation of being tyrannical, but this will usually be forgiven by the players if the end results in a great concert” (2003, p. 196). The conductors also highlight the necessity of a thorough observation of the orchestra before wanting to change it. Some conductors point to the artistic necessity of being very demanding on details, invoking their right to ask for as many rehearsals as musically necessary, while others emphasise the need to be able to work fast.

IX. Relations with the Orchestra divides into two main categories: conductors' *awareness* of psychological and musical aspects of their relationships with players (Table 4.13a); and their actual *interaction* with them (Table 4.13b), which may display *positivity*, attest to their *teamwork* spirit, or address *musical matters*.

Awareness [D=9;ACR=5.1;W=37]	
Psychological [D=4;ACR=7.0;W=24]	Musical [D=5;ACR=2.6;W=13]
(please see Appendix 3, Table 3.9a for the full content of the table)	

Table 4.13a
Relations with the Orchestra (Awareness): all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

The main idea suggested by Table 4.13a is the conductor's careful assessment of the orchestra (whether viewed from a psychological or a musical angle), and is consistent with the conductor's observational attitude mentioned earlier. Some conductors also remark on the relaxed attitude necessary for this assessment to be adequate.

Interaction [D=58;ACR=3.1;W=180]		
Positivity [D=7;ACR=2.4; W=17]	Teamwork [D=33;ACR=3.1;W=103]	Musical Matters [D=18;ACR=3.3;W=60]
(please see Appendix 3, Table 3.9b for the full content of the table)		

Table 4.13b
Relations with the Orchestra (Interaction): all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

The conductors showing their emotions may be seen as an expression of their inner state, preceding the sound production. However, when they seek to elicit a reaction from the orchestra, the same situation takes more communicative overtones, possibly also sending a subliminal message to the audience. The showing of emotions then becomes an incentive to the players and a reaction to their sonic utterance. Chapter Seven addresses these aspects through the analysis of Bernstein's and Boulez's video recordings.

In his article (1994, p. 26), Atik addresses the conductor's demanding attitude mentioned in Table 4.13b under the paragraph "The Ability to Demand" which he views as part of the conductor's leadership. However, in practice conductors develop both a demanding *and* a patient attitude towards the orchestra, challenging the players and drawing the best out of them at the same time. The conductors also aspire to improve the orchestra in the long run, but at the same time invoke their ability to transform it in three or four rehearsals.

All groups of conductors approach the topic of building a true relationship with the players. They speak of their deep and sincere rapport with the orchestra; they mention their efforts to increase the players' self-esteem, faith and trust towards the conductor; and they point to their encouraging and reassuring attitude. Atik considers the conductor praising the orchestra as being part of their transactional role (Ibid., p. 25). The work in the orchestral arena shows less euphoric sides too, and conductors insist on the importance of learning to say 'no' to players' requests and remark on the necessity of controlling the orchestra and defending their personal space.

X. Inner State, the last of the Top Themes, displays topics related to the conductor's nature as a human being. It comprises seven categories, displayed in Tables 4.14a and 4.14b: *moral/ethic*, *musical/aesthetic*, *relational*, *temperamental/emotional*, *intellectual*, *perceptive* and *physical*.

Moral/Ethic [D=14;ACR=2.7;W=38]	Musical/Aesthetic [D=11;ACR=2.3;W=25]	Relational [D=31;ACR=2.8;W=88]
(please see Appendix 3, Table 3.10a for the full content of the table)		

Table 4.14a
Inner State (Moral/Ethic, Musical/Aesthetic/Relational): all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Not *all* conductors are expected to have *all* the personal traits listed in the above tables. In her study about the conductor's leadership, Koivunen argues: "not every conductor possesses all the requisite traits. Many are not well read and have average intelligence, some are hopelessly disorganized or lacking in all ambition but have other characteristics that cause them to succeed" (2003, p. 66).

Table 4.14a displays a fairly stable Average Consensus Rate, which tends to indicate that conductors concur to a similar degree about ethical, aesthetic and relational matters. The latter is by far the most developed column, which is consistent with the stress conductors place on the interactive aspects of their profession.

Several clusters form in these three columns. The conductors' humility, for example, displays several shades of adjectives: simple, unassuming, accessible, self-effacing and discreet. All topics found in this study are inferred and summarised from what practitioners say, and the adjectives found in Tables 4.14a and 4.14b derive from a natural reading of thoughts and facts that the conductors recount. They do not constitute quotations of the conductors' opinion about themselves. Given the subjective nature of the adjectives and the subliminal message they may carry, this clarification might be helpful for a better understanding of this section.

The conductors' listening aptitudes are approached from various angles: hearing well, having perfect pitch and developing an objective listening, which targets the real sound, as opposed to the conductor's mental image of it. Listening skills may be a tributary of other aspects of the inner self, such as inner calm (in spite of the possible excitement of the music) or concentration on the sound (in spite of other mental solicitations). Another topic this study addresses is the conductor's relation to success, failure and public taste, their ability to "meet with Triumph and Disaster and treat those two imposters just the same" (Kipling 1910/1988, p. 115). Konttinen remarks: "the need to separate oneself from the crowd has [...] played a strong part in constructing what has been called *conductorship*" (2008, p. 54). The conductors' personalities may also display less glamorous aspects, such as being strict, severe or bossy.

Temperamental/Emotional [D=16;ACR=3.6;W=57]	Intellectual [D=11;ACR=3.1;W=34]	Perceptive [D=3;ACR=1.0;W=3]	Physical [D=3;ACR=1.0;W=3]
(please see Appendix 3, Table 3.10b for the full content of the table)			

Table 4.14b
Inner State (Temperamental/Emotional, Intellectual, Perceptive, Physical): all conductors
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

More clusters occur in Table 4.14b. The conductors' enthusiastic nature goes along with their energy and their inclination to go forward in their projects. Their restrained and removed attitude complements their calm. Their gentlemanly behaviour is coloured with human decency, politeness and good manners. Finally, a general nebula of positivity may be perceived in the conductors' overall character: being audacious, colourful, enthusiastic, extrovert, passionate, and showing humour.

The ten topics that the conductors develop the most are referred to as their Key Topics. They are displayed here (in bold) within the larger frame of the Matrix. Although conductors do not reach unanimity about these Key Topics, as was the case among conducting manuals, they show, nevertheless, a fairly broad consensus, spanning from 20 to 34 conductors out of 38 addressing these topics. The respective proportions are shown hereunder between parentheses.

I. Musical material

1. Composer

Be the composer's advocate (23/38)

Enter the composer's creative process (22/38)

Promote new composers (22/38)

2. Score

Analyse the score in depth (34/38)

3. Sound

4. Spirit of the music

Be very cautious and flexible with tempo (23/38)

II. The Conductor's Self

5. Inner state

6. Mental construct

7. Relation to the self

8. Working methods with oneself

9. Personal Physicality

Display a careful and clear conducting technique (22/38)

10. Personal Evolution

III. Musical knowledge

11. Instrumental/vocal knowledge

Play an instrument (26/38)

12. Ensemble experience

13. Compositional knowledge

14. Historical/stylistic knowledge

Know the other conductors, past and present (24/38)

15. Other musical opinions/knowledge

IV. Interaction with the Orchestra

16. Relation with the Orchestra

Establish a partnership with the orchestra based on a spirit of reciprocity (20/38)

17. Pedagogy

18. Working methods with the Orchestra

Rehearse efficiently (21/38)

V. General human interaction

19. Communication

20. Psychological skills

21. Leadership

VI. Distant horizons

22. Attuned to one's time

23. Interaction with the wider world

A. From work Ethics to Stylistic Stance

B. Adaptation to the musical reality

The Players

“The better a conductor is, the less you know why.”

Robert L. Ripley (2003, p. 84)

The last part of this chapter compares the three subgroups of players. In addition to tracing possible chronological evolutions, this section examines possible differences in players' point of view depending on the instrument they play (strings, winds or percussion) and the modalities according to which they delivered their testimonies (collectively versus individually). Group A belongs to the first generation of players, Groups B and C to the second. Groups A and B provide collective testimonies, Group C provides individual testimonies.

Group A

The first group of testimonies stems from nineteen experienced orchestra players whose opinions were published in Blackman's book, *Behind the Baton* (Chapter Ten: 'What does the orchestra expect from the conductor?'). These accounts aim to make the conductor “aware of the primary elements the orchestra player expects him to contribute” (Blackman, 1964, p. 188).

Visible Action Continuum

Figure 4.16 displays the common polarity between Being, Knowledge and Preparation on the one hand, and Aptitude, Attitude and Action on the other, Aptitude providing here a smooth transition between these two poles. Like pedagogues and conductors, players are not evenly eloquent about all points of the continuum. Some issues are simply mentioned, while others are more thoroughly developed.

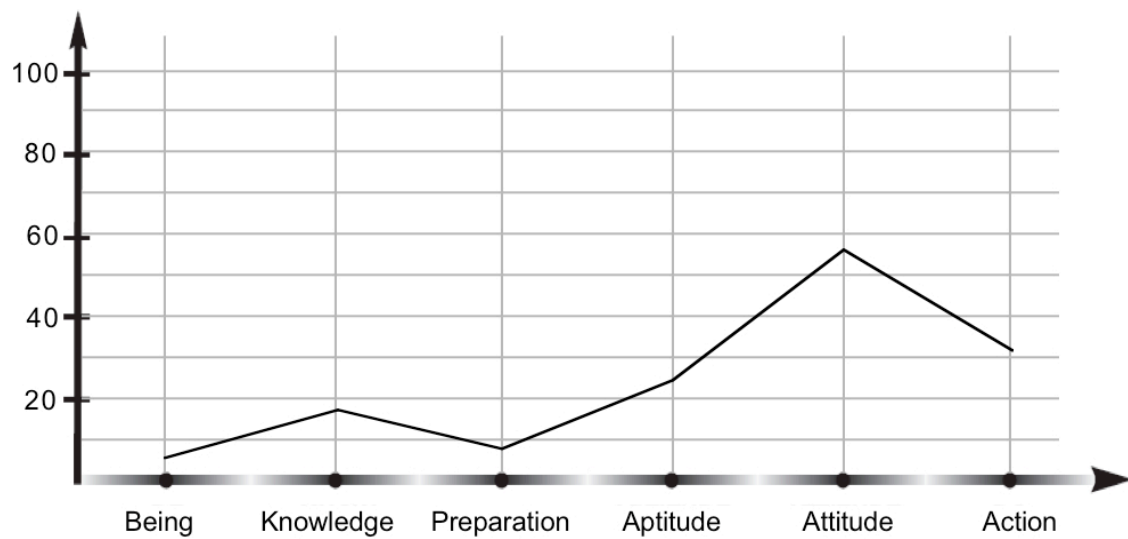


Figure 4.16
Visible Action Continuum: players, Group A

Thematic String Matrix

According to Figure 4.17 Group A stresses Relations with the Orchestra, Working Methods with the Orchestra, and Personal Physicality. Fifteen themes are barely addressed and the remaining seven themes seem totally absent.

THEMATIC STRINGS : DIVERSITY, CONSENSUS AND WEIGHT

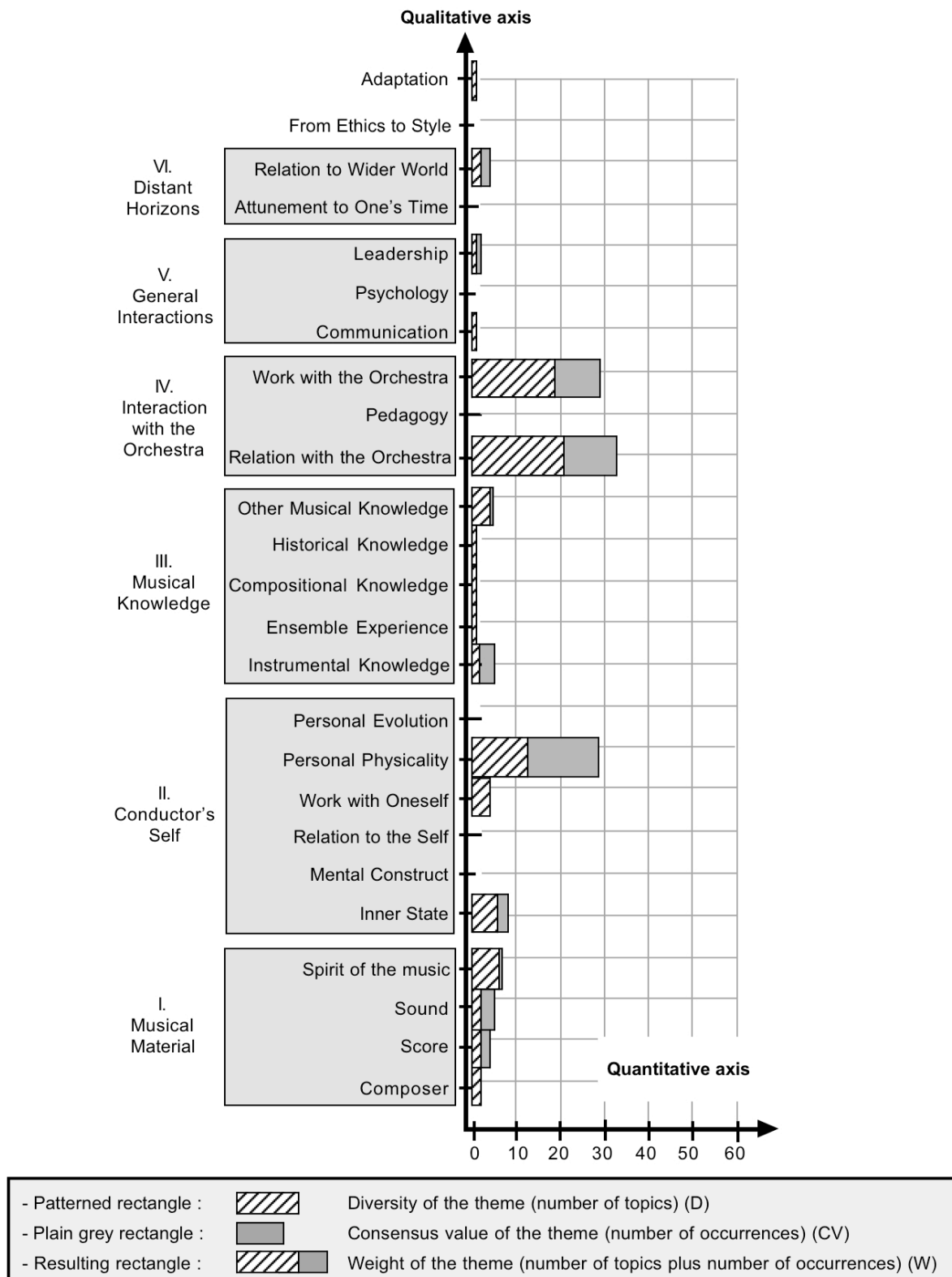


Figure 4.17
The Thematic String Matrix: players, Group A

Group B

Group B provides three series of Grouped testimonies belonging to the second generation of players and dating from 2001 and 2008. These testimonies constitute Internet material, whether written, as for the Ambache survey *What Players Think of Conductors* (2001, ten players) and the Polyphonic survey *Baton Down the Hatches* (2007, seven players) or oral, as for the Chicago Symphony broadcast, *The Chicago Symphony Orchestra reminisce about Sir Georg Solti* (2007, nine players). In both written surveys, the tone was set to be fairly critical towards conductors, somewhat “informed by anti-conductor sentiments” as Nakra puts it (2000, p. 24), and some responses followed this antagonistic path. As will be seen for Group C, where players wrote their testimonies out of their own initiative, this antagonistic spirit persists. However, it was always possible to infer from the comments the conductor’s traits that the orchestra would hope for, notably by turning negative remarks into positive expectations which facilitates later comparisons. Whatever the tone of their testimonies, players always seem to speak out of experience, often citing great conductors as the example to be followed.

Visible Action Continuum

Figure 4.18 displays three main differences with the Visible Action Continuum of Group A: the persona of the conductor seems to have gained interest among the players; the conductor’s preparation is the lowest point of the graph; and the stress on Attitude seems much more marked here than for Group A. The increased interest in Being could be due to the testimonies about Solti, who appears to have made a deep impression on players, who often depict him as a strong personality, “one of the most honest persons” (Aitay, Chicago Symphony broadcast).

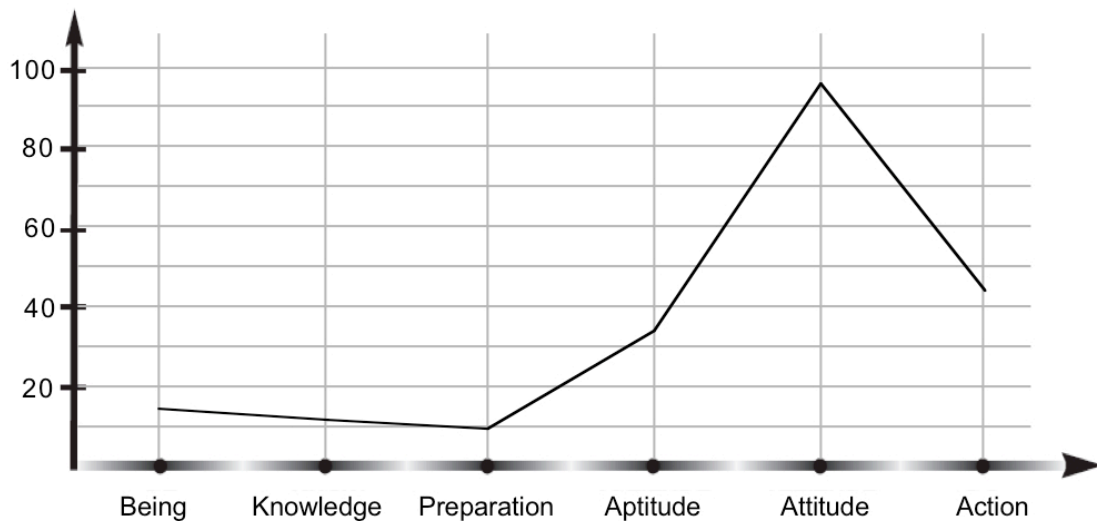


Figure 4.18
Visible Action Continuum: players, Group B

Thematic String Matrix

Like Figure 4.17 of Group A, Figure 4.19 omits seven themes. Three of them are recurrent in both graphs: Pedagogy, Psychology and Attunement to One's Time. The others concern Score, Ensemble Experience, Compositional Knowledge and Historical Knowledge, all of which form part of the conductor's overall preparation for their task and whose absence in the Matrix seems consistent with the low level of Preparation in the Continuum. Four themes are substantially more developed than the fourteen others: the same three as for Group A (Relation with the Orchestra, Work with the Orchestra, Personal Physicality) plus Inner State.

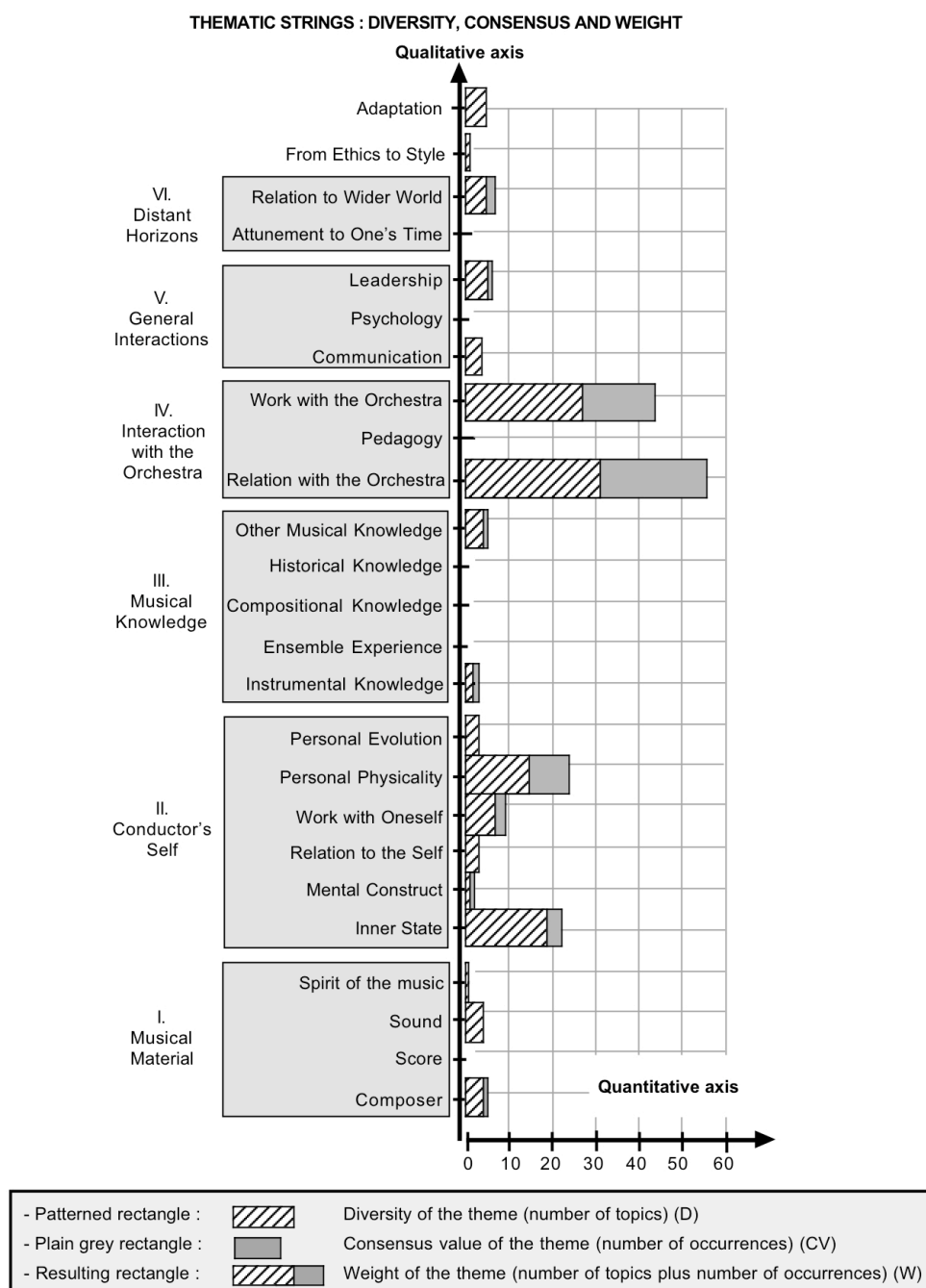


Figure 4.19
Thematic String Matrix: players, Group B

The players of Group B display, on average, slightly more topics than the players of Group A, but build about the same Average Consensus Rate. Like the conductors of Group C to whom they are the closest chronologically, they seem to have more to say about the process of orchestral conducting. They express more extremes (whether in terms of critiquing or admiring conductors), appear more sensitive to teamwork, and manifest more willingness to share their opinions. These traits point to a possible shift in players' mentality and the way they perceive their profession.

Group C

Group C provides five individual testimonies written between 2003 and 2011, stemming from two books and three websites. Robert R. Ripley, cello player with the Philadelphia Orchestra, authors the chapter 'The Orchestra Speaks' in *The Cambridge Companion to Conducting* (Bowen, 2003). Donald Peck, flute player with the Chicago Symphony, wrote *The Right Place, The Right Time* (2007). Jay Friedman, trombone player with the Chicago Symphony, proposes on his personal website the article 'Evaluating conductors' (2004). Cesar Aviles, violin player, publishes online 'How to Know if your Conductor is Good or Bad?' (2010). "The Horn" wrote 'What Do Orchestral Musicians Expect From A Conductor?' (2011).

Visible Action Continuum

Figure 4.20 bears more resemblance to Figure 4.16 of Group A, than to Figure 4.18 of Group B. Groups A and C seem to consider Knowledge the highest of the first three points of the Continuum, and Being the lowest. Groups A and C are both constituted by veteran orchestral players who had the opportunity and time to reflect on the subject. This may induce a more analytical stance than the one prevailing within Group B, which mainly consists of younger musicians, directing their attention more easily towards the conductor's personality than towards the Knowledge and Preparation involved in their task. It is also worthwhile noting that only Group C proposes a higher level of Aptitude than Action which, from this viewpoint, bears more resemblance to the conductors' testimonies.

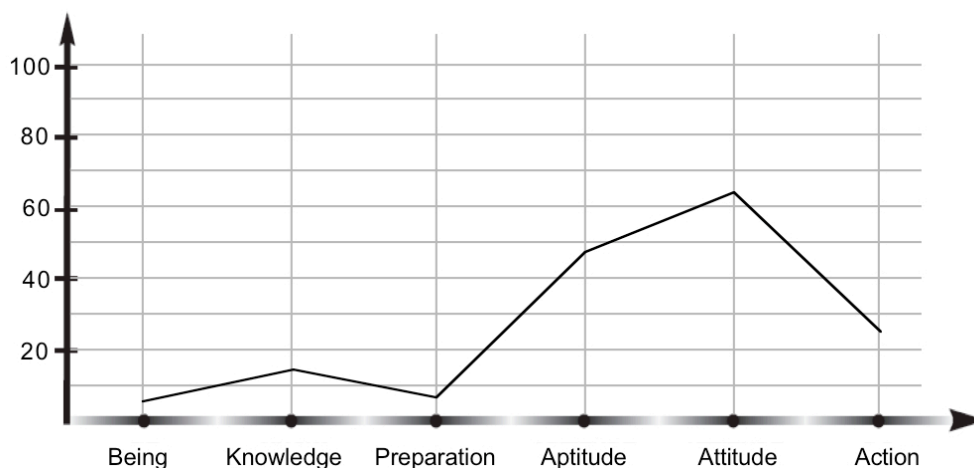


Figure 4.20
Visible Action Continuum: players, Group C

This study does not intend to induce a hierarchy of right or wrong concerning the players' opinions due to their age or experience. It may be argued that circumstances, such as the physical support carrying the testimonies (tape, Internet or books), may affect the players' accounts and, consequently, the outcome of this study. However, it seems that these circumstantial factors have affected only minimally the overall image of orchestral conducting, and differences of opinions likely to occur in complex social and artistic structures such as symphonic orchestras are part and parcel of the phenomenon.

Group C seems to confirm the antagonism between conductors and orchestras evoked earlier. Ripley, directing his remark to a virtual conductor, notes: "you are nothing without the orchestra, but the orchestra could play without you, as has been done many times" (2003, p. 82). Cesar Aviles further remarks: "great conductors are the only category of conductors we really need as musicians to have good performances and grow as instrumentalists" (2010). At the same time, however, players seem to have an understanding of the challenges conductors face. Jay Friedman remarks: "conductors get a constant barrage of insincere compliments and become experts at deciphering people who are only trying to ingratiate themselves" (2004). This requires that conductors develop a lucid self-evaluation and contributes to justify the Matrix category of *Relation to the Self*.

Thematic String Matrix

Figure 4.21 displays two distinctive features. On the one hand, twenty-one themes are addressed, as opposed to eighteen in Groups A and B. Group C seems to cover a wider thematic territory. Because of their longer testimonies and more extensive orchestral experience, it may be hypothesised, players of this Group approach on average more issues than players of Groups A or B.

Among the four themes that Group C does not cover, three are in common with Group B: Ensemble Experience, Compositional Knowledge, and Historical Knowledge. Although Knowledge is relatively dominant in the Continuum, four of the five Knowledge themes in the

Matrix are unaddressed by Group C. As evoked in the Introduction, Knowledge in the Continuum and Musical Knowledge in the Matrix do not cover the same territory, since knowledge in the Continuum may concern knowledge other than musical. It is thus significant that the knowledge players of Group C discuss the most is not musical.

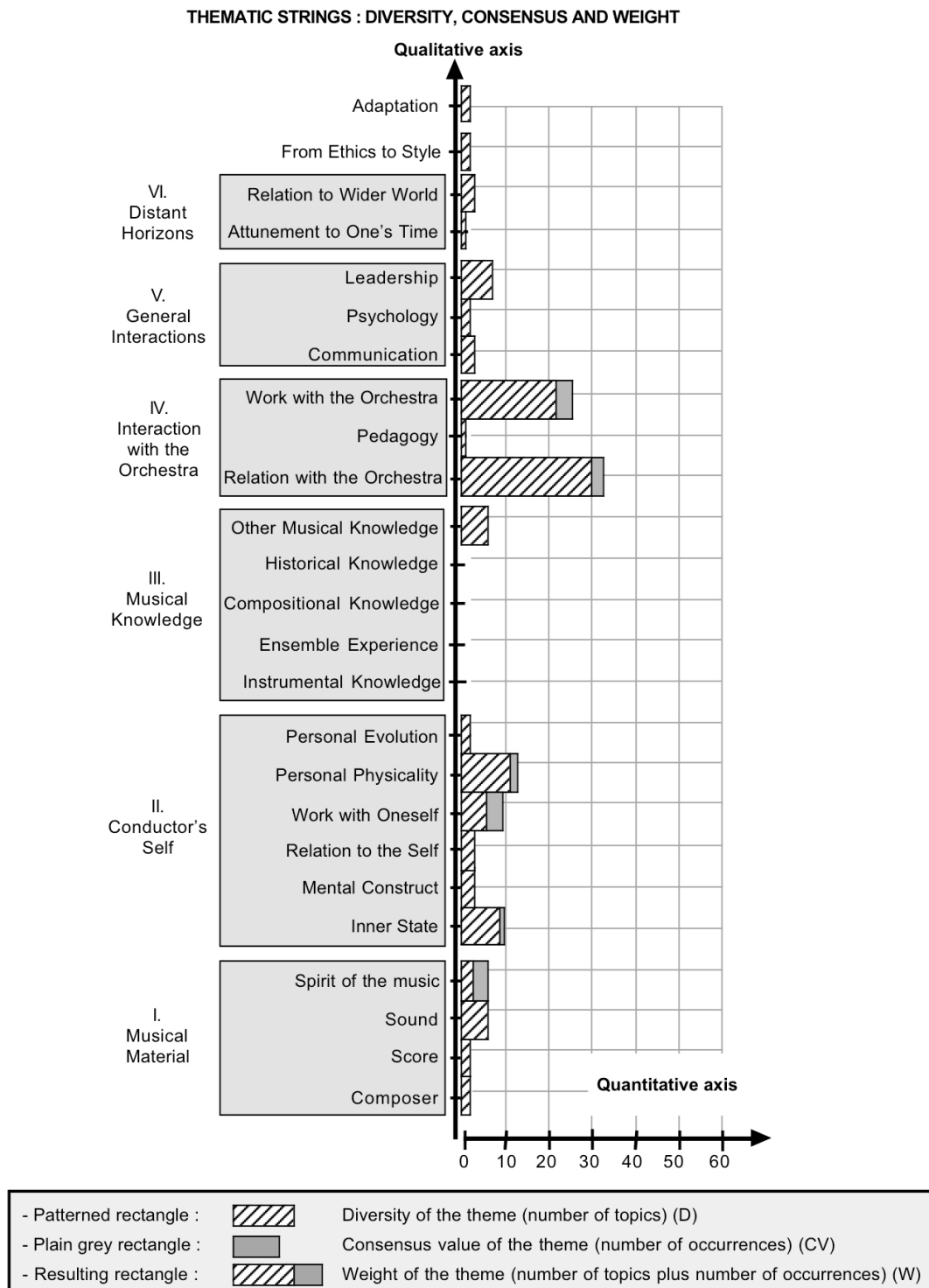


Figure 4.21
Thematic String Matrix: players, Group C

Before presenting the players' four Top Themes and ten Key Topics, this study examines circumstances which may impact on their testimonies, whether the instrument they play in the orchestra, the year of their testimony or the communicational procedure. This section first explores differences of opinions between string players, wind players and percussionists. It then compares testimonies written before 1964 and after 2001. Finally, it parallels collective and individual testimonies.

Whilst 50 players, collectively, may be seen to represent fairly well the orchestra's opinion about the phenomenon of orchestral conducting, it may be argued that a few players cannot speak validly for their category. Six percussion players, for example, may hardly represent the whole profession. It is the aim of this section to open paths of thinking and set up a framework for more substantial investigations.

Instrumental specialism

This section compares testimonies provided by twenty-one string players, twenty-three wind players and six percussionists.

Figure 4.22 displays a similar curve of priorities, all players focusing primarily on the conductor's Attitude. Further analysis shows that the string players comment on the conductor's Aptitudes and Actions in equal proportions, whereas the wind players emphasise Aptitudes and the percussionists Actions. The rhythmical role percussionists play in the symphonic fabric (the 'conductor's right arms' it is said) may lead them to rely more on the conductor's baton technique (Action). The wind players, given their soloistic role, seem to turn their expectations towards the conductor's musical Aptitudes, such as displaying a good ear, having a fine sense of tone colour, managing an adequate balance between sections, and displaying proper style. Possibly due to the necessity of collective playing within their respective sections, the string players seem to expect from the conductor as much stylistic Aptitudes as directive Actions. They also appear to be more sensitive to the conductor's Attitude than their colleagues. Their collective playing could, indeed, breed a loss of artistic individuality, which they are eager to see the conductor not equate

with a loss of human identity (and the lower consideration that may accompany it). The first three points of the Continuum show insignificant differences between categories of players, the number of topics addressed by each group simply paralleling the number of players involved in each group.

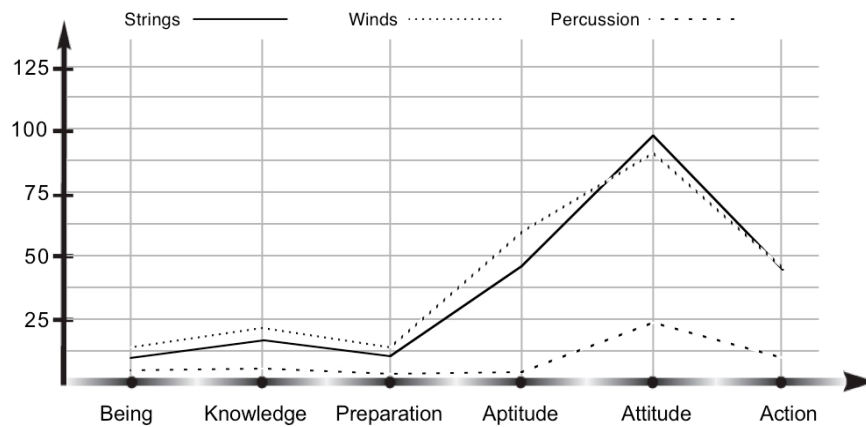


Figure 4.22
Visible Action Continuum: string, wind and percussion players

The next section proposes further comparison between string, wind and percussion players through the Matrix (Figures 4.23a, 4.23b, 4.23c). It points to similarities and dissimilarities between groups, and identifies topics addressed by only one group, as opposed to topics that all three groups approach.

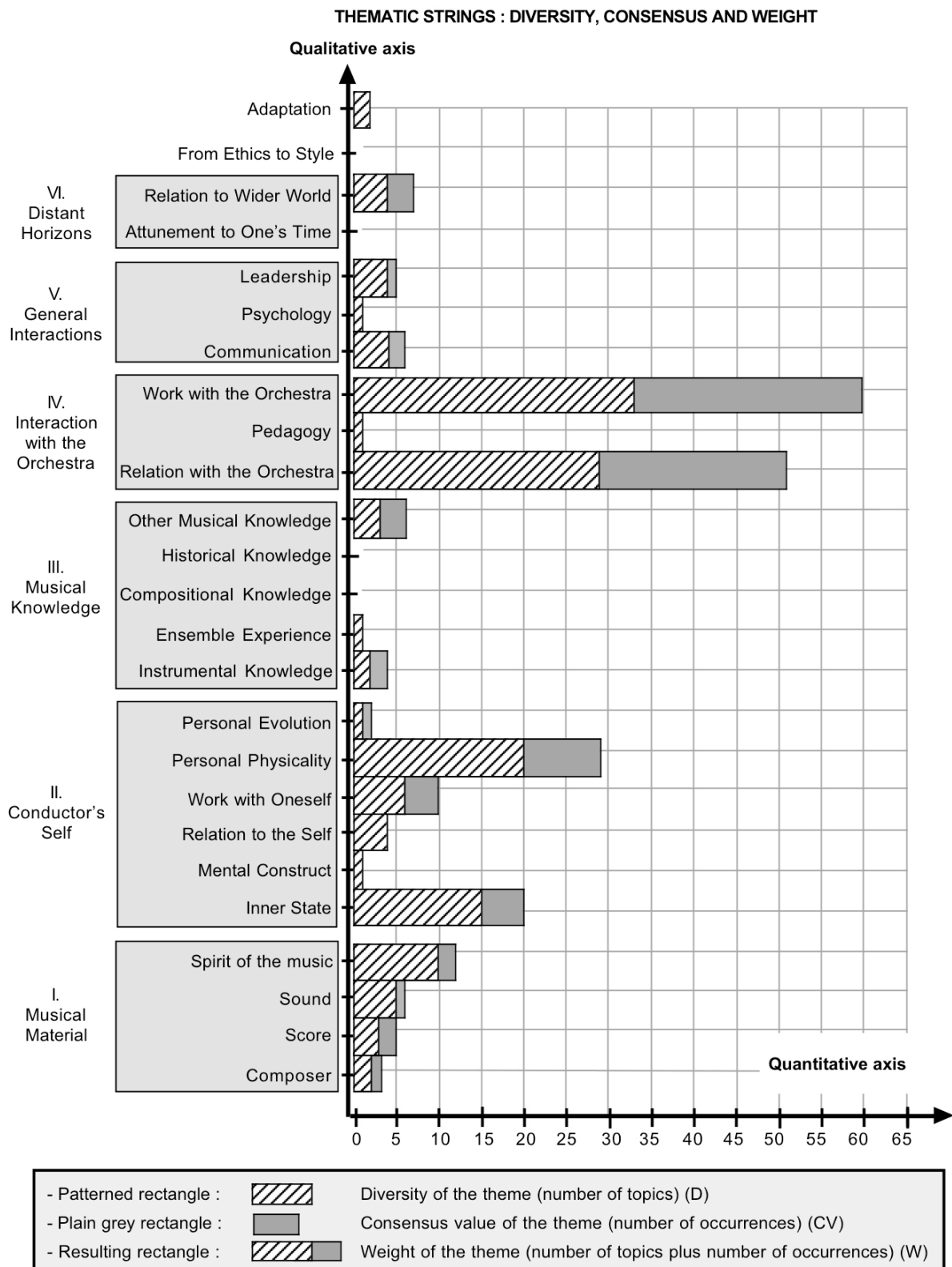


Figure 4.23a
Thematic String Matrix: string players

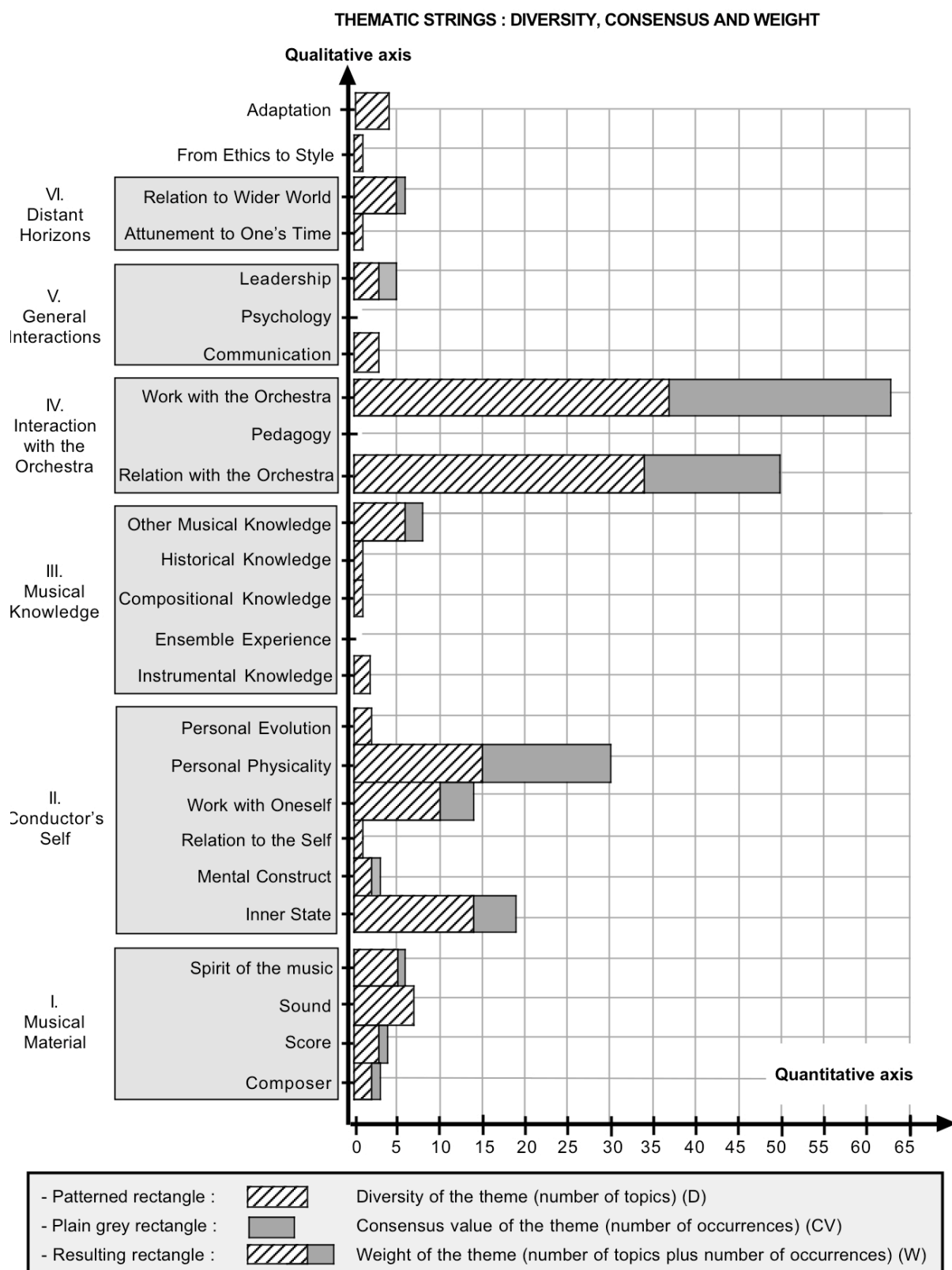


Figure 4.23b
Thematic String Matrix: wind players

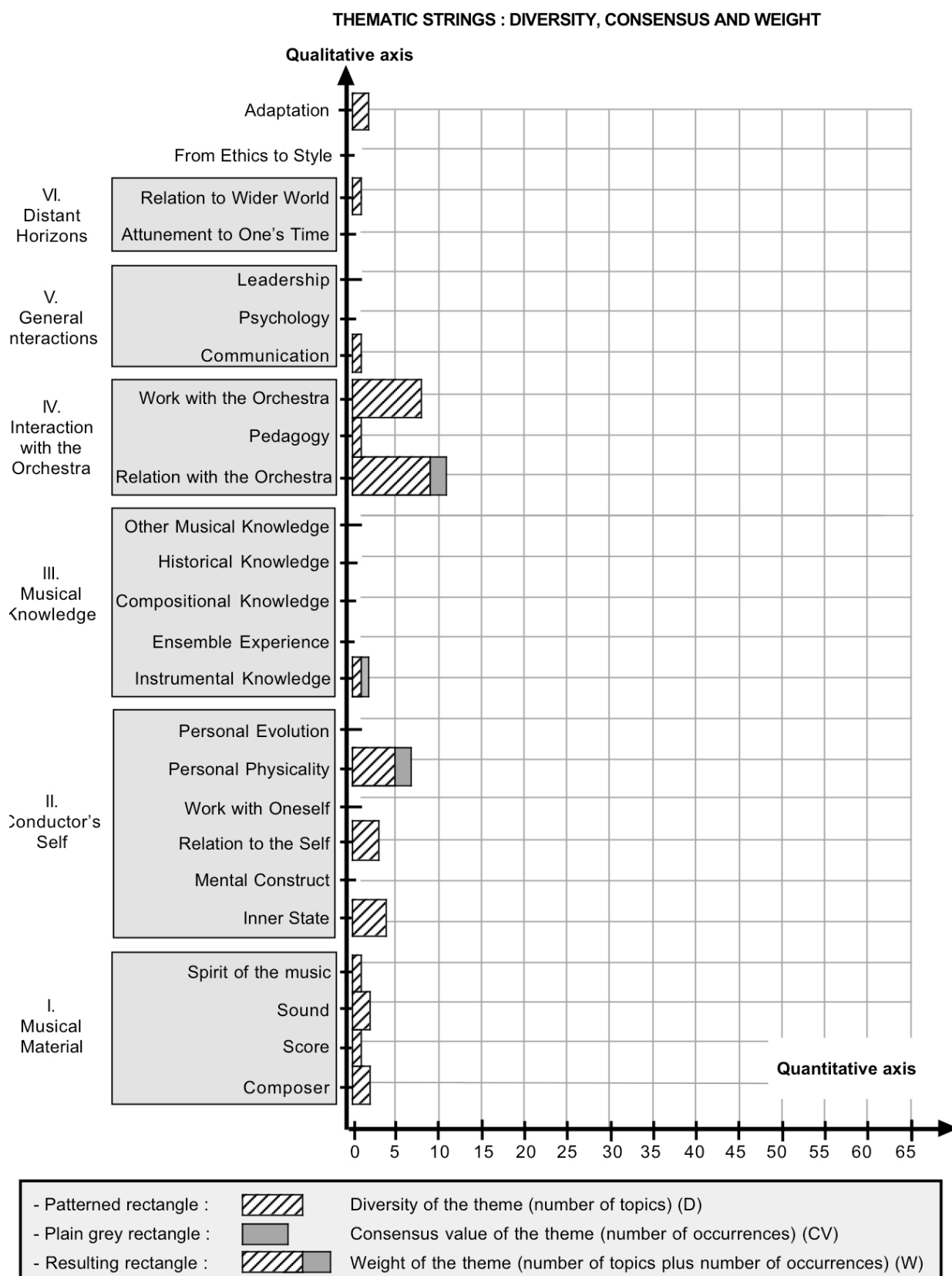


Figure 4.23c
Thematic String Matrix: percussion players

All three groups seem to agree on the four Top Themes mentioned earlier and they all address issues regarding Communication, Relation to the Wider World and Adaptation. No wind player addresses Pedagogy.

String players generally position themselves on a human level: they expect conductors to communicate with players in the quasi-telepathic way described in Chapter 3, to be a pedagogue to the orchestra, and to adopt a psychological approach to rehearsals. They hope that conductors would take time to learn about their musicians, create a good relationship with the orchestra, and show willingness to learn from players. They expect conductors to develop an amicable working atmosphere.

What seems to set apart the wind players' testimonies is their stronger focus on technical and musical issues. They expect conductors to know how to record, to properly conceive tone colours and build a personal sound, to transmit the traditions and respect the styles, to show the phrasing and propose interesting interpretations, to breathe with the winds and maintain a proper posture. They require conductors to build an artistic vision and be specific about musical issues. As orchestral soloists, the wind players expect conductors to share the glory with them, notably by allowing individual bows, to discuss their interpretation with players, and not to start rehearsals with the most delicate part of a piece. They explicitly require that conductors bow the string parts so as to avoid wasting time during rehearsals. Finally, they recommend that conductors know about harmony, counterpoint, orchestration and composition.

The percussion players seem to focus on the conductor's personalities and musical traits, their ability to choose a proper contemporary repertoire, to experiment their ideas with the orchestra, to dialogue with every player, to show musical consistency, to develop a personal gestural discourse, and to take time to gauge the orchestral response to their conducting. The players' topographic situation, enabling them to see the entire orchestra, may be instrumental in allowing them to observe the conductor and his or her ability to keep the orchestra together.

Chronological situation

This section examines how time may affect players' viewpoints on the phenomenon of orchestral conducting, and compares the 19 testimonies provided in Blackman's book *Behind the Baton*, published in 1964, to the 31 testimonies, provided in 2001 and after in various websites and books.

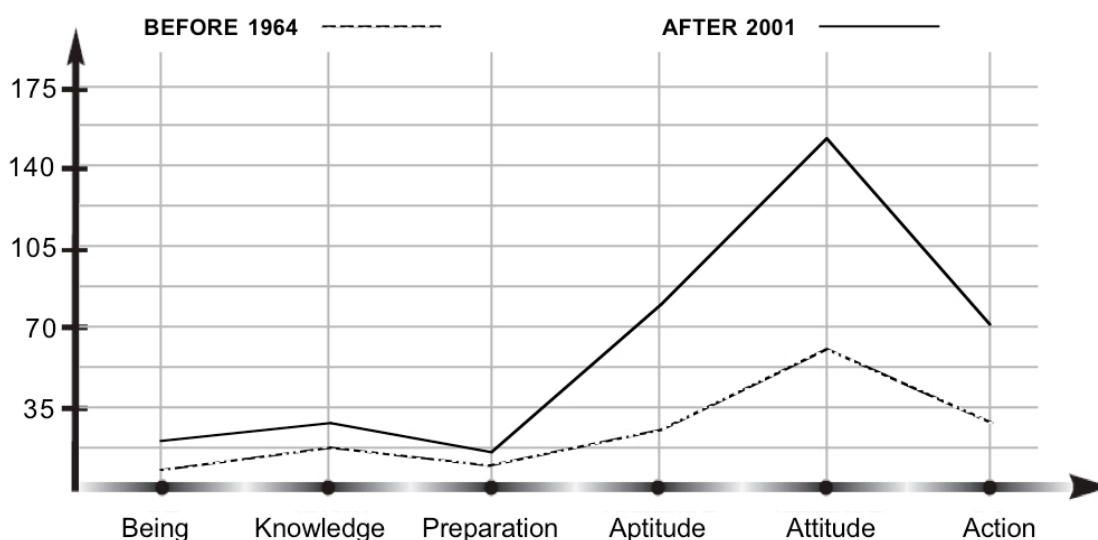


Figure 4.24
Visible Action Continuum: players (before 1964 and after 2001)

Figure 4.24 suggests great consistency in the players' priorities. Both groups are equally balanced around two poles. The first three points revolve mostly around the conductor's Knowledge, and the last three points, mostly around his or her Attitude. The graph also indicates that the first group focuses slightly more on Preparation than on Being, and on Action than on Aptitude, whereas the second group reverses priorities regarding these points. This trend seems consistent with opinions expressed by the second and third generations of conductors, later practitioners addressing more concealed aspects of the conductor's activity (Being and Aptitudes).

Figure 4.25a shows that seven themes have not been approached by the first generation of players, as opposed to three themes (different ones) by the second generation. No specific pattern seems to rule these tendencies. Similarly to the conductors, the pool of players' opinions about conducting seems to expand over time. The first group of players emphasises

expertise/concreteness and the second on interiority/modernity, which suggests that time, as much as their instrumental specialism, affects the players' perception of the phenomenon.

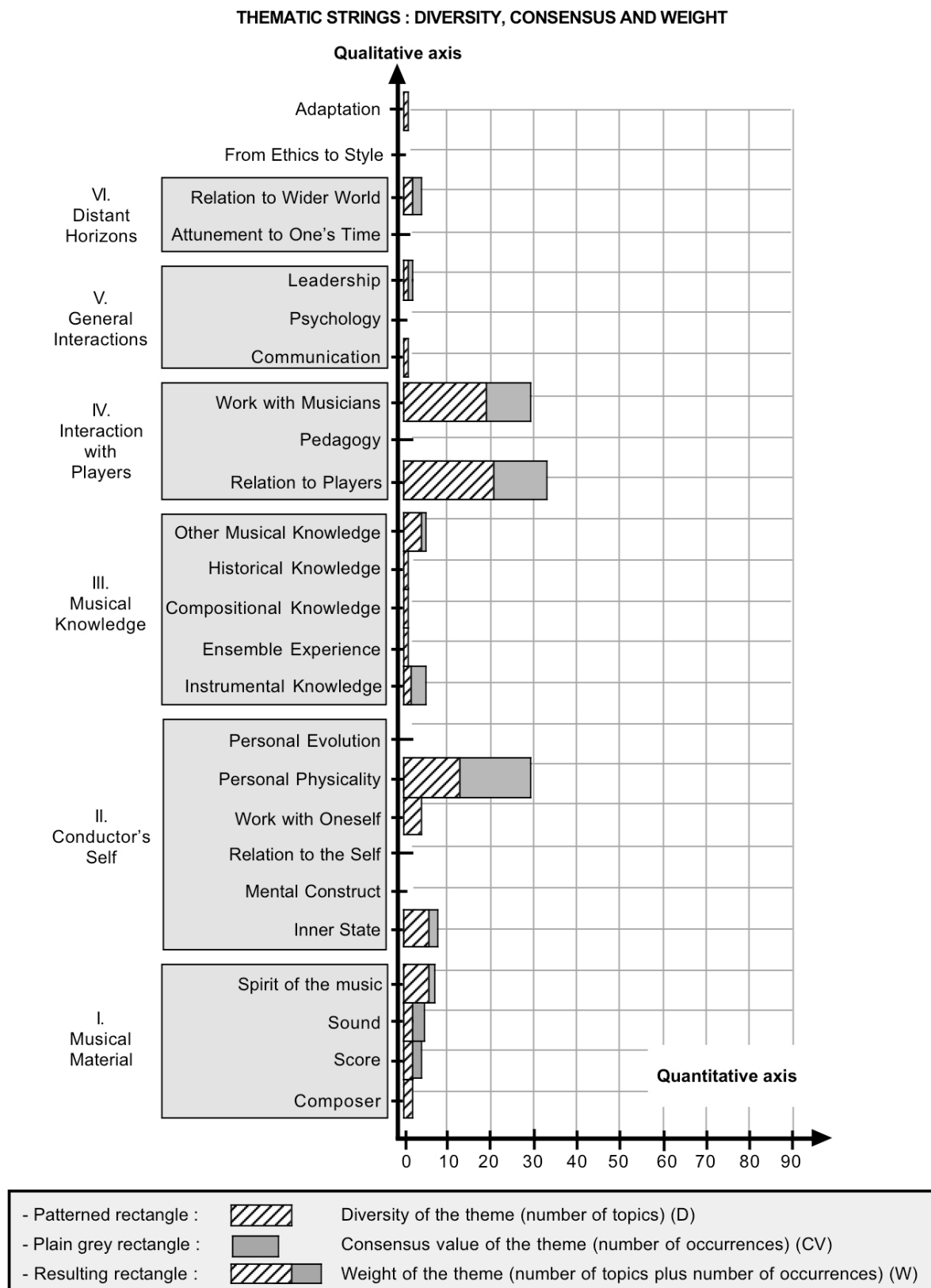


Figure 4.25a
Thematic String Matrix: players (before 1964)

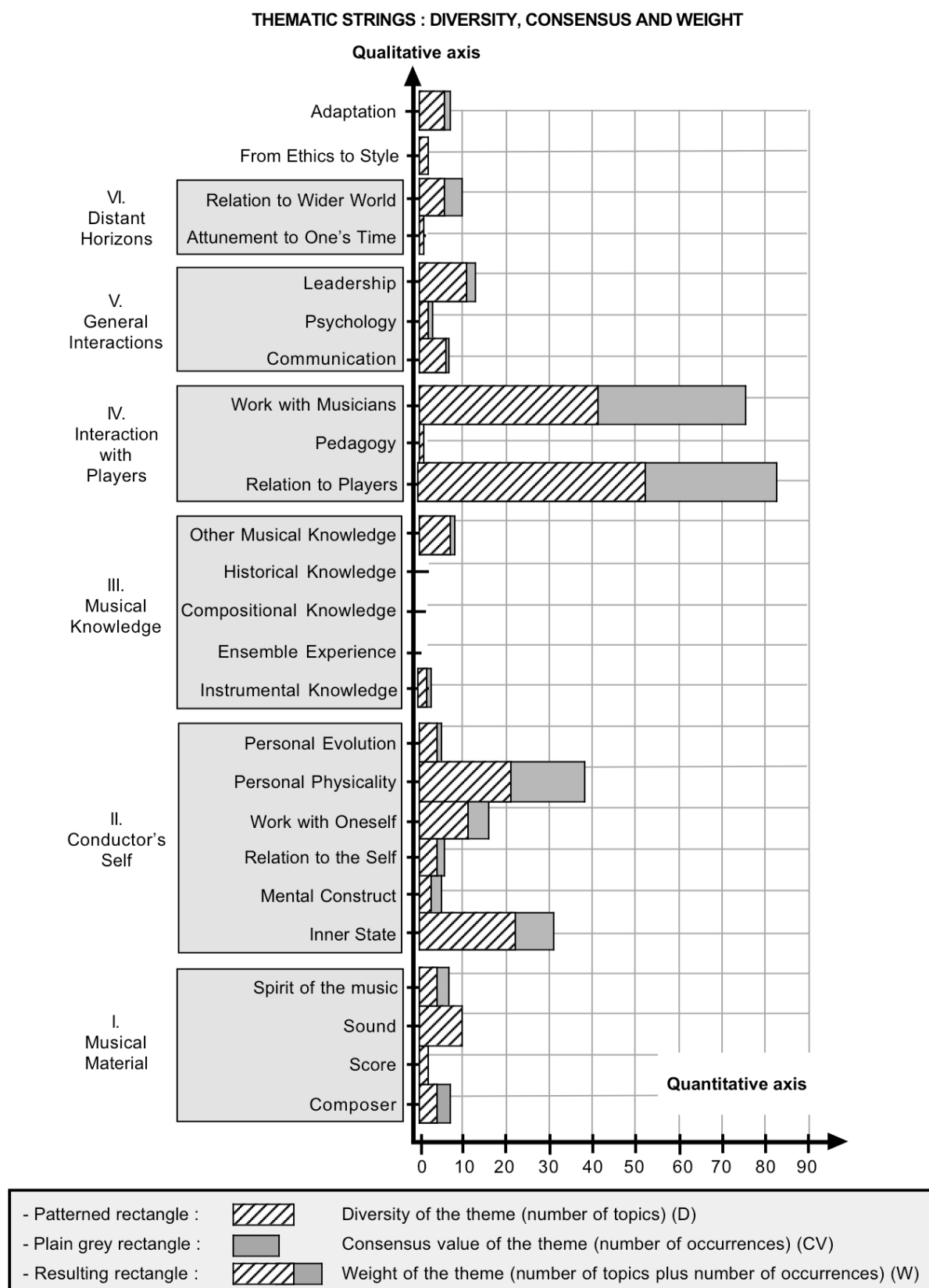


Figure 4.25b
Thematic String Matrix: players (after 2001)

Another substantial difference between both groups of testimonies concerns the conductor's psyche. Only the second group discusses conductors' Mental Construct, Relation to the Self, Personal Evolution and Psychological Skills, and delves deeper into the conductor's Inner Self

than the first group. This trend seems to echo the popularity that psychology, as a mode of thinking, has earned in all layers of society over the last three or four decades. This could also explain why players now expect conductors to display pedagogical aptitudes (given the current psychological connotations of this expression), which they did not seem to require in the past. It is intriguing that conductors see themselves less than before as the players' pedagogues.

Modern life has put much stress on Communication, and orchestra players are no exception, as they increasingly request that conductors be able to communicate with the orchestra, the audience and the wider world. As a corollary, the conductor's Leadership and Attunement to their Time are more on the players' agenda than in the past. Finally, stylistic changes have also occurred: earlier players develop more criteria concerning the spirit of the music; later ones focus on the sheer orchestral sound and discuss issues of work ethics and performance practices.

It appears that the topics which the first group approaches are often addressed by the second group too, suggesting again that the players go through an expansion of their views of the conductor's art. However, some ideas seem to have disappeared from the players' agenda. None of the later testimonies mentions that playing in an orchestra would be a desirable learning path for conductors, nor comments on the conductor's expertise regarding seating arrangements, their work in front of a mirror, their physical coordination, their knowledge of great conductors of the past and their awareness of compositional matters. All in all, it seems that the first generation of players delves into the basics of the art of conducting while later players develop more sophisticated views about the phenomenon. The same trend, it has been suggested, occurs among pedagogues and conductors, and it is only through educated guess that one may infer which topics have become obsolete (thus irrelevant) or self-evident (thus unnecessary).

Communicational circumstances

The circumstances of the accounts may play a role in what the players say about the subject, as some situations may reveal ideas that other situations would not. It is valuable for the conductor to know that string, wind and percussion players expect different things from the podium, or to be

aware that players from the past did not see the conductor's role as they do today. Comparing snappy versus elaborated opinions is instrumental in another way. No conductor would be able to use practically the information provided by this comparison. However, scholars and musicians reflecting on the subject could find it informative to know where succinct opinions versus more detailed ones could lead.

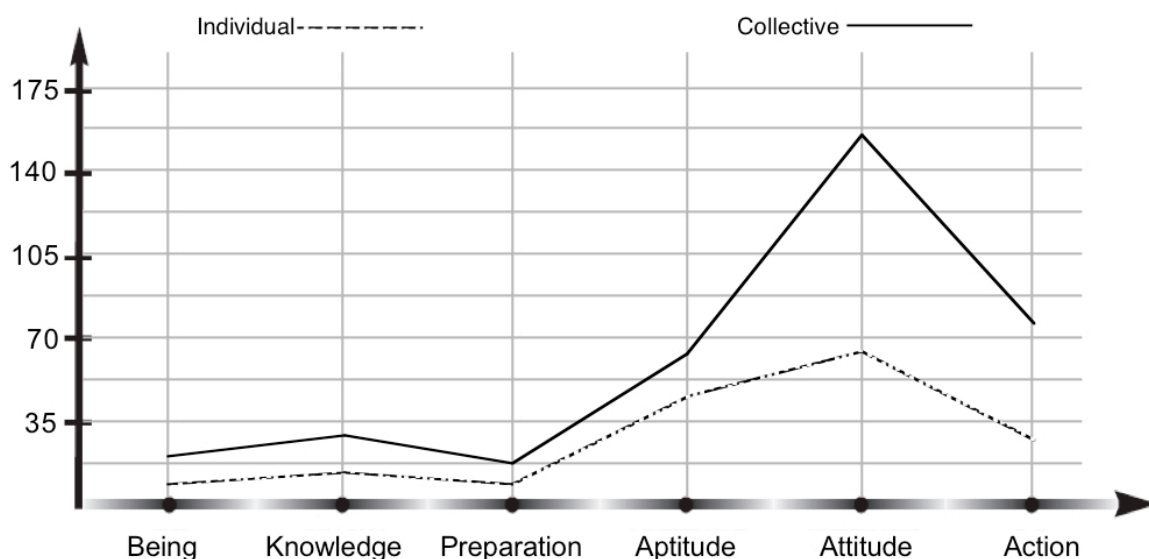


Figure 4.26
Visible Action Continuum: players (individual and collective testimonies)

Figure 4.26 draws a parallel between 5 (lengthy) individual testimonies and 45 (short) collective ones. As may be expected, the number of topics the second group addresses is substantially higher, but not proportionally. However exhaustive, individual testimonies seem to revolve, for each player, around a relatively limited pool of ideas, whereas short testimonies may develop in a few words a relatively larger territory. In other words, long testimonies seem to lack the methodology that would allow them to reach deeper insights into the phenomenon.

Both groups display the common polarity between the first and the last three points of the continuum, but collective testimonies seem to focus slightly more on Being, whereas individual testimonies seem to revolve slightly more around Preparation. This may be interpreted as a tendency for shorter accounts to centre more on conductors' profile, whereas longer ones seem to delve behind the scenes and address the conductor's work. In the same way, individual

testimonies address more conductors' Aptitudes than Actions, whereas collective ones reverse the trend.

Figure 4.27a suggests that Individual testimonies address all themes except the ones relating to the conductor's knowledge. On the contrary, collective testimonies (Figure 4.27b) omit more concealed aspects such as Relation to the Self, Psychological Skills, or peripheral ones such as Work Ethics, Attunement to One's Time and Adaptation. Collective testimonies, representing "1,500 to 2,000 years of collective knowledge" (Patterson, Polyphonic survey, 2007) propose, as a large nebula, a path of thinking concerning the composer: (1) knowing the composer's intentions; (2) being respectful of these intentions; (3) taking active steps in advocating for the composer; (4) implementing the composer's indications; and (5) mediating the composer's indication with the possibilities of the orchestra.

THEMATIC STRINGS : DIVERSITY, CONSENSUS AND WEIGHT

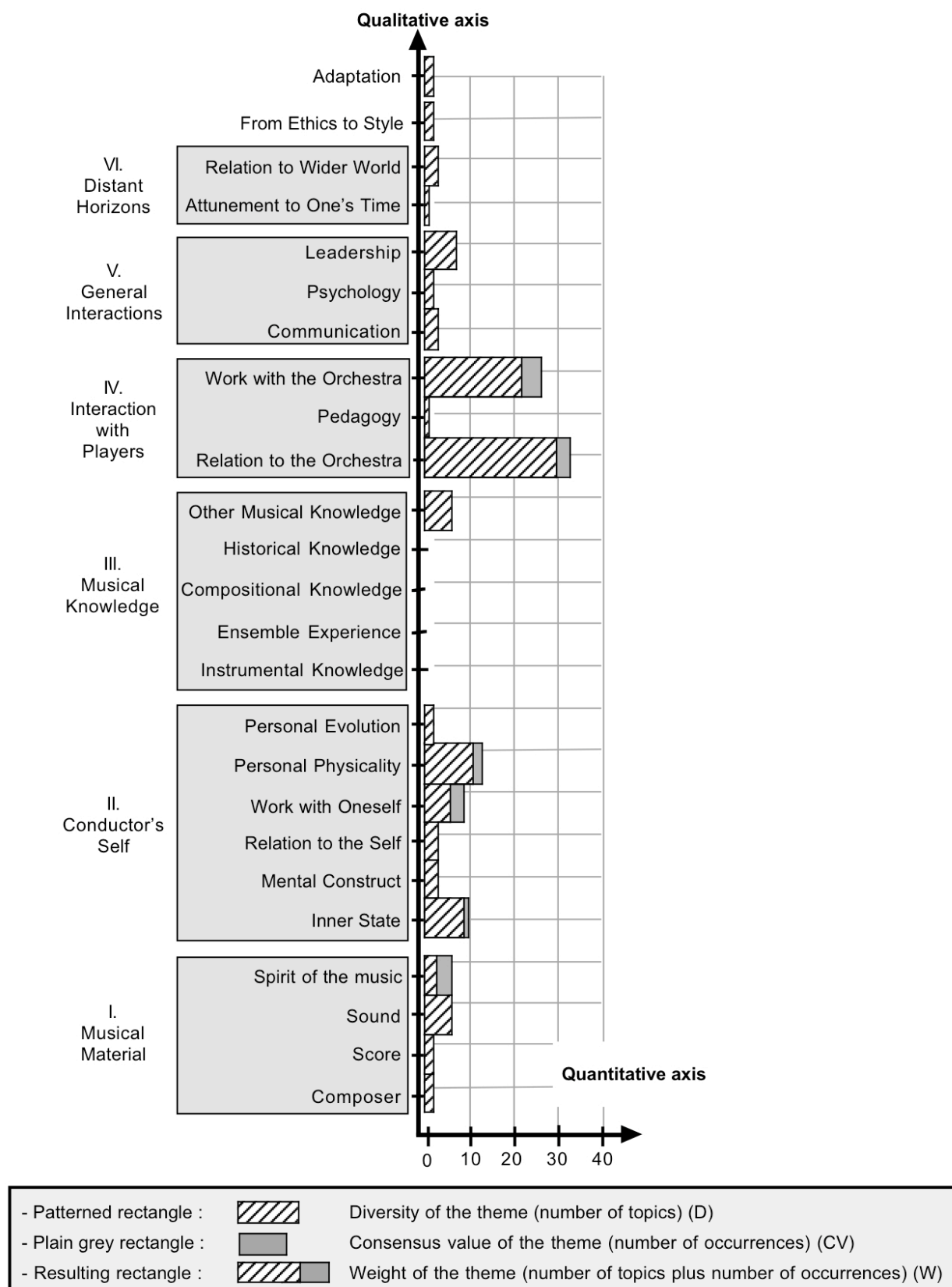


Figure 4.27a
Thematic String Matrix: players (individual testimonies)

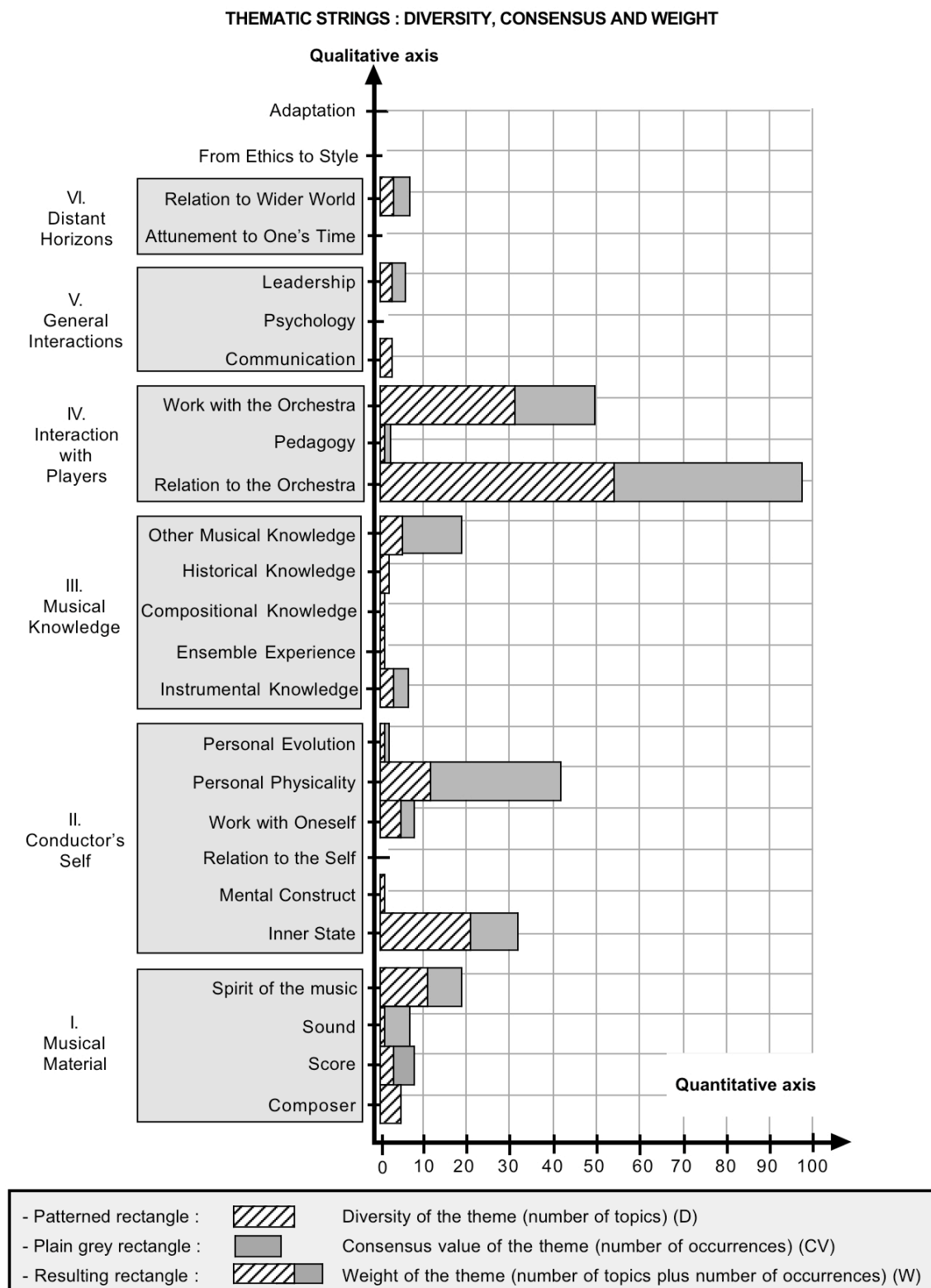


Figure 4.27b
Thematic String Matrix: players (collective testimonies)

This study has grouped the players' testimonies according to chronology, instrumental specialism and communication procedure. A gender grouping would have been possible in principle. However, men provide the overwhelming majority of the testimonies, a proportion which is not in line with the current numbers of male and female players in symphonic orchestras or opera

houses. Therefore, any conclusion from this division would have shown little reliability due to the under-representation of women's opinions.

Stable concepts among all groups of players

Four Top Themes

Three of the players' Top Themes constitute Top Themes for the other sources too: Personal Physicality, Working Methods with the Orchestra, and Relation to the Orchestra. Inner State is the Top Theme that the players address the least and the conductors the most, whilst for the pedagogues it does not constitute a Top Theme.

I. Inner State articulates around the conductor's moral, musical and relational qualities (Table 4.15a), as well as their temperamental, intellectual and physical traits (Table 4.15b). The players do not seem to address the conductor's perceptive abilities, whilst the conductors do. All topics running through the conductor's moral qualities describe a nebula of a highly ethical person. The conductors' humour, and their otherwise exciting and colourful personas, seem to reflect what may be expected generally from a good communicator. It is worth noting the proportion players set between conductors' expected musical qualities (D=3; W=8) versus their other personal traits (D=18; W=33). However, players build the highest consensus around the conductor's listening qualities (ACR=6.0).

Moral/Ethics [D=6;ACR=1.7;W=10]	Musical/Aesthetic [D=3;ACR=2.7;W=8]	Relational [D=8;ACR=2.3;W=18]
(please see Appendix 4, Table 4.1a for the full content of the table)		

Table 4.15a
Inner State: players (moral, musical and relational)
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Temperamental/Emotional [D=2;ACR=1.5;W=3]	Intellectual [D=1;ACR=1.0;W=1]	Physical [D=1;ACR=1.0;W=1]
(please see Appendix 4, Table 4.1b for the full content of the table)		

Table 4.15b
Inner State: players (temperamental, intellectual, perceptive and physical)
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

II. Personal Physicality divides into general topics (Table 4.16a) and those presenting some elements of specificity (Table 4.16b). Among the general topics, the conductor's ability to display a clear conducting technique and to show musical ideas through their gestures meets the highest consensus and may be seen as clusters. Conducting technique (the adjective *clear* is by far the most frequent) is also referred to as baton technique, regardless of the actual use of a baton or not. Concerning conductors showing musical ideas through gestures, players also use words such as 'expressing themselves through their beats' or 'talking with their hands'.

General topics [D=6;ACR=5.8;W=29]			
Baton technique [D=1;ACR=18.0;W=17]	Gestures [D=2;ACR=1.0;W=2]	Music [D=2;ACR=5.5;W=9]	Movement/energy [D=1;ACR=1.0;W=1]
(please see Appendix 4, Table 4.2a for the full content of the table)			

Table 4.16a
Personal Physicality: players (general)
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Specific topics [D=21;ACR=;W=37]					
Baton technique [D=7;ACR=1.4;W=10]	Gestures [D=6;ACR=2.0;W=12]	Body [D=3;ACR=1.3;W=4]	Hands/arms	Head/face/eyes [D=2;ACR=1.5;W=3]	Music [D=3;ACR=2.7;W=8]
(please see Appendix 4, Table 4.2b for the full content of the table)					

Table 4.16b
Personal Physicality: players (specific)
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Other clusters seems to form around the conductors' internal ictus, which some players prefer to call internal rhythm. Regarding cues, players consider them more necessary after long rests and to be handled according to the musician's instrument or the specific instrumental technique of a given passage. The orchestra expresses conflicting opinions concerning the beating ahead of time, which some players totally reject and others require, notably those sitting in the back of the orchestra. In her study, Nakra documents a similar phenomenon with an experiment on "Prokofiev's Dance movement from Romeo and Juliet [where] the accents are given one beat ahead of the intended beat" (2000, p. 85).

A nebula seems to unite the players' general idea of a clear conducting technique and their more specific expectation of the conductor's clear beat pattern. Although they do not seem to equate

the one with the other, they do not appear very specific about their differences either. Similarly, the players require that conductors look at the orchestra, some of them commenting on the communicational benefit that may ensue, while others simply expect conductors to take stock of what is happening in the orchestra. Finally, the players address the conductor's visibility in terms of their adequate physical posture and the necessity of being visible to the whole orchestra.

III. Working Methods with the Orchestra (Table 4.17) spans from general to semi-specific and specific, each category dividing into two sub-categories: practical, and theoretical/abstract. As previously suggested, the allocation into categories, however rigorous in its principle, is likely to be influenced by subjectivity. Nevertheless, despite some arguable borderline situations, each column seems to retain its consistency.

General [D5;ACR=2.6;W=13]		Semi-specific [D=23;ACR=1.9;W=43]		Specific [D=23;ACR=2.2;W=51]	
Practical [D=1;ACR=8.0;W=7]	Theoretical/ abstract [D=4;ACR=1.5;W=6]	Practical [D=6;ACR=5.2;W=25]	Practical [D=1;ACR=8.0;W=7]	Theoretical/ abstract [D=4;ACR=1.5;W=6]	Practical [D=6;ACR=5.2;W=25]
(please see Appendix 4, Table 4.3 for the full content of the table)					

Table 4.17
Working Methods with the Orchestra: players
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

A cluster seems to form with the intonation work the players expect from the conductor: correcting printed mistakes, adjusting harmonies and accurately tuning chords. Maximising rehearsal time forms another cluster: displaying good time management, pacing rehearsals properly, and showing a good rehearsal technique. Players hope the conductor would allow them a musical space to express themselves, and give them artistic responsibility and musical freedom. Finally, running through the piece as a working method is complemented by the players' idea that details should only be worked on afterwards, this run-through allowing the orchestra to pace itself. Finally, a nebula concerns the conductor's experimentation with their artistic ideas, which the players widely accept, provided that conductors announce they are in an experimental mode and accept discussion of their musical options with the orchestra.

IV. Relation to the Orchestra distinguishes between conductors' *Awareness* of the orchestra (Table 4.18a), and their *Interaction* with it (Table 4.18b).

Awareness [D=5;ACR=2.6;W=13]	
Psychological [D=2;ACR= 2.0;W=4]	Musical [D=3;ACR=3.0;W=9]
(please see Appendix 4, Table 4.4a for the full content of the table)	

Table 4.18a
Relations with the Orchestra: players (awareness)
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

Interaction [D=49;ACR=2.1;W=104]			
Positivity [D=8;ACR=;W=15]	Flexibility [D1.=;ACR=1;W=1]	Teamwork [D=34;ACR=2.4;W=81]	Musical Materials [D=6;ACR=1.2;W=7]
(please see Appendix 4, Table 4.4b for the full content of the table)			

Table 4.18b
Relations with the Orchestra: players (interaction)
(D=Diversity, ACR=Average Consensus Rate, W=Weight)

The conductor's acknowledgement of the players takes various guises: a simple acknowledgement of their qualities, a public appreciation of their talent, and an integration of their musical ideas. The teamwork at play between the conductor and the orchestra modulates between partnership, collegiality and complicity. The demanding attitude players expect from conductors is complemented by their willingness to see conductors draw the best out of the orchestra. Finally, the conductor's respect towards the players (which is the most recurrent topic of this theme) complements the conductor's expected consideration towards them as human beings.

The working atmosphere forms another nebula: the players' preference to see conductors in a good mood, their expectations that conductors adopt a lively attitude, and their aspiration for an amicable working spirit. Finally, a nebula concerns the conductors delivering passionate performances: being artistically very present, letting their true personality be known, showing their emotions, and firing up during concerts.

The ten topics that the players develop the most (Key Topics) are displayed below (in bold) within the larger frame of the Matrix. The three sets of Key Topics (derived respectively from

pedagogues', conductors' and players' testimonies) are compared and discussed at the end of Chapter Six. Unlike manuals, but like conductors, players do not reach unanimity about these topics. They show an even thinner consensus than conductors, as 5 to 17 players out of 50 agree on these Key Topics, which constitute, nonetheless, the most recurrent topics in the players' testimonies. This *diminuendo* of concensus between manuals, conductors and players is probably significant, but it is beyond the scope of this study to fully develop the possible meaning of these differences. However, this *diminuendo* seems to parallel the continuum between dogma (manuals) and praxis (players), on which conductors would find themselves sitting in the middle, due to their acknowledged double identity as theoreticians and practitioners.

I. Musical Material

1. Composer
2. Score
3. Sound
4. Spirit of the music

II. The Conductor's Self

5. Inner state
6. Mental construct
7. Relation to the self
8. Working methods with oneself
9. Personal Physicality

Display a clear conducting technique (17/50)

Show the music through your gestures (8/50)

Have a steady internal pulse (5/50)

10. Personal Evolution

III. Musical knowledge

11. Instrumental/vocal knowledge

- 12. Ensemble experience
- 13. Compositional knowledge
- 14. Historical/stylistic knowledge
- 15. Other musical opinions/knowledge

IV. Interaction with the Orchestra

- 16. Relation with the Orchestra

Respect your players (12/50)

Trust players' musicality and professionalism (9/50)

Acknowledge players' qualities and accept their creativity (7/50)

- 17. Pedagogy

- 18. Working methods with the Orchestra

Correct mistakes and intonation (11/50)

Maximise your rehearsal time (9/50)

Refrain from talking (8/50)

Allow players the space to express themselves musically (7/50)

V. General human interaction

- 19. Communication
- 20. Psychological skills
- 21. Leadership

VI. Distant horizons

- 22. Attuned to one's time
- 23. Interaction with the wider world

A. From work Ethics to Stylistic Stance

B. Adaptation to the musical reality

The players' Key Topics all evenly divided between three Top Themes, suggesting that the players' general concerns (Top Themes) are consistent with their specific interests (Key Topics). All ten topics point to the conductor's interaction with the orchestra.

Conclusions

Chapter Four has emphasised the different types of divergence that the practitioners display regarding the phenomenon of conducting, remarking that these divergences may concern specific topics but more often relate to general approaches to conducting. In order to trace these divergences with more details than Chapters 2 and 3, this chapter has analysed each source separately and identified variations of opinion within each source, highlighting their main traits and analysing their Top Themes: four for the pedagogues and players (three of which are common) and ten for the conductors (containing the pedagogues' and the players' ones). Chapter Four has remarked on the wide agreement that the pedagogues build around the theme of Adaptation, and the striking difference between the manuals and the conductors regarding Personal Physicality. This chapter has also reviewed the practitioners' Key Topics.

All manuals have stressed the conductor's Attitude, but have under-developed Being. They have focused on Preparation more than on Knowledge. The first generation of manuals has emphasised beat pattern and Action more than the second. The second generation has developed rehearsal technique more than the first. Chapter Four has discussed different graphic/symbolic representations of the conductor's gestures, suggesting its insufficiency to validly represent their real movements and noting the lack of concern the textbooks display regarding the left hand.

Viewing the pedagogues' testimonies through the Matrix, Chapter Four has suggested that the more developed a theme, the smaller the consensus it builds. The first generation of manuals have emphasised more than the second the pedagogical role of the conductor and the visible part of the phenomenon (Personal Physicality, and Working Methods with Players), but less than the second on the conductor's inner sphere (Relation to Score and to the Self, and Working

Methods with Oneself) and their Relation to the Composer and to the Wider World. The manuals have developed evenly seven themes: Spirit of the Music, Mental Construct, Personal Evolution, and Other Musical Knowledge (possibly a requisite for high-level musical achievements) and Communication, Leadership, and Attunement to One's Time (referring to the conductor's leading figure).

Chapter Four has also reviewed specific topics that have appeared or disappeared from one generation of manuals to the next, remarking that more topics have appeared than disappeared (highlighting the conceptual expansion of this art) and that some topics have turned into more specific ones (notably the programming of concerts and seasons). Finally, this chapter analysed the pedagogues' Top Themes: Personal Physicality, Relations with the Orchestra, Working Methods with Oneself, and Working Methods with the Orchestra, and reviewed their Key Topics.

The ambiguous status of the conducting manuals has been noted here. They often describe the conductor's corporeal discourse as real-life conducting gestures. However, by their necessary pedagogical simplification, they rather constitute a basis for what Kontinen calls 'educational gestures' (in his case to educate conductors), which require maturation in order to become real 'working gestures' used by the fully-fledged conductor in front of professional orchestras. The pedagogues seem reluctant to present their elementary (and sometimes simplified) pedagogical guidance as elementary and simplified. At the same time, they do not convey their entire professional experience in full detail either. Consequently, the manuals find themselves positioned between simplified theory and nuanced practice, breeding ambiguity as to the real extent of their instructions. Part of the divergences between pedagogues may lie in the double-sided nature of their manuals (theory and practice), since some authors simplify certain aspects of orchestral conducting and develop some others in more detail, whereas other authors summarise or expand different aspects. The reader is thus left with the task of comparing apples with oranges, that is comparing the theoretical aspect developed by one author with the practical counterpart of a similar aspect addressed by another.

Chapter Four has divided the conductors into three chronological groups, according to their date of birth and not, as it did for manuals, to the publication year of the texts. It has studied each group separately through the Continuum and the Matrix, revealing more nuances than striking differences between generations of conductors. It has been pointed, however, that each conductor of Group B addresses, on average, more topics than the conductors of Group A or C, but, as a group, Group B develops less topics than the other groups. This supports the idea that conductors have developed, over time, a more articulate discourse about conducting, but paradoxically draw their ideas from a reduced reservoir of topics, possibly indicating a relative standardisation of this art. Some scholars relate this to the standardisation of the orchestral sound. It has been proposed that this phenomenon could also be related to commercial reasons, allowing conductors to be responsible, simultaneously, for several orchestras in the world, setting up norms in terms of orchestral sound and conducting techniques. This situation may explain the heavier stress Group B has put on Musical Knowledge and Preparation, as these aspects are keys to ensure efficient rehearsals. The conductors of this group have also started a new trend: mediating the composer's indications with their own sensitivities, and have shown more commitment in supporting new music.

Compared to Groups A and B, Group C increases its general reservoir of topics and aims to de-standardise the orchestral sound. Contrary to pedagogues, whose Top Themes build little Average Consensus Rate, conductors do reach a high consensus for some of their Top Themes. This agreement may be grounded in the conductors' reference to a common practice, inducing similar opinions about similar situations, whereas the pedagogues have naturally referred more to their own (abstract) concepts than to a common (concrete) praxis. Chapter Four has analysed the conductors Top Themes: Relation to the Wider World, Relation to Score, Spirit of the Music, Personal Physicality, Relation to the Composer, Other Musical Knowledge, Working methods with Oneself, Working Methods with the Orchestra, Relations with the Orchestra and Inner State. It has also identified their ten Key Topics.

The players divide into three groups according to chronological criteria and communicational medium. Group A belongs to the first generation of players, Groups B and C to the second. Groups A and B provide collective testimonies, Group C provides individual testimonies.

Group A has displayed a balanced distribution between the first three points of the Continuum on the one hand, and the last three on the other, stressing the latter but showing a smaller divide between first and last points than the pedagogues and the conductors. This suggests a fairly integrated approach to the phenomenon, addressing significantly the 'behind the scenes' part of the phenomenon. Their Matrix has suggested three Top Themes: Relations with the Orchestra, Working Methods with the Orchestra, and Personal Physicality, whilst seven themes have not been addressed at all.

Group B has displayed a Continuum resembling the one of Group A, except for Being sitting on the top of the first three themes and for the difference between first and last points being more pronounced. It has been hypothesised that both the testimonies about Solti (an alleged strong personality) and the lesser experience of several players of this group (possibly focusing on the surface of the phenomenon) could have lead some players to comment more than Group A on who the conductor is as a person, also revealing more extremes in terms of admiration or deprecation towards the conductor. The Matrix of Group B has displayed the same Top Themes as Group A, and has failed to address seven themes, three of which are in common with Group A. The players of Group B have addressed more topics than the players of Group A (individually and collectively), possibly indicating the musicians' increased commitment in evaluating the orchestral phenomenon of which they feel, more than in the past, an active part (artistically and organisationally).

Group C has displayed a Continuum resembling Group A in that the first three points are balanced around Knowledge, but at the same time confirm the trend initiated by Group B of focusing much more on the last part of the Continuum, analysing the more apparent aspects of the phenomenon. The Matrix of Group C covers a wide territory (only four themes are not

addressed), and the players discuss, in average, more topics than Group B, but their total reservoir of ideas is slightly smaller. It has been proposed that these players lack the necessary methodology in addressing orchestral conducting, which would have allowed them to go into more depth about the phenomenon, proportionally to the number of pages they devote to the subject. Chapter Four has also remarked on possible differences of perspective among players due to their chronological situations and instrumental specialism. It analysed the players' Top Themes (all groups merged together): Inner State, Personal Physicality, Working Methods with the Orchestra and Relation to the Orchestra, and reviewed their Key Topics.

Chapter Four has suggested that several factors may explain the practitioners' divergences of opinion about orchestral conducting, notably their chronological situations, communicational media, instrumental specialism, and role in the process (pedagogues, conductors or players).

Chapter Five: Particularities

One of the purposes of this study is to understand differences of opinions about orchestral conducting. Chapters 3 and 4 have examined, through the Continuum and the Matrix, differences of opinion stemming from different sources (pedagogues, conductors and players). Chapter Four has traced variations of opinion within each source, potentially due to chronological factors, instrumental specialism or communicational modalities. Chapter Five goes one step further and studies differences of opinion stemming from the same conductor and from practitioners displaying dual status: Bernstein appears as a pedagogue and a conductor; Dickson as a conductor and a player; and Blackman as a player and a pedagogue. Chapter Five investigates if and how situational factors influence what practitioners say about conducting in order to help comprehend further the possible variations of opinion stemming from the same practitioners.

Conductors' multiple testimonies

Thirteen conductors provide multiples testimonies. It happens that conductors change their mind over time about specific topics, but more often differences of opinion consists in changes of focus, conductors addressing a large number of issues in one interview and about as many of others in another. Although these opinions do not directly conflict, this change of focus may translate into a different approach to their art and different musical outcomes.

Group A

Walter, Boult, Ormandy, Karajan, Solti and Giulini provide several testimonies each. It is revealing to see if and how time and other circumstances affect the way they relate to their art or express their views about it. Figures 5.5 to 5.10 analyse their testimonies and display general trends and specific profiles.

One general trend consists in the polarity of the conductors' graphs. In almost all cases, the first three points of the Continuum are less developed than the last ones, which is consistent with the overall Continuum of all conductors (Figure 3.3) . Knowledge is often the highest point of the left

side of figures 5.1 to 5.6, whereas the conductors are split about considering either Aptitude or Attitude as the highest point of the right side.

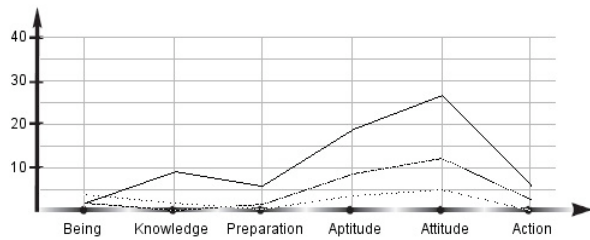


Figure 5.1
Visible Action Continuum: Bruno Walter

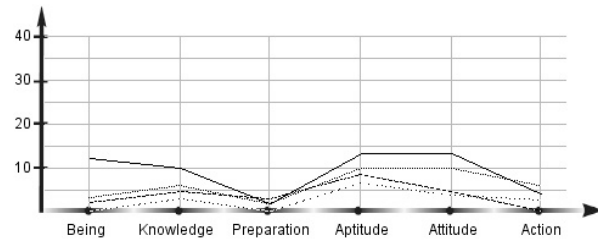


Figure 5.2
Visible Action Continuum: Adrian Boult

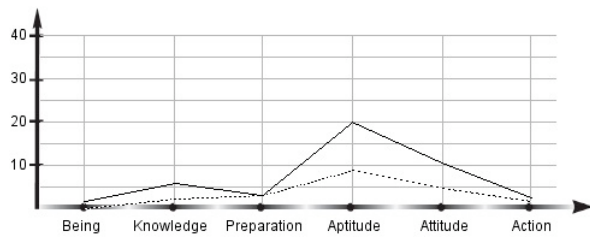


Figure 5.3
Visible Action Continuum: Eugene Ormandy

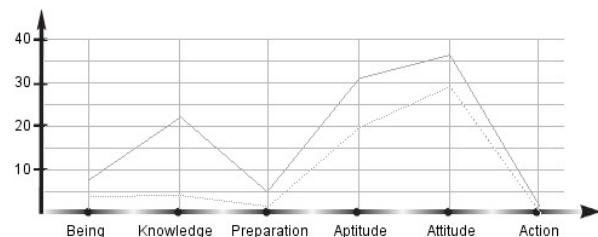


Figure 5.4
Visible Action Continuum: Herbert von Karajan

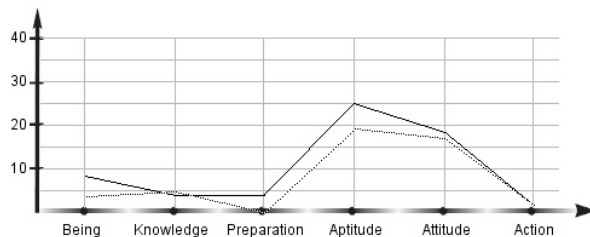


Figure 5.5
Visible Action Continuum: Georg Solti

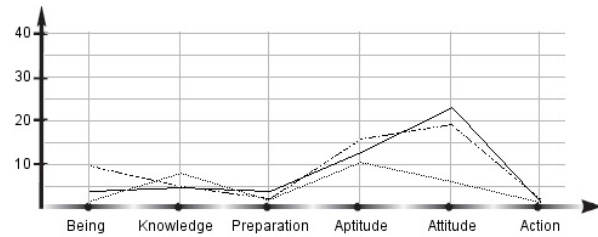


Figure 5.6
Visible Action Continuum: Carlo Maria Giulini

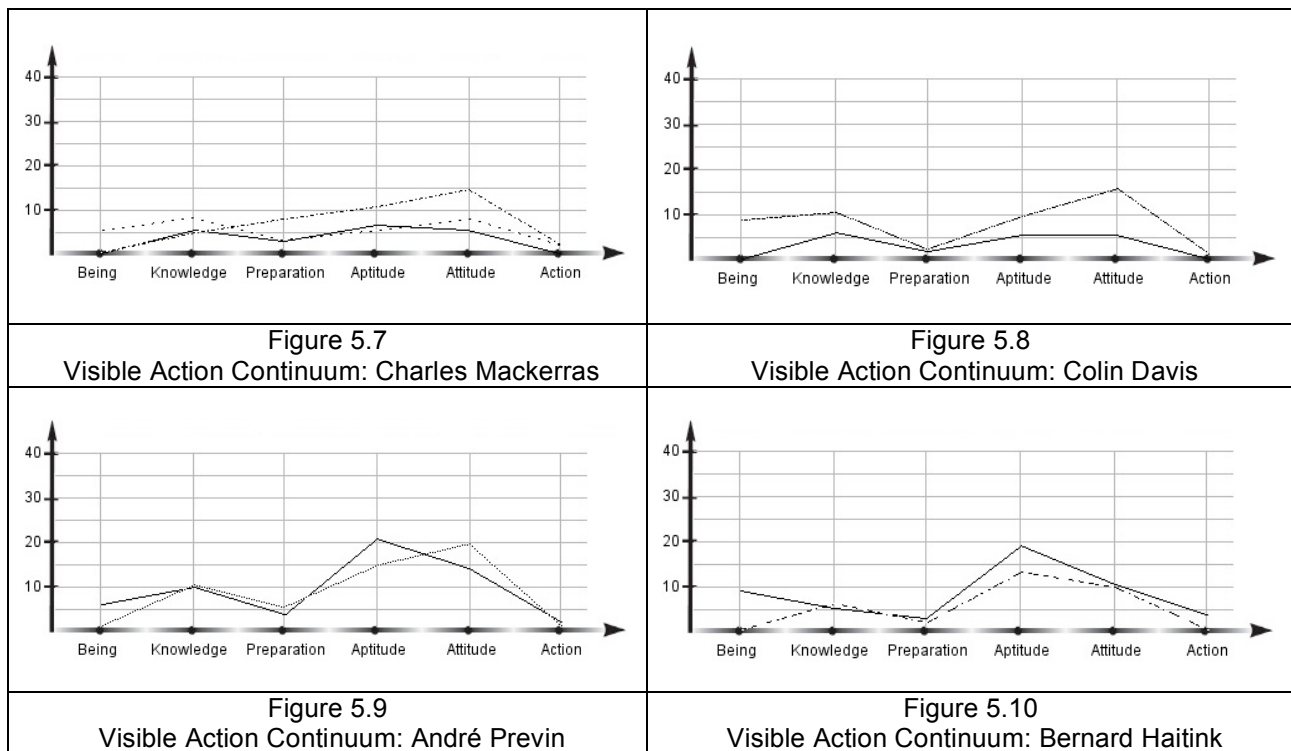
All Walter's and Karajan's graphs indicate a prominent focus on Attitude and a secondary one on Aptitude, whereas Ormandy consistently proposes a reversed priority between these two points. Boult either treats them equally or adopts Ormandy's approach. Things seem to change with Giulini who addresses Attitude more than Aptitude in two of his graphs and reverses priorities in the third, a discrepancy that will be further analysed in the next section. In almost two-thirds of the cases, Knowledge is the top issue of the first three points. No pattern seems to rule Being and Preparation. Action is invariably the lowest of the last three points in all testimonies.

These observations seem to indicate some degree of consistency within the frame of the Continuum. However, the content of the testimonies presents little topical common ground not only between conductors, but also between testimonies from the same conductor. In his three

testimonies, Walter mentions twice seven issues out of a total of ninety-seven (2.06%). More generally, the common topics which the conductors address in their different testimonies vary between 1.6% for Ormandy and 12.5% for Giulini, with no observable pattern in between. Paradoxically, Giulini's Continuum (Figure 5.6) displays the least consistent graph. This small topical consistency in the conductors' testimonies could be due to the vastness of the subject and parallels the pedagogues' inclination to propose new texts and add new elements to their sometimes recently published conducting manuals. However, this tendency seems to contrast sharply with the consistency of the Visible Action Continuum. It may then be speculated that, for each of these conductors, an appropriate account of their profession must present certain traits to adequately echo their beliefs. Metaphorically speaking, a face, to be recognisable, needs to display certain features (eyes, nose, mouth) in order to evoke a facial image, whatever the colour of the eyes, the size of the nose, or the shape of the mouth. Similarly, a pertinent account of the art of conducting has to speak of Being, Knowledge, Preparation, Aptitude, Attitude and Action in certain proportions in order to reflect properly the conductor's ideas.

Group B

Mackerras provides three testimonies, whereas Davis, Previn and Haitink provide two testimonies each. To ensure consistency with the multiple testimonies of Group A, figures 5.7 to 5.10 keep the same format for the vertical axis, although no conductor of Group B reaches 40 topics for any given point of the Continuum. Similarly to Group A, each conductor of this group presents different graphs from their peers, but they also show diversity within their own graphs. Mackerras prioritises Knowledge and Attitude in one graph, Aptitude in the other, and Attitude in the third. Previn focuses on Aptitude in one graph and Attitude in the other. Almost all conductors vary from no comment concerning Being and Action in one of their graphs to a slightly higher rate in the other. However, they do manifest consistency about Preparation, which is always addressed but never much developed.

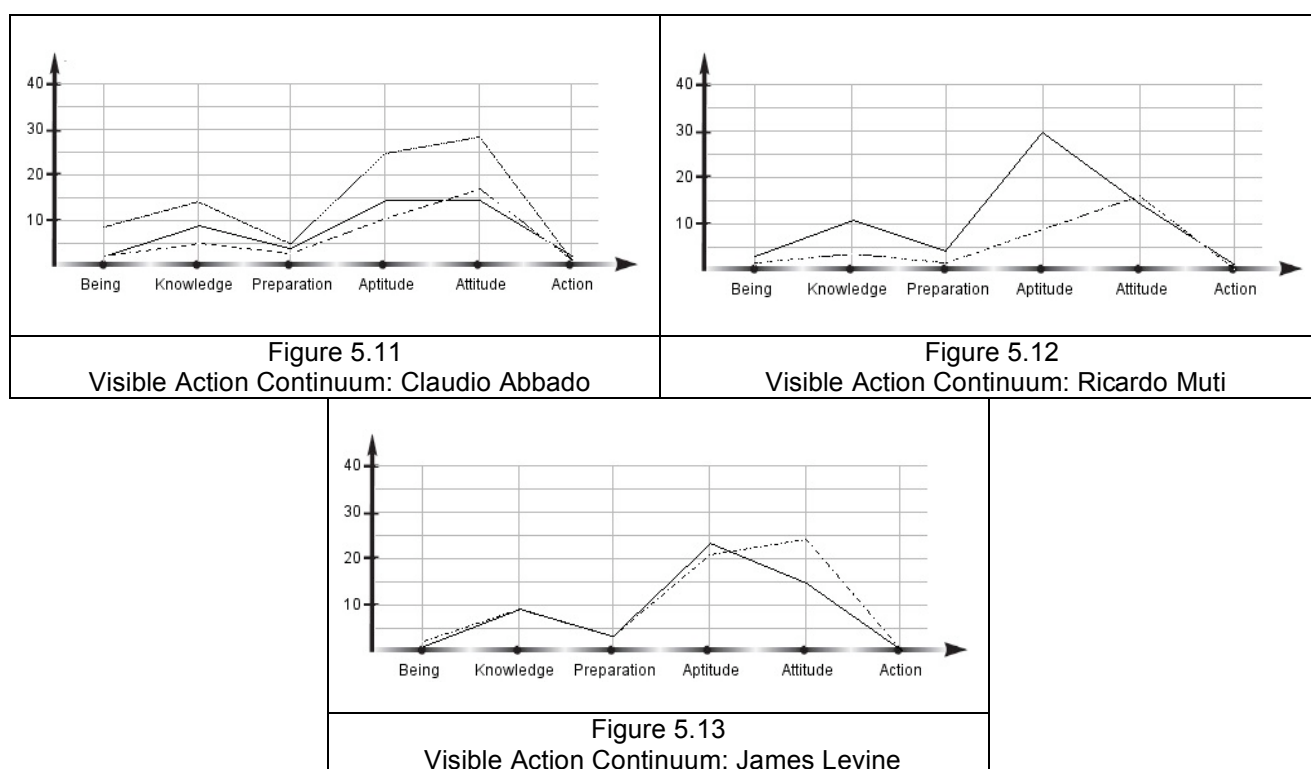


The conductors of this group show less consistency than Group A regarding their Continuum, but more consistency when it comes to the actual topics they discuss. The percentage of repeated topics spans from 7.4% for Haitink to 18.9% for Mackerras, a substantial expansion compared to Group A. This is in line with the smaller reservoir of topics discussed earlier, and the increased likelihood to develop the same topics in several testimonies. Additionally, two topics run through three-quarters of these testimonies: playing an instrument and knowing the styles and traditions.

Previn presents two conflicting ideas, depending on the interview. First, he recognises the critical listening to recordings as a valuable tool for learning a score. Nine years earlier he advised not to resort to this method, as it is likely to cast an interpretative colour on the piece and to be detrimental to the conductor's own conception of the music. Second, he promotes the building of a wide repertoire in his first testimony, but in the second he advocates a thorough selection of the repertoire according to one's deep personal taste. It may be assumed that these differences echo the conductor's evolution and represent the methods he uses with the best results at the moment of the interview.

Group C

Figures 5.11 to 5.13 analyse Abbado's, Muti's and Levine's multiple testimonies. These figures reflect the general tendencies referred to earlier. However, they reflect discrepancies too, notably more differences between graphs coming from the same conductor. For all three conductors, Aptitude is sometimes higher and sometimes lower than Attitude. For Abbado, Preparation is sometimes higher, sometimes lower than Being. Circumstances appear to play a bigger role in these conductors' testimonies than in previous ones, but no specific reason nor definite pattern seems to explain this trend.



The percentage of repeated topics extends from 11.2% for Muti to 19.8% for Levine, confirming the expansion noticed in Group B. In addition, all three conductors agree on three of their repeated topics: playing an instrument (a topic that was also recurrent among the multiple testimonies of Group B), knowing the other great conductors, and improving the quality of the orchestra in the long term.

Practitioners' dual status

This section analyses three testimonies that practitioners provide under dual status: pedagogue and conductor (Bernstein), conductor and player (Dickson), player and pedagogue (Blackman). It

does so in order to explore to what extent the status under which the practitioners speak affects what they say about conducting.

In the opening chapter of her book (1989), Elisabeth Bernard suggests that all conductors, regardless of their expertise, share common traits related to their very function, implying musicianship and leadership, whether they conduct amateur groups or highly trained professional ensembles. Since “there is no established word to describe being a professional conductor” (Konttinen, 2008, p. 9), and given the ‘everyone wanting to conduct’ syndrome (Ibid., p. 20), the word ‘conductor’ designates any individual belonging to a certain family of musicians who necessarily display, Bernard posits, comparable types of personas. The threshold between amateur and professional conductor is blurred and no clear terminology helps distinguish between these unclear categories.

Equally true is that the borderline between pedagogues, conductors and players appears hazy at times, not least because some experienced players and respected pedagogues are also occasional conductors. A pedagogue, conductor, and player may approach the process of orchestral conducting with fresh eyes, proposing different opinions on the subject. It is these possible additional points of view that this section aims to bring to light.

Leonard Bernstein: ‘The Art of Conducting’

By its pedagogical nature, ‘The Art of Conducting’ belongs to the body of didactic texts about orchestral conducting. However, by the personality of its author, it sits on the borderline between a conducting manual and a conductor’s testimonies. Other books display this double status, notably Boult’s *Handbook of the Technique of Conducting* (1920) and Scherchen’s *Handbook of Conducting* (1933). However, I opted for a more recent document, whose primary format is a TV show with live orchestral examples, offering little possibility for the viewer to forget that this pedagogical discourse is held by a fully-fledged conductor.

Visible Action Continuum

Figure 5.14 displays an important common feature with Figure 2.1 (conducting manuals): Being appears under-addressed. Action displays more resemblance with Figure 4.2 (second generation of manuals) than Figure 4.1 (first generation). Although chronologically closer to the first generation, Bernstein seems to have developed a new approach to conducting which may have exerted an influence over the second generation of pedagogues. However, contrarily to both sets of conducting manuals, Bernstein focuses on the conductor's Aptitude rather than Attitude, and on their Knowledge rather than Preparations, displaying trends akin to the conductors' testimonies.

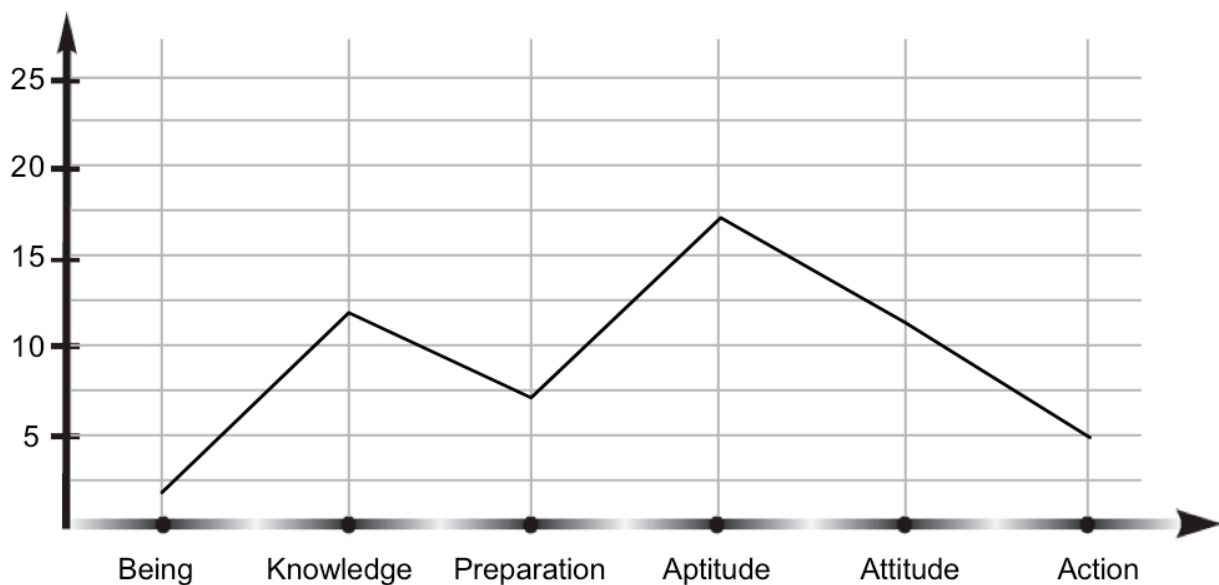


Figure 5.14
Visible Action Continuum: Leonard Bernstein in 'The Art of Conducting'

Under Being, Bernstein refers to the conductor's pedagogical role and necessary humility towards the composer. Concerning Knowledge, he argues: "the list [of things conductors need to know] is endless, [consisting in] thousands of [...] subtle details", whether historical, physical, psychological, or instrumental (p. 155).²³ A subject that practitioners rarely develop is the necessity for the conductor to know *how* to address the players, according to their specific instruments, which implies knowing the instrumentalists' specific vocabulary and imagery. Under Preparation, Bernstein points to the need for a thorough reading of the score: "a conductor has to

²³ This section referring exclusively to Bernstein's text (1954), quotes from this book only mention page numbers.

know [all the notes of a score] or he has no right to ascend the podium” (p. 150). However, he also admits: “in a way, [a] conductor will never be completely ready” (p. 155). Aptitude appears as the most developed point of the Continuum and principally addresses musicality and leadership. Bernstein remarks: “almost any musician can be a conductor, even a pretty good one, but only a rare one can be a great one” (p. 128). He highlights the necessary aptitude for achieving musical excellence: “[a conductor] must have the gift of finding the true tempo” (p. 142). It is unclear what Bernstein means by ‘great’ musician and ‘true’ tempo, both terms requiring the reader’s/viewer’s imagination to construct a (necessarily subjective) meaning. However, one may understand that in Bernstein’s eyes there is something superlative about this art, contrasting with the lack of an adequate word to designate the professional conductor. Attitude concerns the conductor’s interaction with the self, the players, the audience and the composer’s legacy. He suggests: “the ideal modern conductor is a synthesis of two attitudes” (p. 128), passion and precision, inherited respectively from Wagner and Mendelssohn.

Quite typically of didactic texts, Bernstein comments on the Actions conductors are to display. Although quantitatively limited to four topics (manipulating the baton, beating time, displaying meaningful gestures, and engaging only parsimoniously with talking), Action finds itself significantly developed as far as inner nuances are concerned. In his book, Bernstein adds this note to his TV script: “in practice a conductor seldom beats so squarely. The motion can, in fact, go to the other extreme of being very curvaceous” (p. 137). It is significant that Bernstein does not make this caveat in his TV show. His facial and bodily expressions, it may be assumed, are eloquent enough to convey this restrictive message. Figure 5.15 is unlikely to achieve the same effect and may necessitate this additional commentary.

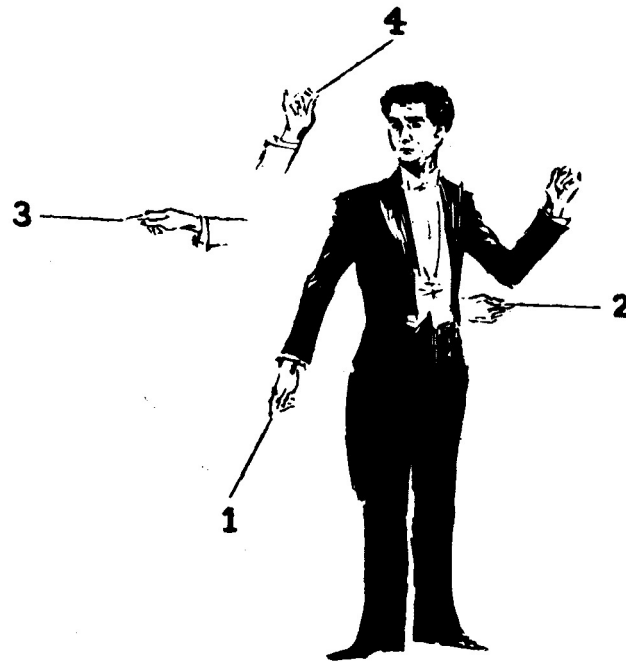


Figure 5.15
Bernstein, 'The Art of Conducting': beat pattern in four

It is also significant that Bernstein did not choose to represent the trajectory of the baton but the conductor displaying the movement (with a very low One, as in Rudolf and Fantapi  ). This graphic is likely to provoke from the reader a perception closer to the one elicited by the TV show. Lee (2008) merges Saito's diagrams into the ones proposed by Rudolf and Green in order to suggest nuances of intensity. Bernstein, too, is concerned with the graphic representation of the conductor's energy.

<p>Figure 5.16 'The Art of Conducting' Beat pattern in a "sustained" two</p>	<p>Figure 5.17 'The Art of Conducting' Beat pattern in a "dramatic" two</p>

Bernstein, 'The Art of Conducting': beat patterns in two

By delivering his pedagogical message on TV rather than in a book, Bernstein shows his preference for a live presentation of the conductor's gesticulations and may have opened the path to other pedagogical videos on conducting, whether as Internet material such as Ennio Nicotra's and Duane Carter's (respectively 2006 and 2008), or commercial DVDs such as Denise Ham's (2004). Going one step further, Johannsen and Nakra propose "several conducting systems [...] developed with the aim of providing an interactive experience for would-be conductors" (2010, p. 287). David Bradshaw and Kia Ng develop their own device: "the gestures are broken down and analysed in order to provide feedback as to their observable gestural content. This can then be fed back to the user, thus illustrating how the performed gestures are being perceived" (2008, p. 37). The opposition Bernstein proposes between *square* and *curvaceous* beating may suggest the idea that meaningful beating consists of departing from its mechanical model. He argues: "we have *conducted* nothing at all. We have only been beating time, and there is an eternity of difference between the two" (p. 138).

Thematic String Matrix

It is not unproblematic to compare Figure 3.2, analysing opinions expressed by six authors in more than two thousand pages, and Figure 5.18, representing the beliefs of a single person (hence dispensing with the Consensus value) expressed in thirty-two pages. However, there are three points that are worth emphasising. Both figures stress Personal Physicality. This may constitute a distinctiveness of didactic texts. However, Bernstein stresses even more Spirit of the Music, which seems in line with the difference he makes between time-beating and conducting. Finally, it is intriguing that Bernstein, a composer himself, should not comment about the compositional knowledge that may underpin the conductor's work. This suggests that the circumstances of the delivery are key to understanding the practitioners' testimonies and their possible divergences.

THEMATIC STRINGS : DIVERSITY

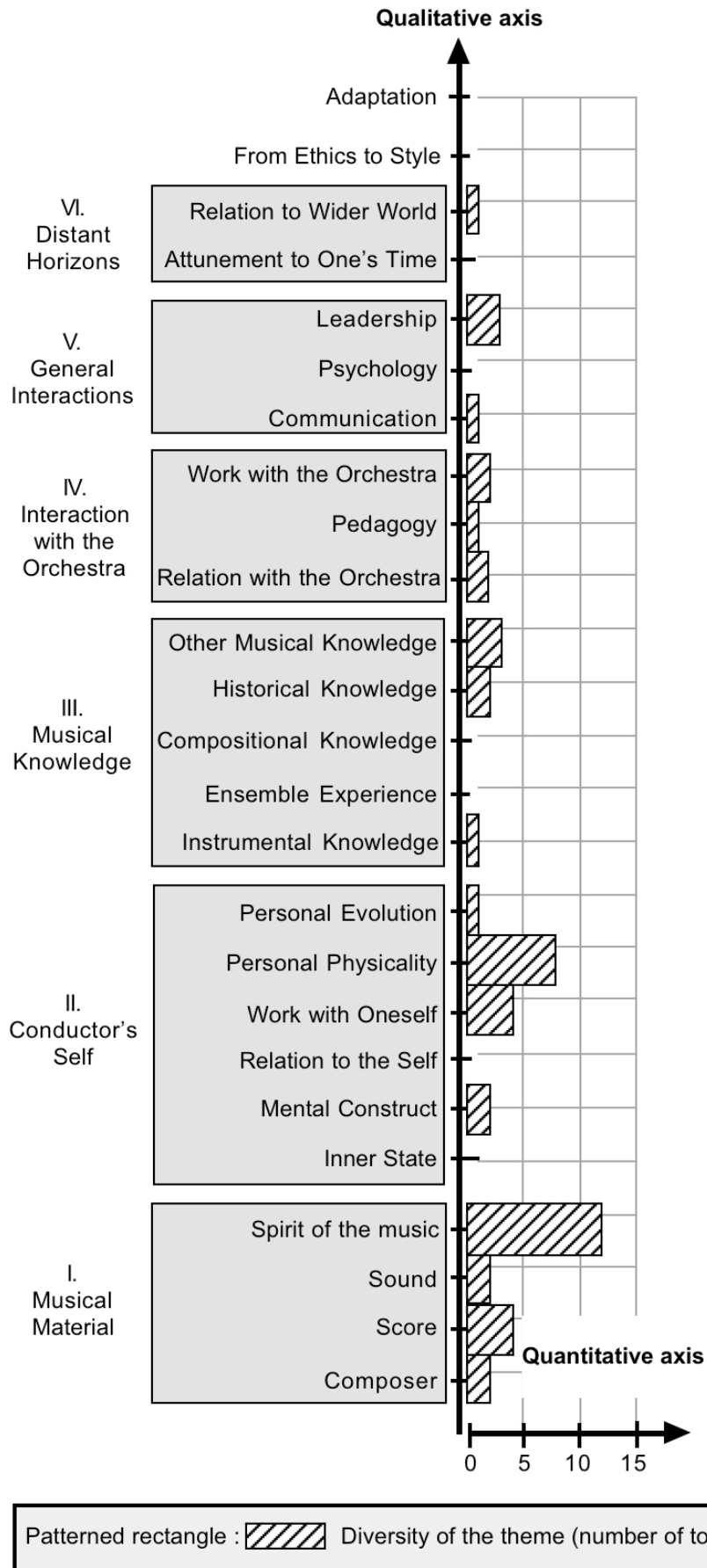


Figure 5.18
'The Art of Conducting': Thematic String Matrix

Bernstein emphasises, however, the conductor's understanding of the composer's legacy, notably through a thorough examination of the composer's indications and a careful study of their lives and aesthetic influences. He does not develop any particular path of thinking directed more specifically to twentieth-century music, to which his own compositions belong. In his Harvard Lectures he does delve into the composer's "need for newer [...] semantic richness [...] expanding music's metaphorical speech" (Bernstein, 1976, pp. 269–270) but, in the frame of 'The Art of Conducting', he limits himself to signalling the importance of a thorough reading of the score, a proper orchestral balance and a good dynamic control. Under Spirit of the Music he stresses: "[a conductor] has to deal with the intangible [and with] mysteries that no conductor can learn or acquire" (p. 156). He adds: "[conductors] must have a profound perception of the inner meaning of music" (p. 129), a subtle awareness of the tempo and a fine control of the general musical shape. The conductor's aural image is high on his agenda, too. He points out: "the extent to which [a conductor] can hear the printed notes in his head is in a way a measure of his talent" (p. 150). His Working Methods appear in line with those addressed by the pedagogues.

Under Personal Physicality, Bernstein disagrees with the idea "that the right hand should simply beat time, while the left hand is in charge of expressing emotion. [...] No conductor can divide himself into two people, a time-beater and an interpreter. The interpretation must be *in* the time-beating itself" (p. 139). Shin Maruyama and Esther Thelen (S) also remark: "orchestra conductors convey the appropriate time structure of a musical piece [and] signal their musical ideas with the same hand strokes" (2004, p. 524). Nakra mentions, however: "traditional conducting pedagogy teaches that the left hand should be used to provide supplementary information and expression, and the EMG (Electromyography) signals often supports this" (2000, p. 76). The fact that both hands would supplement one another does not clearly state either in what way or what the fundamental role of each hand is. Bernstein argues: "a conductor should be able to convey [...] different qualities with his left arm tied behind his back" (p. 139). However, when demonstrating this on TV, Bernstein quite rapidly unties his left arm, and smiles to the concertmaster, who has reminded him his own words. This episode not only reflects Bernstein's reluctance to abide by

pre-established norms (even his own), but also opens the question whether norms could be established with a reasonable degree of stability for this art form.

Bernstein also notes the attitude of the eternal student required from the orchestral conductor and their instrumental, vocal, stylistic and historical knowledge. Finally, he suggests: “conductor and orchestra [are] bound together by the tiny but powerful split second” (p. 155), which Kontinen concatenates into the “reaction time between the conductor gesturing and the orchestra responding, and another between the gesture and the concrete sound” (2008, p. 201).

Harry Dickson: Gentlemen, More Dolce Please and Beating time: A musician's memoir.

The *New York Times* online presents Harry Ellis Dickson: “first violinist of the Boston Symphony Orchestra for five decades and conductor of the Boston Pops for nearly as long” (Midget, 2003). Dickson remarks, however: “wearing two hats as I do as player and occasional conductor presents some problems. No matter how affable, how comradely, how unpretentious I try to be with my colleagues, I am looked upon with suspicion. I am on the ‘other side’. I am a potential enemy” (1969, p. 34). Nonetheless, whatever the players’ general mindset towards conductors, he notes:

Each performance is, for us, a challenge to do our best regardless of what we think of the conductor and if he is a man of great knowledge, inspiration, and communicative powers, the performance is that much greater. I know of no single instance when a member of the orchestra has consciously tried to sabotage the conductor, even though there have been some occasions when the temptation was almost overpowering.

(Dickson 1969, p. 105)

Visible Action Continuum

Figure 5.19 suggests a stronger focus on the conductor’s Being than on their Knowledge and Preparation. Attitude is the highest point of the graph. Aptitude and Action are far behind and appear fairly close to each other.

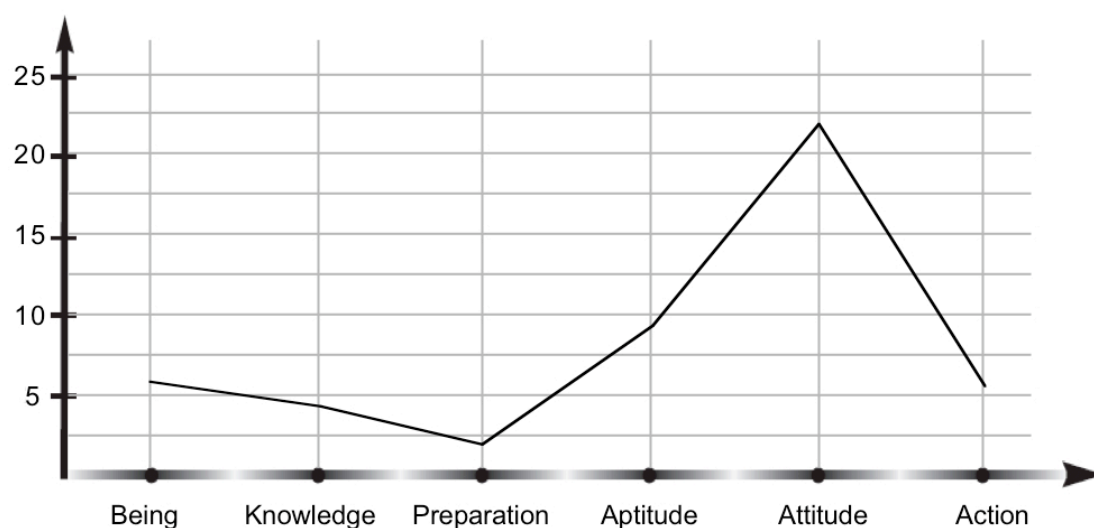


Figure 5.19
Visible Action Continuum: Harry E. Dickson

Under Being, Dickson questions the received image of the conductor being a highly trained musician. He quotes *The Christian Science Monitor*: “by any musical standards whatsoever [the American actor and comedian] Danny Kaye is a great conductor” (1969, p. 93). Dimitri Mitropoulos further comments: “this isn’t funny. This man is a great conductor!” (1969, p. 94). This opens the question of the conductor’s artistic profile and musical preparation. Dickson adds: “Danny Kaye does not read a note of music” (1969, p. 93). The Thematic String Matrix addresses more of this debate.

Under the conductor’s Attitude, Dickson remarks: “[Reiner’s] approach to music was unemotional, matter-of-fact, and so utterly professional. [...] He knew exactly what he was doing” (1969, p. 92). At the other extreme, he comments about Davis: “he never gives the impression of being a prima donna. No tyrant he, but a musical collaborator who inspires” (1969, p. 105). Referring to the conductor’s Action, Dickson comments:

I have recently been reflecting on conducting and conductors. [...] When I am asked what conductors really do, I am at loss in trying to explain, [...]. There is a charisma, a certain metaphysical power, in some conductors that inspires the players to give their best. What they actually do, and how they do it, is a mystery.

(Dickson, 1995, p. 104)

Konttinen suggests in her dissertation: “what conductors *do* is very difficult to define or even to understand if not conducting oneself” (2008, p. 45). Moore and Yamamoto comment: “just as movement perceptions tend to drop below the level of awareness, so too the concepts that arise from these perceptions tend to operate subliminally” (1988, p. 97), possibly clarifying Dickson’s discomfort in explaining consciously a phenomenon that he only perceives unconsciously.

Thematic String Matrix

As shown by Figure 5.20, there are nine themes that Dickson does not approach: four of them belong to Knowledge. Dickson approaches only minimally Personal Physicality. This is in line with the low interest he manifests towards Action in the Continuum and may echo his discomfort in explaining what conductors ‘actually do’, in spite of fifty-seven years of orchestral experience as first violin in a world-class orchestra.

I. Musical Material

Concerning Relation to the Score, Dickson adopts the stance of his mentor, Pierre Monteux, not letting “anyone sing [or play] what is not written in the score—ever!” (1969, p. 84), whereas under Spirit of the Music he stresses players’ expectation that the conductor make their musical passion visible.

II. The Conductor’s Self

Dickson points to a series of human qualities he expects from conductors: generosity, humour, simplicity, humility, and sensitivity, and mentions several times the conductor’s ability to hear well. Under Mental Construct he addresses solely the topic of memory. Relation to the Self focuses on being authentic to oneself and Working Methods with Oneself points to the conductor making his or her musical decisions before the first rehearsal.

III. Musical knowledge

Although Dickson's experience as an orchestra player may have helped him as a conductor, this correlation is never suggested. Under Other Musical Knowledge he addresses the issues of displaying fine musicianship and expertise in acoustic issues.

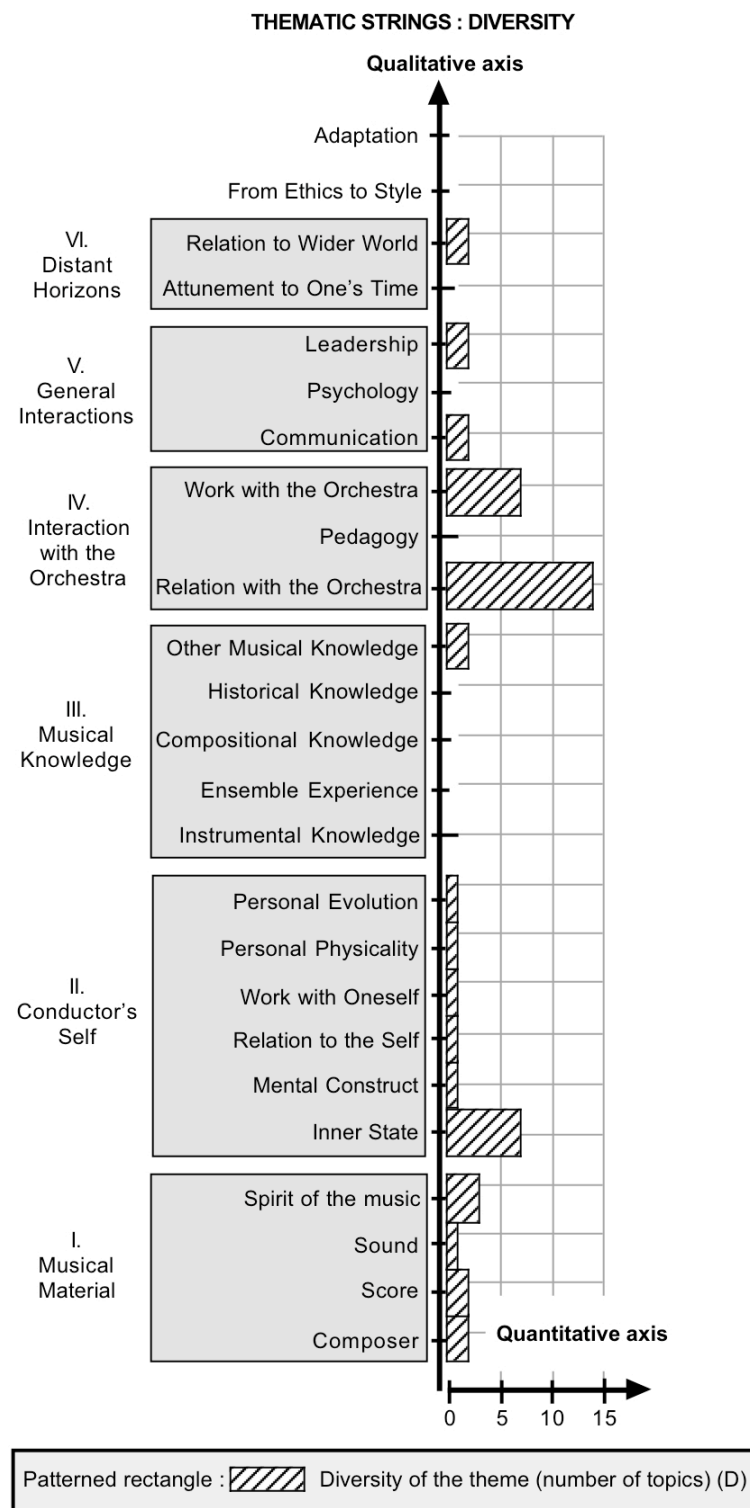


Figure 5.20
Thematic String Matrix: Harry E. Dickson

IV. Interaction with players

Relations with Players is a theme that Dickson develops substantially. It ranges from the conductor's respectful, friendly and genuine relations with the orchestra, to their efforts to achieve artistic excellence. Dickson remarks: "[some conductors have] those intangible qualities [of] bringing out the full capabilities of their players, and [...] make them surpass themselves" (1969, p. 36). He notes about Mitropoulos: "players respected him as a musician and loved him as a man" (1969, p. 97). This theme also addresses the conductor's attitude towards the players' personal well-being and professional satisfaction. Finally, concerning the alleged antagonism between conductors and orchestras, Dickson argues:

If an exception proves the rule that conductors are natural enemies of players, Sir John Barbirolli was certainly the exception. Each time he appeared with us in Boston he gained our admiration and affection. His music-making, as well as his manner, was warm, friendly, intelligent, and highly ethical.

(Dickson, 1969, p. 104)

Under Working Methods with Players Dickson points to efficient work sessions, intonation, proper but restrained use of verbal guidance, and players' artistic freedom. Regarding this last issue, he recalls Monteux's advice: "it is the wise conductor who knows when to follow the orchestra" (1969, p. 36). Along these lines, Faber (S) argues about Copland's *Appalachian Spring*: "an organic *accelerando* may occur in spite of the conductor as the violas [...] find the pulse as a section. [...] This [musical] section is not forgiving to over-conducting" (2012, pp. 13–14). Dickson also remarks on Stokowski's relentless use of free bowing: "[he] had the strange conviction that uniform bowing [...] stifles self-expression. [And spectators] told me [...] that they had never heard the orchestra play so freely and with such fiery abandon" (1969, p. 97). Dickson implicitly agrees here with Don Ehrlich (P) to join paths with the conductor, "even if what we find contradicts what we want to think" (Polyphonic survey, 2007)

V. General Human Interaction

Dickson expects the conductor to communicate, convince, and be articulate about their expectations, admiring for example Colin Davis for being “a musical collaborator who inspires [and is] very articulate” (1995, p. 104). Under Leadership he recommends that the conductor assumes the full authority towards the ensemble rather than delegate part of his or her power to some players, which may provoke resentment from the others.

VI. Distant Horizons

Relations to the Wider World addresses the conductors’ ability to negotiate a contract and enlarge the audience of the orchestra by organising concerts for children or programming pop music and concerts with amateur groups. Dickson refers again to Danny Kaye: “it is impossible to describe what goes on at a Danny Kaye Concert” (1969, p. 94). Possibly explaining Dickson’s enthusiasm, Wöllner (S) remarks: “the higher the experts judged a [...] conductor’s facial expression, the more observers liked the conductor and the more they could imagine playing under his direction, [whatever his] years of training and number of professional performances” (2008, p. 264), highlighting the conductor’s facial demeanour as a passport to the players’ sympathy.

Charles Blackman: Behind the Baton

By its format (more than a hundred pages organised in nine chapters) Blackman’s account (1964) develops a pedagogical discourse that places his book at the interface between a musician’s opinion and a conducting manual. Blackman argues:

Common errors in theorizing about conducting [...] arise from the indiscriminate use of easy words and phrases to describe the act of conducting. [...] It is one thing for the layman to accept a convenient label or description, but it is most important for the conductor to know what these words really mean, and how they apply to him.²⁴

(Blackman, 1964, p. 25)

²⁴ This section referring exclusively to Blackman’s text (1964), quotes from this book only mention page numbers.

Visible Action Continuum

Figure 5.21 shares two main features with Figure 2.3 (the players' Continuum): Knowledge is the highest of the first three points, and Attitude is the highest of the last three. However, Blackman seems to be in line with manuals about Being and with conductors about Action, showing little interest in these two points.

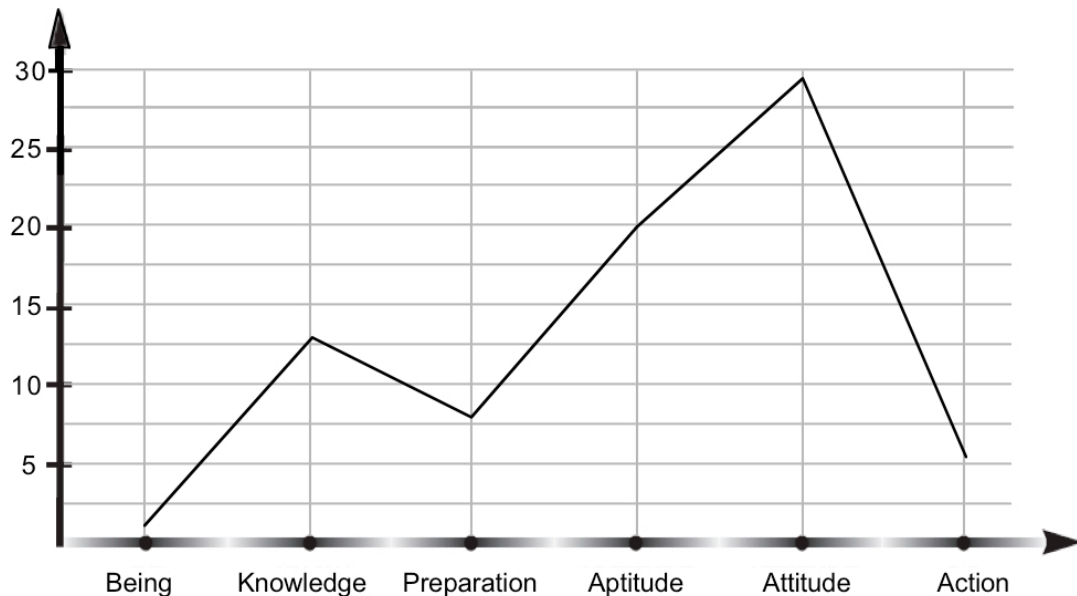


Figure 5.21
Visible Action Continuum: Charles Blackman

Concerning the conductor's Preparation, Blackman remarks: it is not "because [...] an art [cannot] be taught, [that] this art cannot be learned" (p. 48), highlighting the conductor's personal work and proactive attitude in the acquisition of their art, coming close to Slatkin's stance on the matter. He further comments: "tradition and protocol inhibit the players from telling [the conductor], directly and truthfully, specifically what they expect from the 'man' behind the baton. If he does eventually acquire this knowledge, it is only through intuition, guess-work, and after years of painful frustration" (p. 187). The conductor's preparation may include playing in an orchestra to experience the phenomenon from within.

Aptitude develops a wide range of topics, such as the ability to observe life and draw universal gestures from this observation, and to set the working atmosphere with the orchestra. Blackman argues: "the value of a conductor's knowledge lies only in his ability to effectively transmit that knowledge to the orchestra" (p. 31). Attitude points to the conductor's lucidity towards him— or

herself, the psychological and artistic space conductors are to leave to the orchestra, their willingness to communicate with the audience and to capitalise on the magic of the performance, their adaptive attitude to what they see and hear from the orchestra, and the high demand they are to put on themselves. Addressing Action, Blackman emphasises “the delicate difference between conducting an orchestra and conducting while an orchestra plays” (p.19) coming close to Bernstein’s distinction between conducting and time-beating. On the conductor’s gestures, Blackman remarks:

A conductor [...] must avoid using an arbitrary devised set of gestures whose meaning and intent may be clear only to himself. The entire physical manifestation of conducting is made up of descriptive arm and hand movements, which people in every walk of life have been using as far back as history can trace”

(Blackman, 1964, p. 87).

Blackman refers here to the reservoir of universal gestures from which the conductor may draw his or her own vocabulary. Wöllner (S) remarks: “conducting gestures [...] also occur in everyday communication” (2008, p. 251). Referring to the gestures that inhabit the music, Hatten (S) suggests that they, too, are rooted in universals: “[gestures] ‘go beyond’ the score to embody the intricate shaping and character of movements that have direct biological and social significance for human beings” (2004, p. 94). Blackman’s and Hatten’s ideas come close to one another, but refer to different things, respectively real versus virtual gestures. However, this ambivalence sheds light on the nature of the conductor’s gestures, which are expected to be functional (e.g. beat patterns and cues) but also to reflect the inner fluctuations of music (e.g. musical articulations, dynamics, and variety of textures). Garnett (S) argues: “the richness of individual conductor styles arises from the interaction of a complex of metaphorical transformations shared within Western musical culture” (2006). Blackman also highlights the importance for the conductor to breathe with the music. He argues: “breath control is one of the particularly important though hidden requirements for good ensemble performance” (p. 28). Finally, the conductor must show anticipatively all the characteristics of the music: phrasing, balance, expression and dynamics.

Thematic String Matrix

Figure 5.22 stresses three main themes: Personal Physicality, Relation with the Orchestra and Work with the Orchestra, an emphasis displayed by all the conducting manuals.

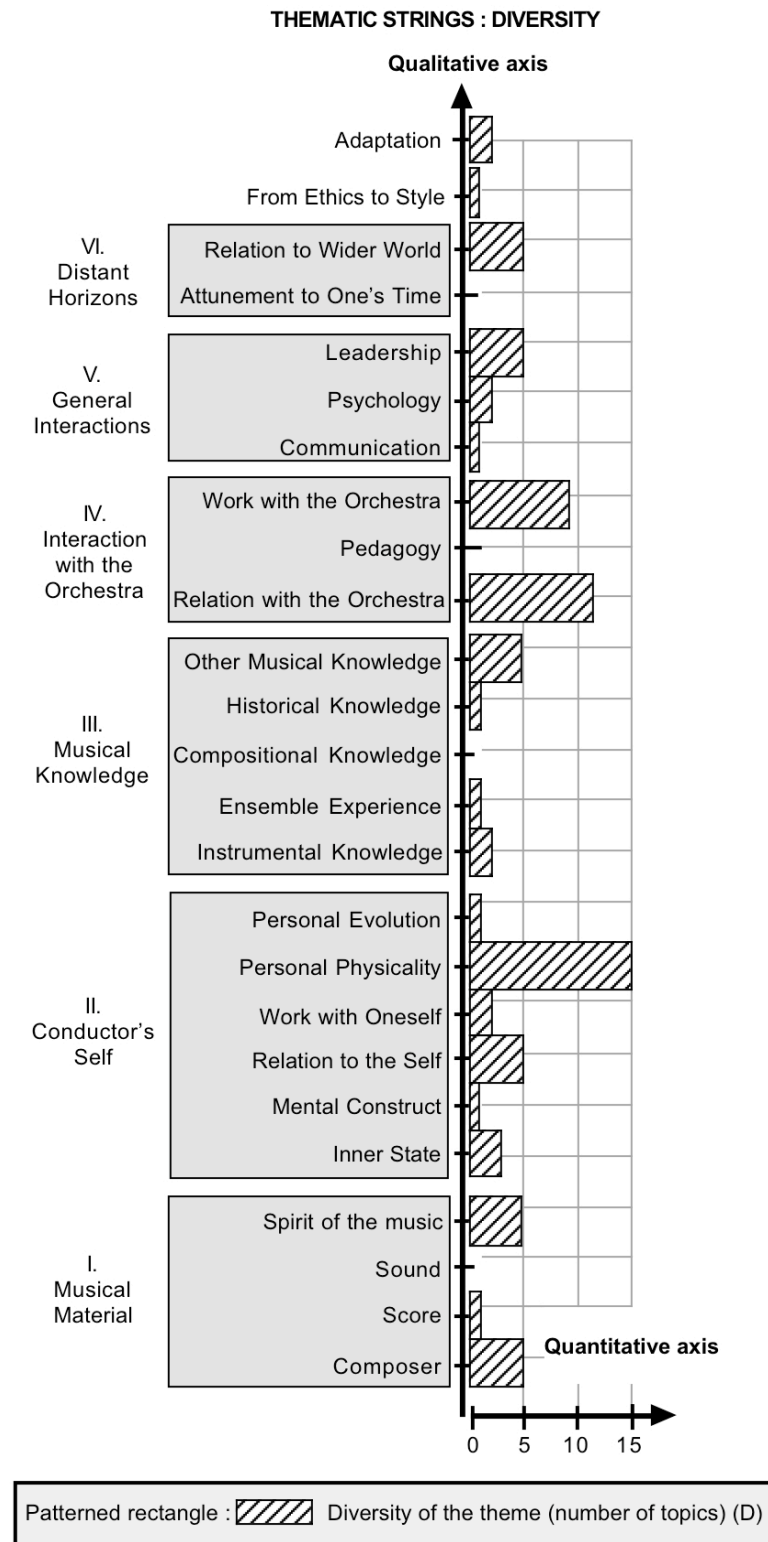


Figure 5.22
Thematic String Matrix: Charles Blackman

I. Musical Material: conductors should be able, according to Blackman, to connect with the composer's subconscious, "submerging [their] own psyche in that of the composer" (p. 97). He further comments: "the composite psyche [is] a blend of composer and conductor" (p. 108). Concerning the score, Blackman notes: "[the composer's] communication was fully and clearly stated in musical notation, a code or language you are expected to read easily with complete comprehension" (p. 77). However, he also remarks on "the tangible specific notation of the composer [versus] the intangible opinion of that notation as understood by the musician" (p. 48). This difference between the musical notation and the performers' comprehension relates closely to of the discussion about the interpretative role of the performer. However, Blackman highlights here the paradox between the clarity of the sign (score) and the complexity of the object (music). He further comments: "students and professionals [...] would have to study the score carefully, not only to find out *what it says*, but to see *how the score speaks* as well" (p. 84), alluding to the composer's personal style: their specific vocabulary, notational peculiarities, or particular aesthetic options. Blackman also addresses the conductor's uniqueness: "it is not technical clarification but musical individuality which sets one conductor's concept apart from another" (p. 20). Paradoxically, he also suggests: "conductors need not be afraid of looking like one another on the podium" (p. 72).

II. The Conductor's Self does not address any new topics, compared to previous testimonies. In Personal Physicality, the most developed of his themes, Blackman addresses the roots and nuances of bodily communication. Blackman remarks: "through various physical actions, [the conductor] is required to indicate to the players all of the instructions contained in the score, plus all that may be implied by the score, or understood as a result of diligent study and research" (p. 27). This comes close to Clarke's idea of the score encapsulating the interpretative tradition to which it belongs. Blackman adds: "the very nature of music, with its wide variety and constant change, makes it imperative that the directions [be] quickly understood" (pp. 30–31), coming close to what Bernstein calls the 'split second' relation. Personal Evolution points to conductors' ceaseless re-discovering of their art.

III. Musical Knowledge points to Instrumental Knowledge, notably the conductor's practice of an instrument and their awareness not only of the instrument's possibilities but also of the players' potentiality. Under Ensemble Experience Blackman suggests: "a good way to become familiar with the orchestra is to be an integral part of it [...] [which will] provide first hand knowledge of all the instruments, their relationship with each other and the conductor, the human reflex fact, the psychological barriers and sympathies of all concerned" (p. 61). About Historical and Stylistic Knowledge Blackman remarks: "every composition is the result of generations of composers" (p. 39), suggesting the cascade of aesthetic influences a composer inherits from the past.

IV. Interaction with Players develops substantially Relations with the Orchestra and Working Methods with the Orchestra. Concerning Relations with the Orchestra, he argues: "[the conductor] is expected to be all things to all players at once" (p. 31) and "never shift to the orchestra any defect or failure of his own" (p. 33). Blackman further comments: "every gesture, every glance must be motivated by a genuine understanding of the players as people and as accomplished musicians" (p. 94). These comments summarise the multiplicity of the conductor's function evoked in the Introduction, the necessary fairness in the conductor/orchestra relationship and the conductor's acknowledgement of the players as musicians and human beings.

Blackman sees the conductor's authority as acquired rather than imposed, and his or her artistic vision as documented and discussed, rather than arbitrarily forced upon the orchestra. Blackman argues: "one of the prime reasons for having a conductor is to provide that which the players cannot provide for themselves" (p. 60). Blackman also remarks on the conductor's expertise in rehearsing efficiently, notably by listening to the real orchestral sound as opposed to their mental image of it, and in assessing the players' reactions to their direction. Finally, Blackman notes: "verbal instructions, during rehearsal, cannot [...] be considered a substitute for the physical direction at the concert" (p. 105), echoing Walter's opinion on the matter (Bamberger, 1965, p. 162).

V. General Human Interaction

Blackman states: “if any one element of the conductor’s equipment could be considered more important than others, it might well be the ‘psychological factor’” (p. 95). He adds: “if people can be taught the science of psychiatry, the conductor’s psychological thought process can be stimulated and directed” (p. 47).

Concerning Leadership, Blackman remarks: “any relaxation of control, however slight, in the physical functions of conducting constitutes a surrender of leadership” (p. 29). However, conductors should be careful not to abuse their power: “the enormity of this challenge can drain [...] the rational power from the brain [...] unless one is intellectually and carefully acclimated” (p. 99). Blackman remarks here on something new among the practitioners: the conductor’s necessary preparation for the proper exercise of authority.

VI. Distant Horizons discusses the conductor’s Relations to the Wider World, mainly through their relation to the public. Blackman argues: “the attention of the audience must be gained, channelled, and held so that the communication can be completed” (p. 112). Blackman expects conductors to evaluate adequately the effect that their conducting gestures have on the audience and to include the public in their artistic agenda, joining in this other pedagogues, notably Green (1961/1997, p. 8) and Fantapié (2005, p. 134). Blackman also remarks on the conductor’s awareness of their public image as a way to optimise their communication with the wider world.

The transversal theme A., From Ethics to Style, addresses the conductor’s approach to traditions. Blackman warns, however: “tradition [may] grant legitimacy and authority to distortion and sometimes deliberate disregard of a composer’s written intentions” (p. 100), implicitly suggesting the existence of good and bad interpretative traditions, without proposing, however, criteria to help distinguish the ones from the others.

Finally, B., Adaptation to the Musical Reality, addresses the conductor’s ability to adapt their musical approach to the players and their gestures to the aural result.

Blackman's testimonies constitute the last double status that this chapter examines, and allows the exploration of the phenomenon to come full circle: pedagogues, pedagogue/conductor (Bernstein), conductors, conductor/player (Dickson), players, and finally player/pedagogue (Blackman).

Conclusions

Chapter Five analysed two types of particularities: multiple testimonies provided by thirteen conductors and the contributions of three practitioners displaying dual status.

Six conductors of Group A (Walter, Boult, Ormandy, Karajan, Solti and Giulini) have proposed between two and four testimonies each. Their analysis has revealed the consistency of their Continua but the lack of common ground concerning the topics they address, suggesting a consistent approach to conducting but a different implementation of this approach.

Four conductors of Group B (Mackerras, Davis, Previn and Haitink) have contributed two or three testimonies each, showing both a wider diversity in their Continua but a higher rate of common topics. Previn displays two conflicting ideas between his interviews: the listening to recordings as a learning method (accepted in one testimony and rejected in the other), and the building of a vast repertoire (promoted first, but contradicting the selective repertoire advocated later).

Group C has proposed between two and three testimonies for Abbado, Muti and Levine, and confirmed the previous trend: a wider diversity as far as their Continua is concerned and a higher consistency regarding the common topics they raise in their different testimonies. No valid explanation has been proposed for this phenomenon.

Chapter Five has then analysed the testimonies of Bernstein, Dickson and Blackman, displaying dual status: pedagogue/conductor, conductor/player, and player/pedagogue, respectively. This study has remarked that the practitioners consistently display characteristics related to both sides of their dual status. However, their testimonies seem mainly informed by the primary agenda of

their account: pedagogy for Bernstein, a player's testimony for Dickson, and pedagogy again for Blackman.

Chapter Five has proposed that not only different sources may diverge as far as opinions about conducting are concerned, but also that the same practitioner may display different beliefs about this art. However, these divergences consist mostly in addressing different topics and only minimally in presenting contradictory opinions. It has been suggested, nonetheless, that both types of divergence indicate a shift in the practitioners' mind-set and may possibly affect their music-making.

Chapter Six: Comparison between all sources.

This study has developed the Continuum and the Matrix as a way to compile and compare the data extracted from the testimonies. At this stage, however, it will only compare the information it has processed, refraining from compiling all data from all sources. Each main source (pedagogues, conductors, and payers) offers a specific point of view on the phenomenon. Unfolding these segments opens a space in which orchestral conducting may be seen living. By contrast, collapsing them into a single image reduces them into an undefined landscape, ignoring a large part of the message: the source. This study considers, indeed, that who is speaking is a significant part of what is being said.

As stated in the Introduction, the lack of individual identification of the testimonies analysed by the League of American Orchestras (1997 and 2001), and the lack of evidence concerning methodologies have led me to refrain from thoroughly investigating its results. Musicians such as Gustav Meier (M), Benjamin Zander (here considered as C), Randy Fisher and Craig Sorki (P), took part in this survey and offer a compounded point of view about the traits and skills required from conductors, music directors and community artistic leaders respectively. However, for the sake of exhaustiveness, I shall compare, at the end of this chapter, the conclusions of this survey with the results of my own research, and emphasise points of agreement and disagreement.

Continua and the Matrices

Visible Action Continuum

The Visible Action Continuum, it must be remembered, is a testimony of Weight rather than Diversity. It does not reflect the number of topics a given source addresses, but expresses the recurrence of these topics.

The relative stability of scale in the right column (Figures 6.2, 6.4 and 6.6) suggests a consistency in the number of testimonies stemming from one individual, whatever the length of the testimony. The different scales of the left column (Figures 6.1, 6.3 and 6.5) highlight the various number of

topics each source develops. There is hardly any pattern running through all the testimonies except for Aptitudes and Attitudes being generally the most developed points. For the pedagogues and the players the highest point is Attitude and lowest Being. For the conductors, the highest point is Aptitude and the lowest is Action.

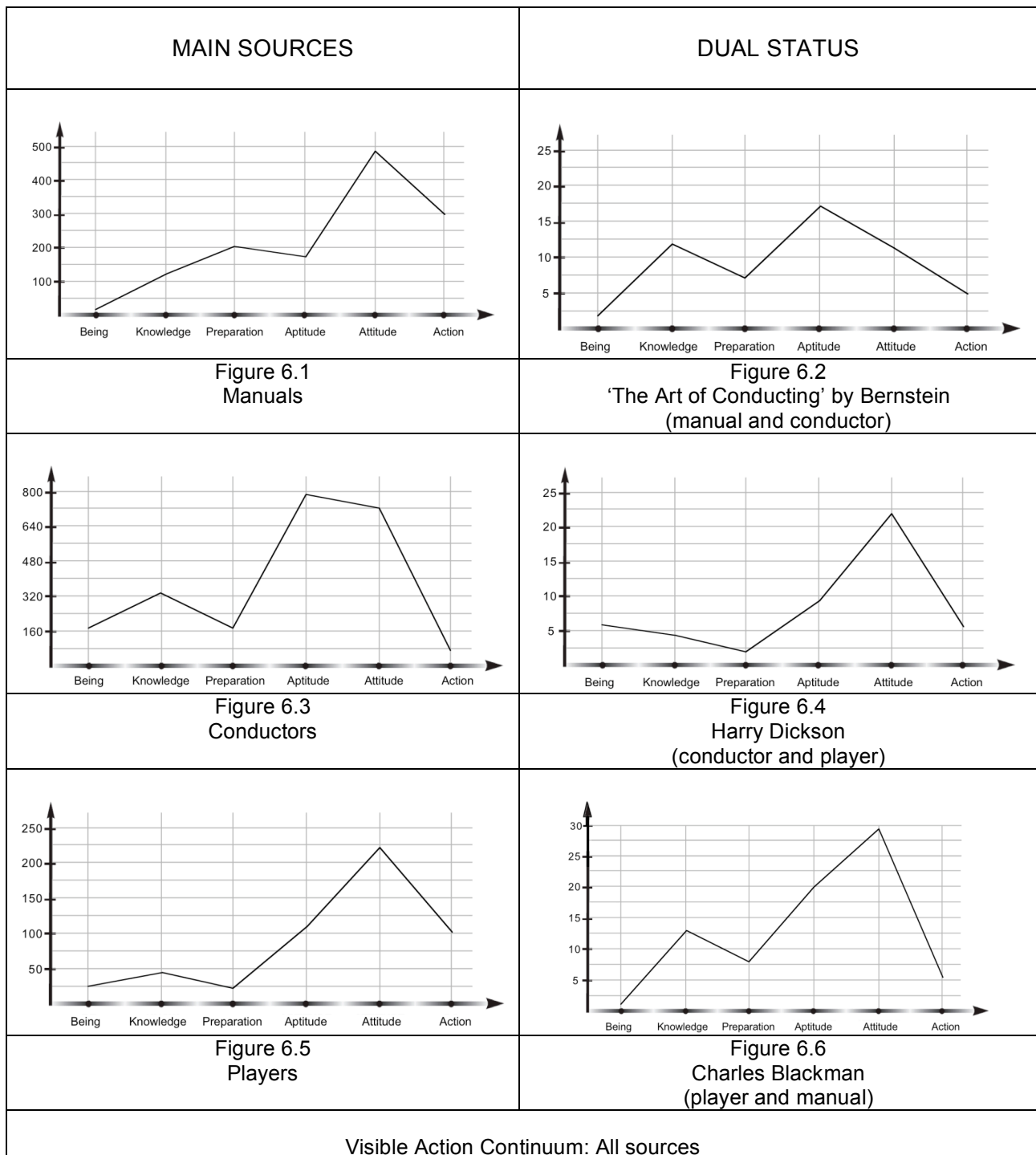


Figure 6.7 makes the quantitative difference between the main sources more visible. It also shows that conductors and players prioritise Knowledge among the first three points, whereas the

pedagogues, possibly due to their didactic purpose, stress Preparation (the acquisition process) rather than Knowledge (the result of this process). The conductors' stress on Aptitude may have to do with the skills they have developed over the years, and which possibly explain why they are who they are. This idea conflicts with Lebrecht's vision of the 'great conductor' being a commercial product. It is also worth noting by how much conductors focus more on Aptitudes and Attitudes than on everything else.

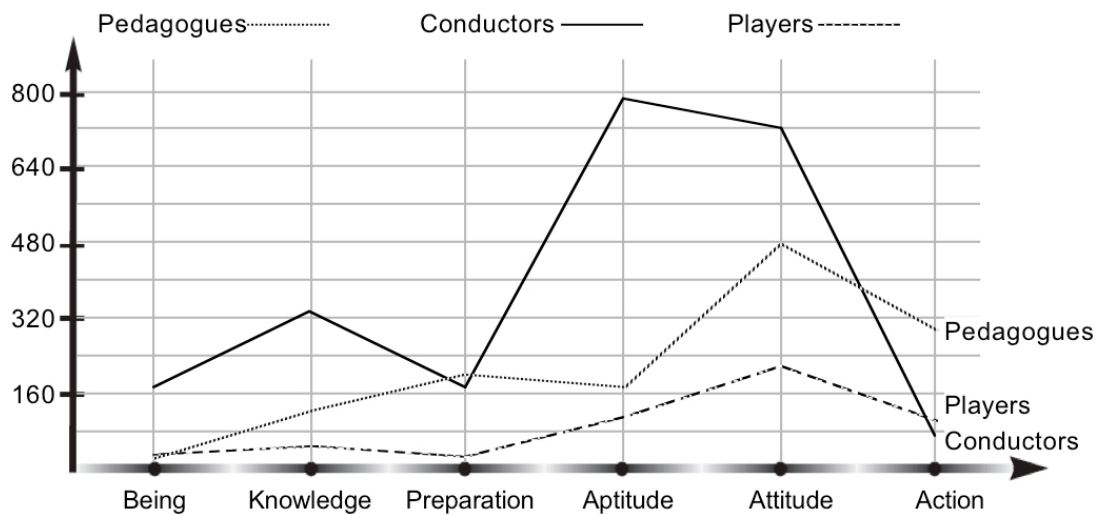


Figure 6.7
Synopsis of all main sources

Figure 6.8 reshuffles the Visible Action Continuum. It analyses the practitioners' testimonies according to their respective quantity of topics, using a different scale for each source and displaying relative values (R.V.) instead of absolute ones. The X axis displays now the six sources, from Manuals to Blackman, rather than the points of the continuum, retaining however the shades of grey between sources as a symbolic representation of the gradual rather than discrete change of identity.

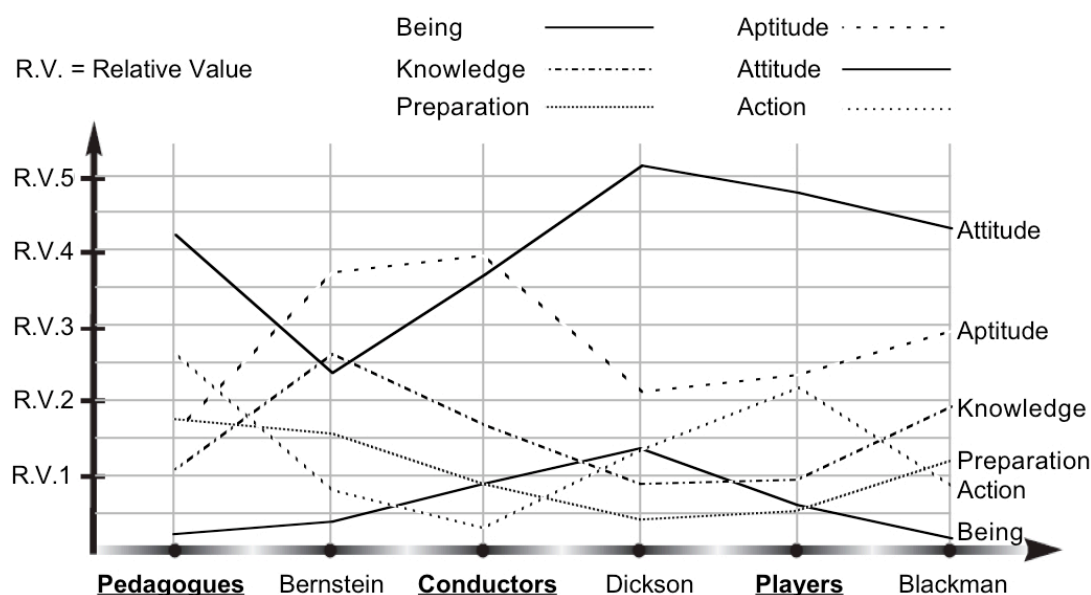


Figure 6.8
Synopsis of all sources reshuffled

In Bernstein's and the conductors' testimonies, the main point is Aptitude, approaching R.V.4. For the other sources, the maximum number of topics concerns Attitude, reaching above R.V.5. with Dickson. Figure 6.8 also shows the arch that Being builds between the pedagogues and Blackman (that is, extending from the pedagogues to the conductors, to players, and back to a pedagogue), climaxing with Dickson (a conductor-player). This suggests that the conductors and Dickson are the ones who talk the most about conductors as persons, relative to their respective reservoirs of topics, a similarity which may be due to Dickson's identity as a conductor. Possibly due to his double status as player and conductor, Dickson appears to be the fulcrum of two other arches. From left to right, starting with Bernstein, Attitude increases to Dickson and decreases to Blackman, whereas Knowledge decreases to Dickson and increases to Blackman. For Being and Attitude, the levels reached by Blackman and the pedagogues are comparable, possibly due to their pedagogical agendas.

As mentioned above, Figures 6.8 displays the testimonies of my main sources according to the status of their author, extending from six pedagogues (Rudolf, Green, Labuta, Fanatapié, Petit and Meier) back to a player-pedagogue (Blackman). Assigning this order allows the X axis to take into account the pedagogical function of the conductors, the conducting experience of some players, the pedagogical experience of others, and, possibly, to reveal significant trends. It is

worth noting, for example, the reversed arch drawn by Preparation. Dickson seems to act here primarily as a player, and Blackman as a pedagogue. Knowledge and Aptitude always seem to parallel each other, suggesting that sources could view the one relative to the other, possibly viewing Aptitude as a more visible side of Knowledge: Knowledge would designate the acquired information and Aptitude would refer to the skills conductors are expected to display thanks to this knowledge. This difference comes close to McCaleb's distinction between intellectual and embodied knowledge (2012, p. 116). Finally, Action is the highest point for the pedagogues and the players. Conductors and players address the first three points of the continuum in an evenly balanced way (this is more easily discernible in Figure 6.7) and seem to agree about the way they relate to the 'behind the scenes' process. It may be hypothesised that conductors and players develop a similar approach to these points, possibly reflecting their common intercourse.

Thematic String Matrix

According to Tables 6.9 to 6.14, the pedagogues and the players concentrate on four themes, three of which are common: Personal Physicality, Relation with the Orchestra, Working Methods with the Orchestra. What appears as marginal to their agendas is situated upstream and downstream to the actual orchestral music-making: Composer and Score, on the one hand, and Attunement to One's Time and Relation to the Wider World, on the other. How much the manuals and the players develop the Conductor's Self and their musical knowledge seems to fluctuate with no discernible pattern, except for the middle themes of Knowledge, which invariably appear the less addressed of the string.

THEMATIC STRINGS : DIVERSITY, CONSENSUS AND WEIGHT

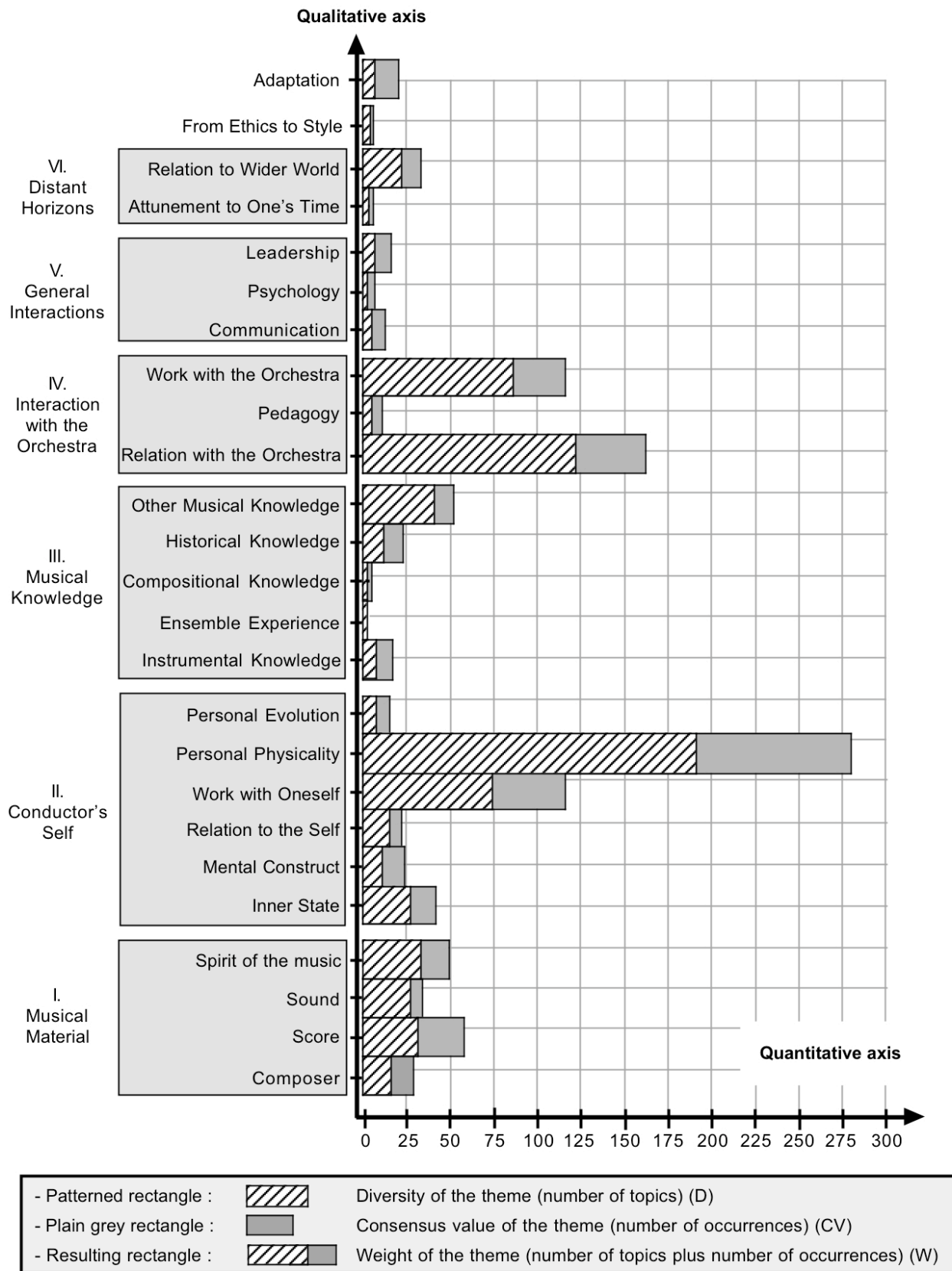
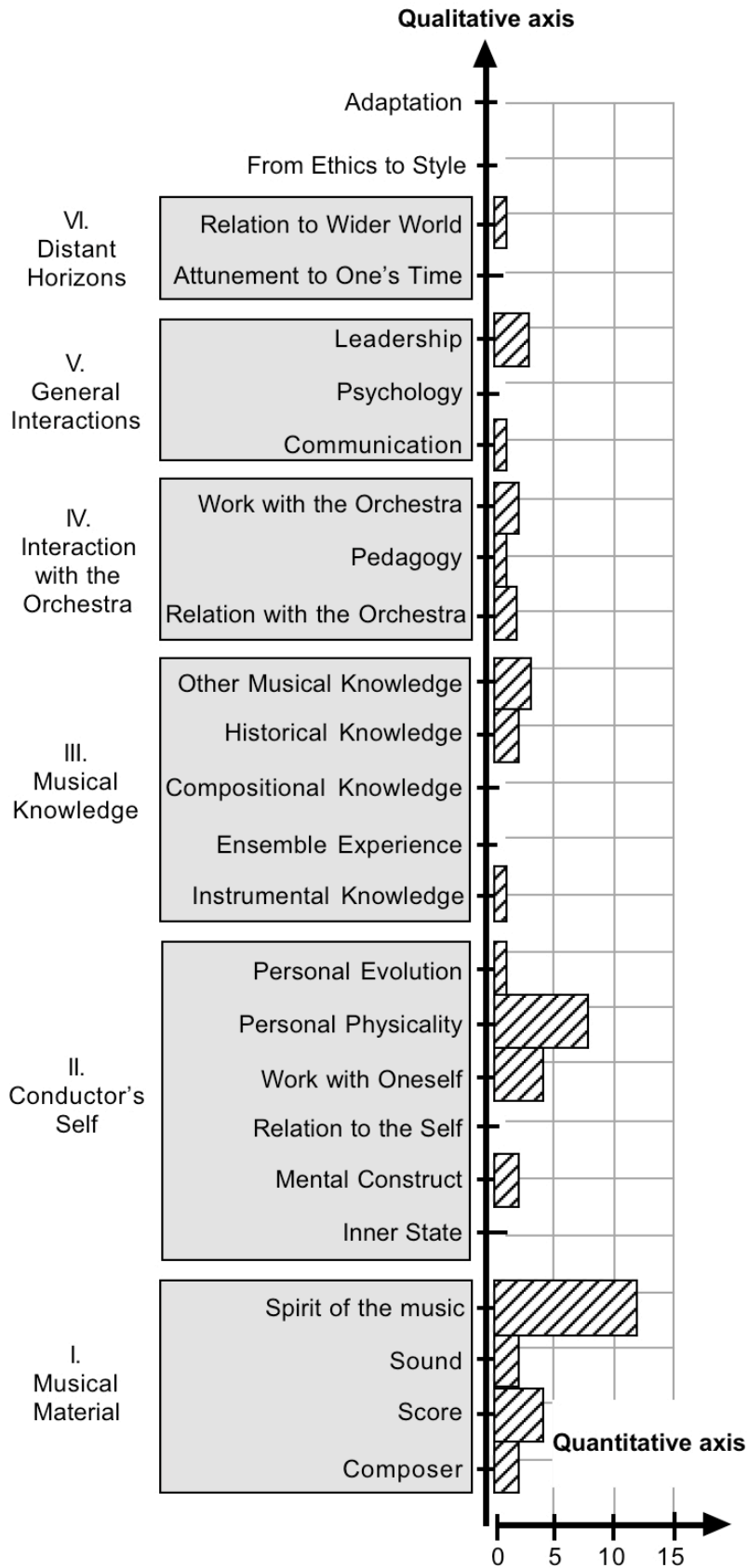


Figure 6.9
Thematic String Matrix: manuals

THEMATIC STRINGS : DIVERSITY



Patterned rectangle :  Diversity of the theme (number of topics) (D)

Figure 6.10
Thematic String Matrix: Leonard Bernstein
'The Art of Conducting'

THEMATIC STRINGS : DIVERSITY, CONSENSUS AND WEIGHT

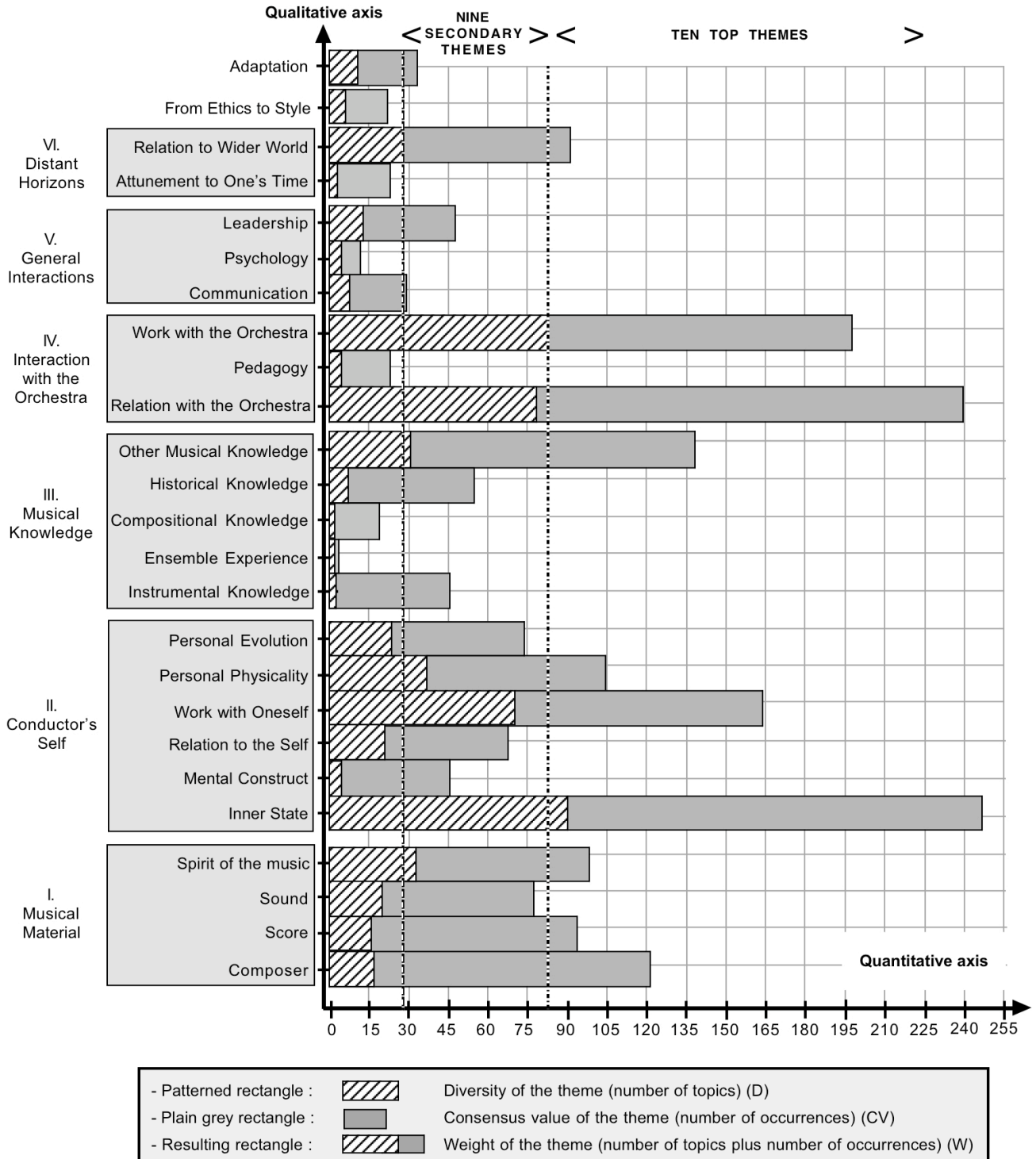


Figure 6.11
Thematic String Matrix: all conductors

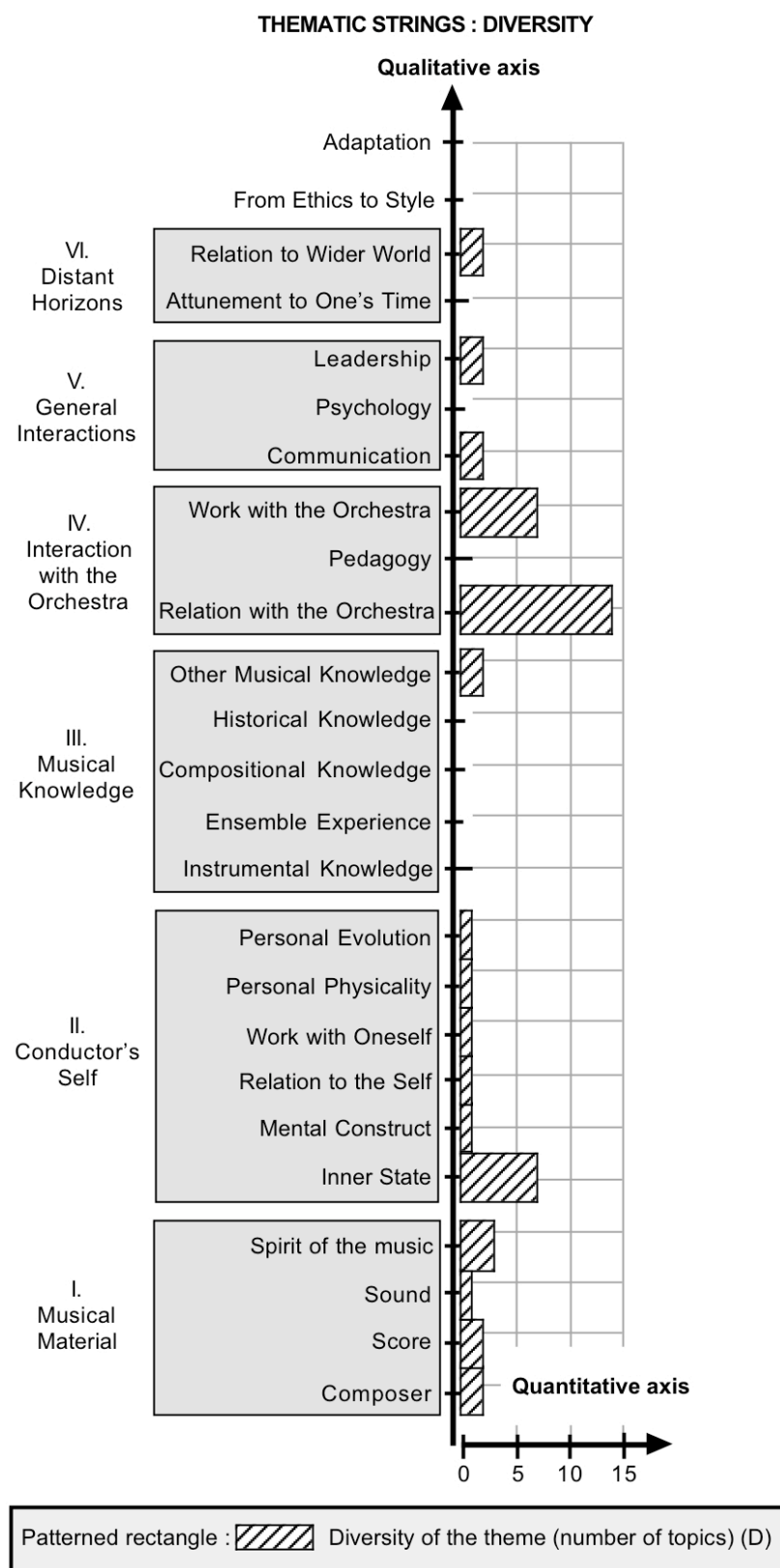


Figure 6.12
Thematic String Matrix: Harry E. Dickson

THEMATIC STRINGS : DIVERSITY, CONSENSUS AND WEIGHT

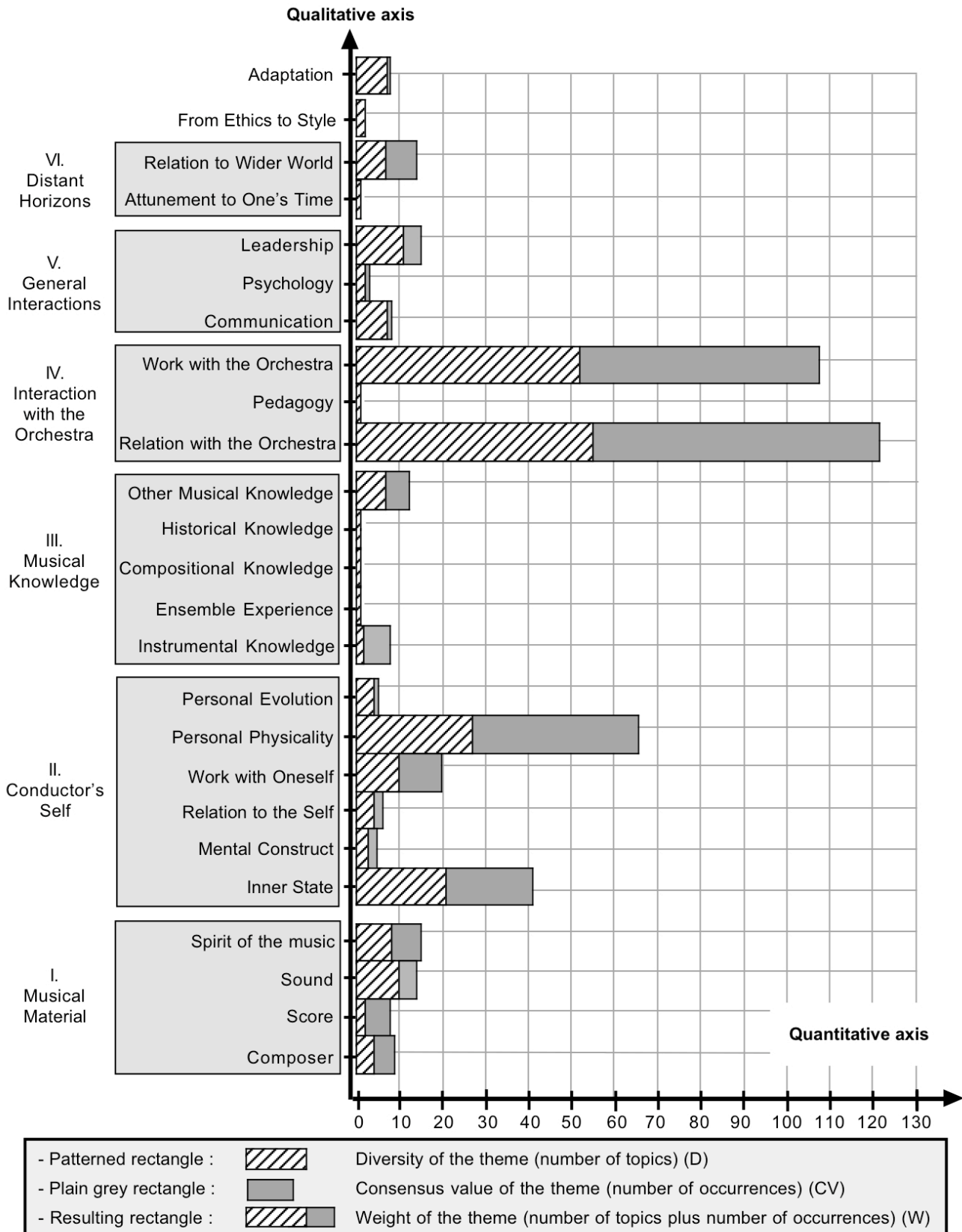
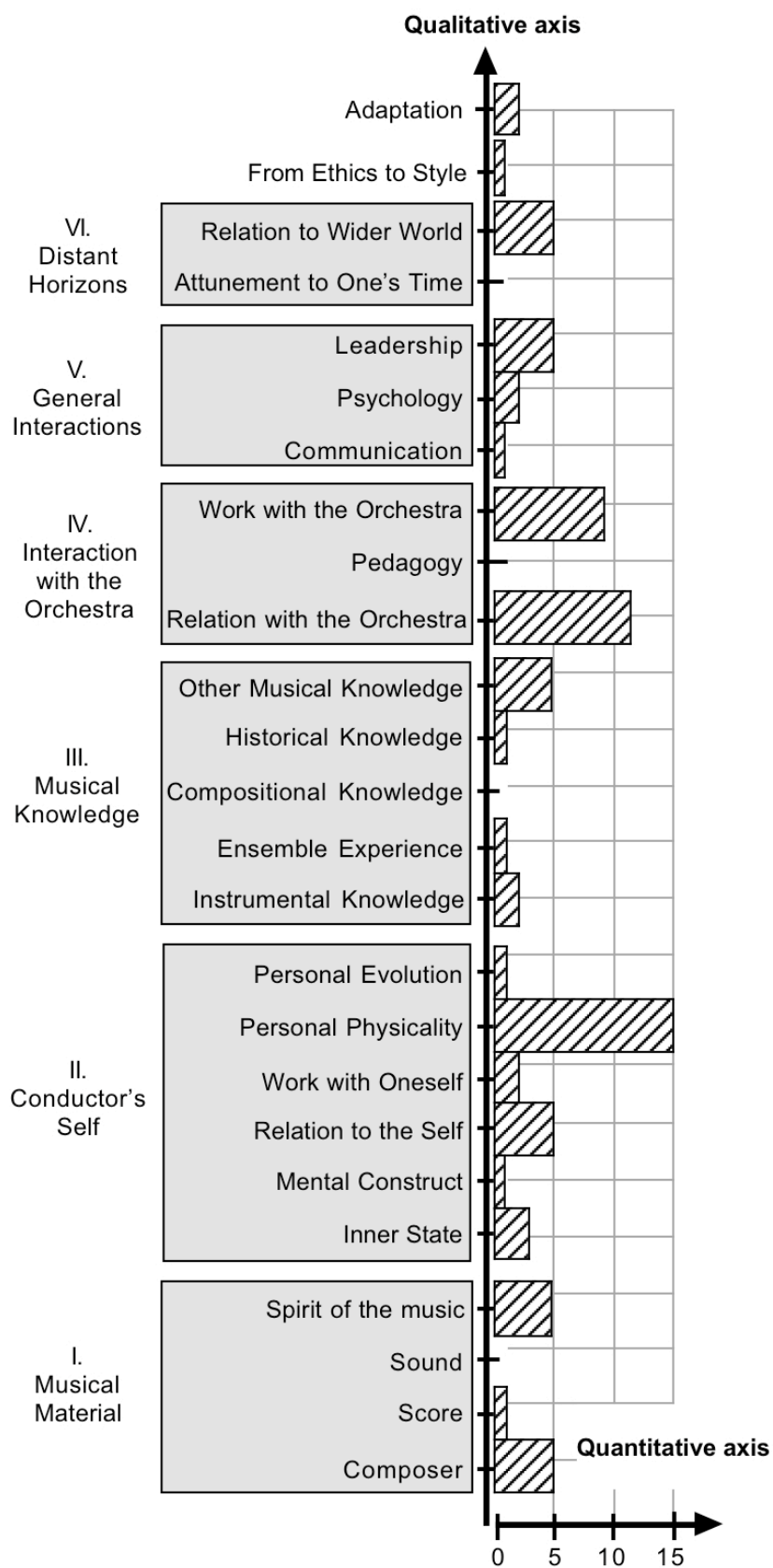


Figure 6.13
Thematic String Matrix: players

THEMATIC STRINGS : DIVERSITY



Patterned rectangle :  Diversity of the theme (number of topics) (D)

Figure 6.14
Thematic String Matrix: Blackman

The conductors develop quite substantially ten themes (Figure 6.11) identified in Chapter Four as Top Themes. They include all the pedagogues' and the players' Top Themes, and reach out up- and downstream of the symphonic experience *per se*. They substantially address five of the six strings of the Matrix. Moreover, they significantly develop nine other themes (secondary themes), situated between the two dotted lines of Figure 6.11. It appears that, for a great number of conductors, orchestral conducting involves all these nineteen themes simultaneously. This comes close to Nakra's description of the art of conducting as "a gestalt profession, [which] involves all of the faculties simultaneously" (2000, p. 23).

Players and manuals seem to refer to orchestral conducting as a phenomenon revolving around fewer fundamental principles, even though all aspects of the Matrix are present in their respective accounts. Although almost no player refers to the art of conducting as a mystery, Dickson does (1995, p. 104) and Ripley strongly implies it (2003, p. 84). By contrast, many conductors use the word or explicitly refer to this idea.

It seems intriguing that the pedagogues develop so many topics around relatively few conceptual pillars. It may be assumed that they do so as an expression of their double status: their didactic agenda leads them to the schematisation of the subject for pedagogical reasons, but their hands-on activity as practising conductors makes them resort to numerous nuances in order to adequately describe the phenomenon. Consequently, the general shape of their Thematic String Matrix resembles the one developed by the players (focusing on a few pillars), but the horizontal axis of their matrix resembles the conductors' matrix (developing a wide array of topics and using a similar scale).

The matrices of the dual status display mixed characteristics, resembling preceding or following groups. Bernstein, as a pedagogue, displays proportionally less Personal Physicality than manuals, but more than conductors. His substantial development of Spirit of the Music also appears as a transition between the manuals and the conductors' accounts. However, the amplitude of this development, relative to the rest of Figure 6.10, is a testimony to Bernstein's

personal interest in the semantics of music. Finally, the absence of Inner State, Relation to the Self, and Compositional Knowledge, may be seen as Bernstein's self-effacement towards his pedagogical role.

Dickson, too, seems to play a transitional role, this time between conductors and players: Relation with the Orchestra is the second most important theme for the conductors and the first for Dickson and players; Working Methods with the Orchestra is the third most important theme for conductors and the second for Dickson and players. Finally, Dickson and Blackman show more similarities with the following groups, possibly indicating their main identities, respectively player and pedagogue.

Average Consensus Rate

Figures 6.15 to 6.17 display the relative scales on which Thematic Diversities are graphed, decreasing from about 200 topics for manuals to 100 for conductors and 60 for players. This suggests that these respective sources perceive the themes related to orchestral conducting as less and less complex. Further examination reveals that all three groups agree on their less developed themes: Ensemble Experience, Compositional Knowledge and Attunement to One's Time. The rest of the figures demonstrates that priorities vary a great deal, except for the Top Themes, which do present overlaps, as the conductors' Top Themes comprise the pedagogues' and players' Top Themes.

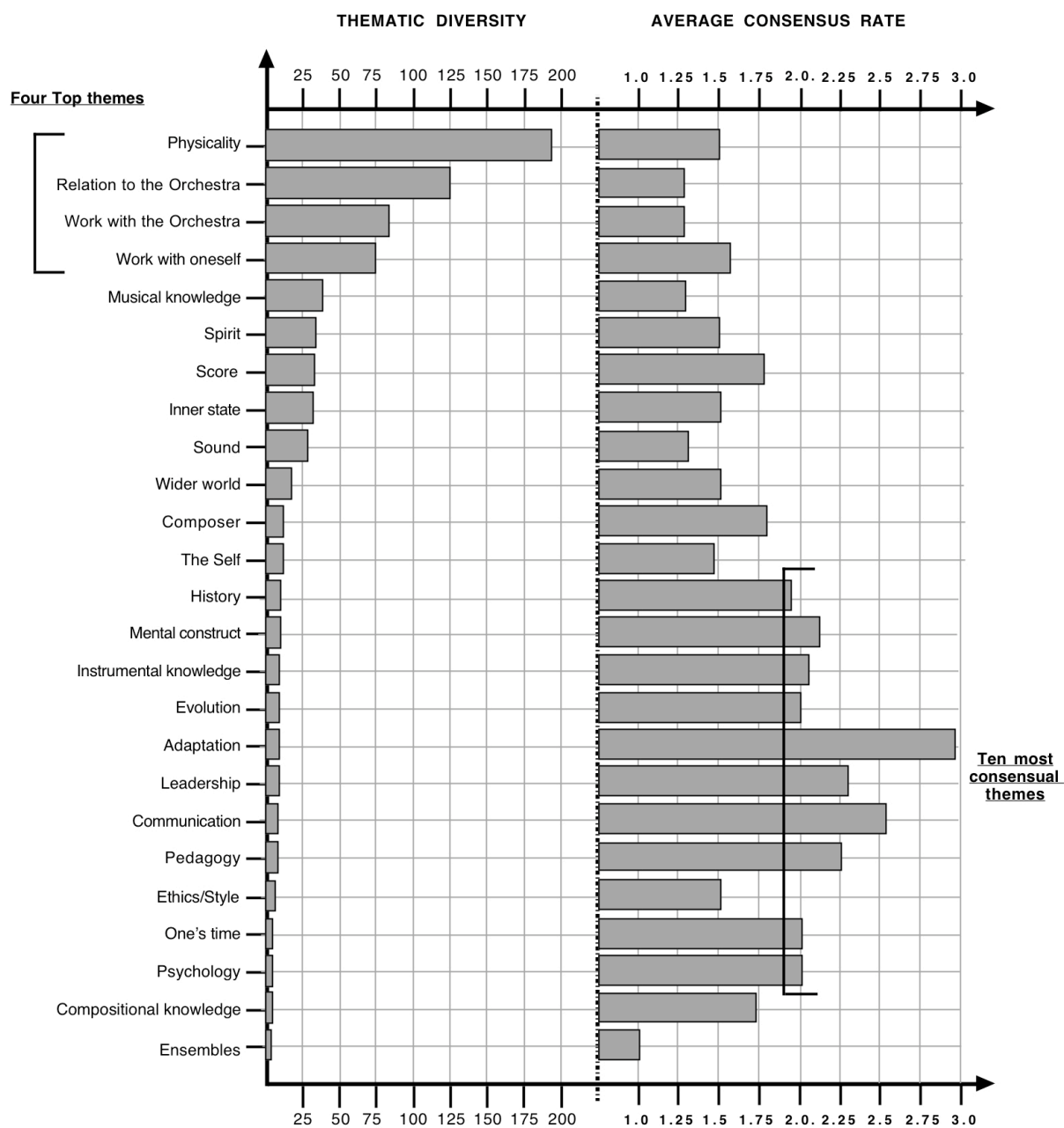


Figure 6.15
Diversity versus Consensus: manuals

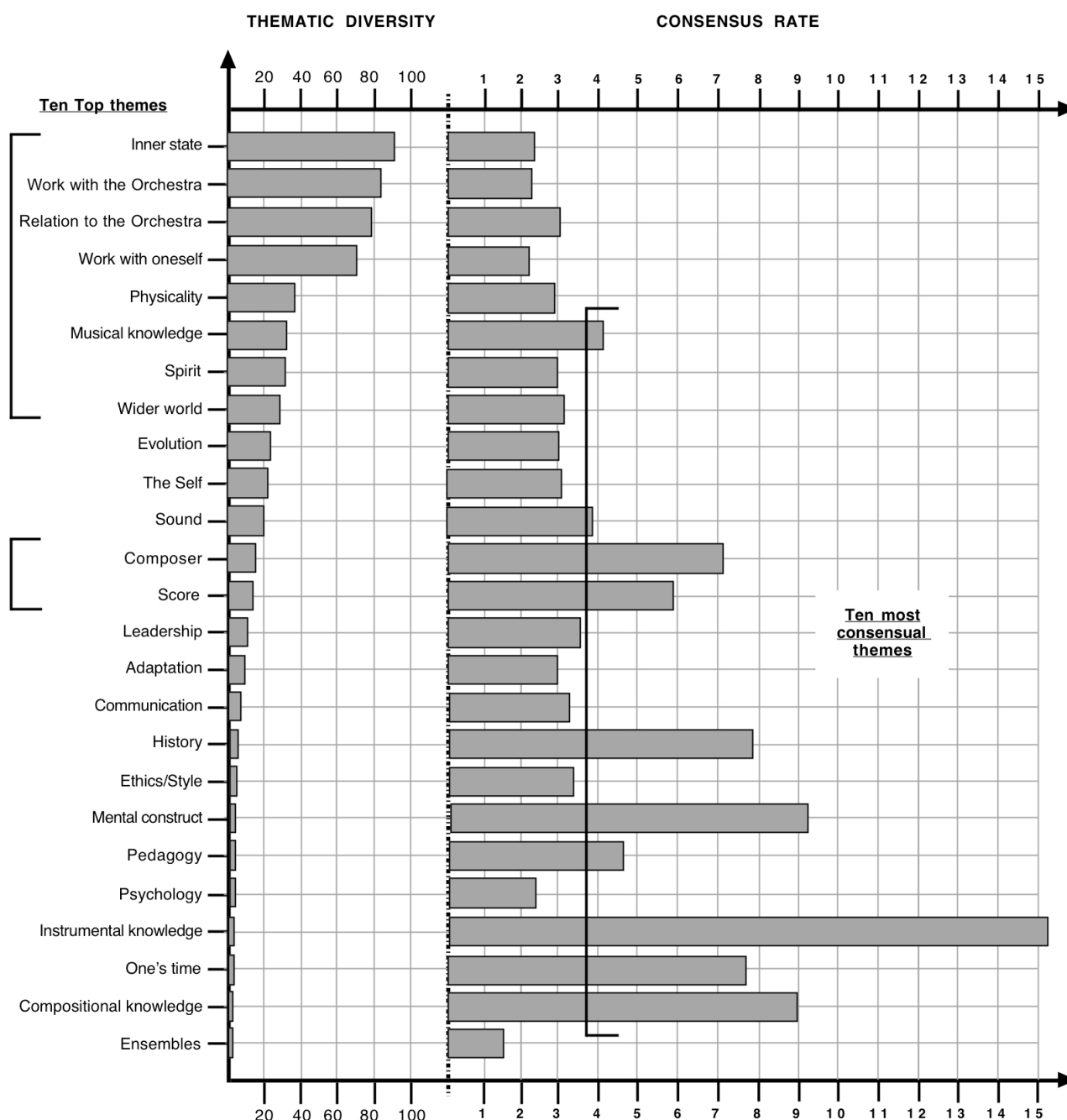


Figure 6.16
Diversity versus Consensus: conductors

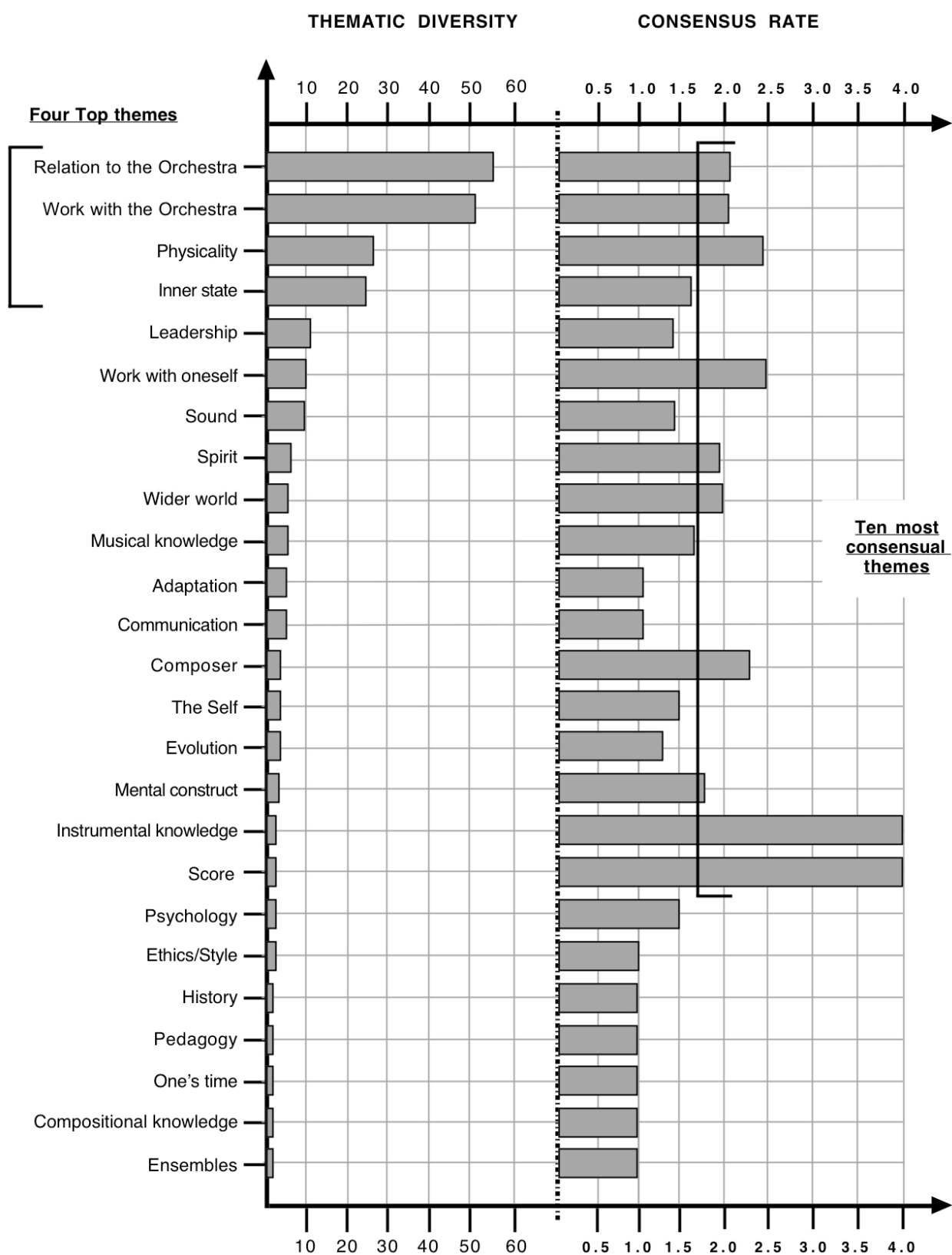


Figure 6.17
Diversity versus Consensus: players

The right side of the figures suggests two other differences. First, the scale of the consensus varies between 3.0 and 16. At the same time, the number of practitioners sharing their beliefs (six manuals, 38 conductors and 50 players) and the number of words the practitioners devote to

express their beliefs (several lines for players, dozens of pages for conductors and hundreds of pages for pedagogues) change substantially. This naturally affects the likelihood of finding common ground, but in an unpredictable way. Developing many topics in many pages may increase the practitioners' chances to address the same issues, just as it may reduce those chances if the practitioners go into such details that they either fail to address the same detail or if they disagree on very precise topics. Similarly, developing few ideas may translate into approaching such general issues that they easily build consensus, or into lowering the chances for addressing the same topics. Therefore, it seems hazardous to infer any specific reason for these differences of scale, all the more so since neither the number of practitioners nor the quantitative importance of their testimonies is consistent in any systematic way with the agreement they reach. The scales of the Consensus Rate would thus require other tools to be adequately comprehended. It is nonetheless worth taking account of these numbers as trends.

The second difference concerns the relation between the left and the right side of the graphs, that is between the diversity and the agreement the themes seem to build. Manuals suggest a fairly clear situation: the more complex a theme, the less consensual. The conductors and the players present a less marked image, as three of their Top Themes are also consensual ones. Again, several factors may come into play to explain this: the pedagogical nature of the conducting manuals (addressing substantially the same themes), but the practical experience of their authors (not building any consensus around these themes); the conductors' extensive practice of their art in fairly similar conditions, revolving around the same world-class orchestras and performing in the same concert halls, leading them to draw fairly similar conclusions (and thus to build more substantial common grounds); and the *esprit de corps* of the players, if subliminal, significantly addressing and agreeing on the same issues.

Key Topics

Tables 6.1a and 6.1b display in three columns the pedagogues', the conductors' and the players' Key Topics.

Ten Key Topics			
The matrix	Pedagogues	Conductors	Players
I. <u>Musical Material</u>			
1. Composer		<u>Be the composer's advocate</u> <u>Enter the composer's creative process</u> <u>Promote new composers</u>	
2. Score	Study/analyse the score	<u>Analyse the score in depth</u>	
3. Sound			
5. Spirit of the music	Flexible tempo with informed/meaningful purpose	<u>Be very cautious and flexible with tempo</u>	
II. <u>The Conductor's Self</u>			
6. Inner state	Passionate/energetic/positive/tonic/dynamic/enthusiastic		
7. Mental construct	Build your inner image of the piece		
8. Relation to the self			
8. Working methods with oneself			
9. Personal Physicality	<u>Distribute/complement appropriately the roles between both arms</u> <u>Use your eyes as much as possible</u>	<u>Display a careful and clear conducting technique</u>	<u>Display a clear conducting technique</u> <u>Show the music through your gestures</u> <u>Have a steady internal pulse</u>
10. Personal Evolution			
III. <u>Musical knowledge</u>			
11. Instrumental/vocal knowledge	Know the techniques and possibilities of orchestral instruments and voice	<u>Play an instrument</u>	
12. Ensemble experience			
13. Compositional knowledge			

Table 6.1a
Ten Key Topics in all the practitioners' testimonies (a)

The matrix	Pedagogues	Conductors	Players
15. Historical/Stylistic Knowledge	Know music history/styles/traditions	Know the other conductors, past and present	Respect your players Trust players' musicality and professionalism Acknowledge players' qualities and accept their creativity
16. Other Musical Knowledge			
IV. Interaction with the Orchestra			
17. Relation with the Orchestra	Plan/prepare your rehearsal	Rehearse efficiently	Correct mistakes and intonation Maximise your rehearsal time Refrain from talking Allow players the space to express themselves musically
18. Pedagogy			
18. Working Methods with the Orchestra			
V. General human interaction	Adapt your conducting to the circumstances		
19. Communication			
20. Psychological Skills			
21. Leadership			
VI. Distant horizons			
22. Attuned to One's Time			
23. Interaction with the Wider World			
A. From work Ethics to Style			
B. Adaptation to the Musical Reality			

Table 6.1b

The comparison between the practitioners' Key Topics leads to several observations.

Only three of the pedagogues' Key Topics (underlined) belong to their Top Themes. Conversely, two of their Top Themes do not house any Key Topic. This study has remarked that manuals develop a substantial number of topics, but only concentrate on four Top Themes. These themes express general areas of interest, whereas Key Topics highlight the pedagogues' specific concerns and belong to a wider territory. As pedagogues, the authors seem to focus on the important pillars which the students must master, but as conductors they emphasise other topics too, which they consider important through their hands-on experience.

The conductors display a stronger consistency between Key Topics and Top Themes (eight of their Key Topics belong to their Top Themes). However, playing an instrument, one of the conductors' Key Topics, does not belong to any of their Top Themes but builds nonetheless the largest consensus among conductors, justifying its status as Key Topic. This paradox may lie in the conductors mentioning their instrumental skills but not assigning them any particular role in their conductorship, in the same way they do not connect their ensemble experience to their expertise as conductors. These skills thus appear to have only a subliminal importance for the conductors, who do not fully develop the theme to which they belong.

The players display total consistency between Key Topics and Top Themes, as all their Key Topics belong to their Top Themes.

This crescendo of consistency between pedagogues, conductors and players regarding Key Topics and Top Themes is intriguing, as it seems to conflict with the agenda that one would assume for these sources: the manuals, given their pedagogical nature, are expected to be conceptually consistent, but in fact, display the widest consistency gap; the conductors, allegedly both thinkers and doers, comment both on theory and practice, but show less of a disconnect between their Key Topics and Top Themes than manuals; and the players, expected to display mostly a hands-on approach, are the ones who show maximum conceptual consistency as far as Key Topics and Top Themes are concerned.

However, all sources meet on two Top Themes: Personal Physicality and Working Methods with the Orchestra, both of which house Key Topics of all the practitioners. The first theme refers to proper conducting technique (and is mostly developed by the pedagogues), the second points to rehearsal technique (and is mostly addressed by the players).

Relation with the Orchestra, the third common Top Theme between all sources, does not house any Key Topic from manuals. As for the pedagogues' fourth Top Theme (Working Methods with Oneself) and the players' fourth Top Theme (Inner State), they both address the conductor's self, and do so according to their inherent agenda: pedagogical for the manuals, relational for the players. There is a paradox in the pedagogues proposing a Key Topic belonging to Inner State (which is a Top Theme for the conductors and the players, but not for the manuals), possibly having to do with the authors' background as conductors. Finally, the attention that manuals draw to Adaptation is another testimony to the wide territory they aim to cover.

Conductors and players agree on the concept of teamwork. However, conductors speak of partnership, whereas players mention respect, trust and acknowledgement. This linguistic nuance emphasises a difference in the practitioners' point of view: the conductors refer to the result of a happy working relationship, while the players point to its prerequisite. General Interactions not housing any of the conductors' Key Topics is intriguing, as they often comment on this theme. However, since the testimonies they provide revolve mostly around the process of conducting itself, some peripheral matters which they address do not reach a sufficient consensus to become a Key Topic.

A final remark concerns the balancing of the Key Topics compared to the rest of the Matrix. The players focus on the music-making itself, whilst the conductors and the pedagogues display a wider approach, revolving mostly around Musical material.

Before concluding this chapter, the next section reviews and briefly discusses the results of the survey carried out in 1997 and 2001 by the American League of Orchestras. This survey

compounds opinions of pedagogues, conductors and players about the necessary 'Traits and Skills of a Music Director', notably three facets of this position: (1) conductor (2) artistic director, and (3) community artistic leader. Reviewing this survey constitutes a reality check of my own research and aims to understand the limits of each study.

The conductor is expected to display four types of skills: performance abilities, technical, and conducting skills, and artistic knowledge. Under the conductor's performance skills are listed his or her ability to play a musical instrument, and to perform as a soloist or in chamber music and orchestral ensembles. The conductor's ability to investigate the composer's aesthetical universe and to enact the emotions encapsulated in the score are also listed under this heading. Under technical skills, conductors are expected to display proficient aural skills, detailed knowledge of all orchestral instruments, as well as compositional, analytical and stylistic knowledge. Under conducting skills, the survey lists baton and rehearsal technique, podium presence, communicational skills and the ability to gain respect from the orchestra. Finally, under artistic knowledge, conductors are required to demonstrate thorough knowledge of orchestral repertoire and history of music, as well as linguistic skills and knowledge in visual arts.

I am confident that all themes addressed by the survey have been analysed by the present dissertation. In order to limit misunderstandings, the practitioners' own words have helped shed light on the arguably hazy concepts such as style, presence or emotions. The categories I used to classify the topics addressed in the testimonies, and the rationale for allocating these topics into specific categories, have been discussed in Chapter One, emphasising the difficulty of clearly setting limits between these categories. It may seem problematic that the League of American Orchestras allocates aural and compositional skills under 'technical skills', and rehearsal and communicational skills under 'conducting skills'. However, this classification constitutes a renewed testimony to the volatility of these topics and the permeability of these categories.

The survey then develops the skills required from the artistic director. The terms used to describe these skills are best addressed through my Visible Action Continuum: personal discipline (Being),

knowledge of current contemporary music and performance practices (Knowledge), ability to assume leadership (Aptitude), confidence, fairness and integrity (Attitude), fund-raising, and marketing/public relations (Action).

Finally, qualities expected from the community artistic leader could be usefully discussed under my categories of General Interaction and Distant Horizons: discretion in sensitive issues, good public and personal relations, impact of the orchestra on the community and the wider society, educational programmes, awareness of political processes and public policy.

Conclusions

Chapter Six compares all testimonies and aims to identify main trends. It has suggested the inadequacy of collapsing all Continua and Matrices into unified ones, as it considers the practitioners' identities as important factors of their testimonies, assigning supplementary meaning to their words.

The analysis of the Continua has revealed a quantitative decrease of topics between sources (proceeding downwards from conductors to manuals to players) and a relative quantitative stability of the testimonies provided by the three practitioners displaying dual status, which also show transitional characteristics of the main sources to which they belong. Chapter Six has also compared all testimonies relative to their own quantity of topics, emphasising again salient differences between main sources and transitional characteristic of the double status.

The comparative analysis of the Matrices has highlighted the quantitative differences between the practitioners' Top Themes: ten for conductors (plus nine secondary themes), four for manuals and players. It has emphasised the variations regarding the Average Consensus Rate: manuals never reach a high consensus about diversified themes, conductors significantly agree on one third of their Top Themes, and players agree on three-quarters of theirs. Finally, this chapter has highlighted the increasing consistency between the practitioners' Top Themes and their Key Topics, going from manuals to conductors to players, reflecting their increasing 'hands-on'

agenda, implicit to their respective identities. These observations suggest that practical agenda and intellectual consistency seem to go hand in hand. Conversely, abstractions in this field, interesting and eye-opening as they may be, could breed inconsistency and require a reality test. This is aim of Chapter Seven.

Chapter Seven: Video analysis

“One picture is often worth a thousand words,
and moving pictures can be worth a million”

Moore and Yamamoto (1988, p. 220)

Introduction

Chapter Seven is devoted to a comparative video analysis of Bernstein and Boulez conducting Mahler’s Second Symphony. It belongs to the body of knowledge stemming from performance observations. Some researchers use movement detection, like Marin Nakra (1992 and 2000), Paul Kolesnik and Marcelo Wanderley (2004) and Geoff Luck (Gritten and King, 2011), others conduct video analyses, like Eric Hinton (2004), Martin J. Bergee (2005) or Liz Garnett (2009). My analysis aims, on the one hand, to explore how much the discussions proposed in text-based part of this study (Chapters Two through Six) may be traced in real performances and, conversely, to assess how much of the conducting observed on the videos is addressed in the text-based study.

The overall objective of the first six chapters of this dissertation has to do with integration, in its double meaning: the assessment of the conductors’ integration (harmonious concatenation) of the elements the practitioners describe in Chapters Two to Six; and the appraisal of the conductors’ integration (appropriation) of these elements into their gestural discourse. Given the number of elements to be processed in a fairly short time, it may be hypothesised that this integration is only possible through the conductor’s intuition, musical and other. Henri Bergson (S) (1903/2011, p. 2), sees two possible approaches to a subject: turning around it (which provides *relative* knowledge), and entering the subject (which provides *absolute* knowledge), the latter only possible through intuition. Bergson suggests: “intuition, if intuition is possible, is a simple act” (Ibid., p. 5). I propose that orchestral conducting engages with both strategies (relative and absolute): the text-based study describes what is to be integrated (turning around the subject), whereas the video performances examines how the conductors have integrated it

(entering the subject). In a way, the latter makes the former appear a simple act. It is significant that Fantapié proposes in the opening pages of his manuals: “it is sometimes more difficult to speak about conducting than to conduct” (2005, p. 8),²⁵ alluding to the simplicity of this intuitive act and to the difficulty of its verbal explanation.

Garnett (S) argues: “the aphorism that ‘talking about music is like dancing about architecture’ is both widely quoted and widely attributed” (2009, p. 43). It aims to express “the mistrust of musical literature” (Ibid.). I argue that there should be better arguments for disqualifying words from speaking about sounds. The essence of dancing and architecture lies in shapes defying gravity, as much as the essence of verbal and musical discourses lies in aural signals unfolding in time relying on memory to construct meaning. Ludwig Wittgenstein (S) argues: “understanding a sentence is much more akin to understanding a theme in music than one may think” (Zbikowski, 2009, p. 359). Additionally, music and words share a common history, merging in chanted prayers, poetry versifications, and more recently in *Sprechgesang*. Given this cognitive proximity, it is unlikely that mental structures ruling the one would not apply, at least partially, to the other. If melody and harmony can illuminate the significance of a poem, why not speculate that words may illuminate music and conducting in exploring sequentially continuous sounds and movements?

Garnett (S) emphasises the difficulty of selecting meaningful elements in the conductor’s gestural discourse: “what, of all these myriad actions, matters?” (2009, p. 56). Shifting angle from movement perception to their significance, McCaleb argues: “the ability to detect movements in performance is secondary to understanding their meaning” (2012, p. 12). Once the actions have been identified and meaning has been assigned, expressing this meaning in words represents the last challenge. Moore and Yamamoto (S) remark: “the complexity of movement is troublesome to capture concisely with words.” (1988, p. 220). Rudolf Laban adds: “the thinking connected with movement is almost diametrically opposed to the [...] thinking connected with words” (1970, p. 22), given the continuous nature of movements and the discrete nature of

²⁵ “Il est parfois plus difficile de parler de direction que de diriger”.

words. McNeill (S) further comments: “speech and gesture contrast semiotically—a gesture is global, synthetic, instantaneous, and not specified by conventions of form; a linguistic form is analytic, combinatoric, linear, and defined by socially-constituted rules” (2006, pp. 1–2). Chapter Four has discussed the extent to which the conductor’s gestures are also conventionalised and benefit from social consensus, just as words do, even though some conductors refute the reference to any pre-established norm.

The cognitive proximity between words, music and movements is thus recognised by some scholars and questioned by others. Whatever the difficulty of the task, testing words against actions, that is testing Chapters Two through Six of this dissertation against Chapter Seven, is a worthwhile challenge and a helpful step to validate this study.

Analysing the practitioners’ testimonies and “learning new concepts allows us to perceive musical elements that [...] we did not know to listen for” (Garnett, 2009, p. 56). Conversely, “new musical experience can help [...] make sense of concepts [...] not previously understood” (Ibid, pp. 56–57). The first process generates concepts and categories, and the second tests these categories. My video analyses propose similar methods: they explore the conductors’ gestures and examine how theories of movement may be applied to the video observations. They also examine how the conductors’ actions could be mapped onto the models developed in the text-based study, testing at the same time the validity of these models.

Several texts apply Laban’s theories to conducting. Neale King Bartee (S) suggests that Laban’s system “gives the conductor a basis for developing expressive movements” (1977, p. 161), emphasising the conductors’ “limited familiarity [...] with the possibilities of movement” (1977, p. 17). Stephen W. Miller (S) (1988) and Michele M. Holt (S) (1992) propose that students develop their gestural communication through Laban’s methods, validating their research by comparing groups of students, the ones applying Laban’s principles obtaining grades significantly higher than the others. Charles Gambetta (S) argues: “Laban Movement Analysis [provides] a comprehensive set of tools for conceiving and executing potent, persuasive gestures” (2008, p.

30). Billingham (S) suggests: “the Patterns of Total Body Connectivity brings a heightened capacity for [...] movement strategy toward healthy conducting” (2009, p. 29). Finally, Raphael Cottin (S) presents Laban’s system as “taking account of [the conductor’s] body organisation, patterns, natural adjustments, motivations and internal driving forces” (2011, p. 2).

This study utilises Laban’s system as an observational tool. It also draws on concepts and methodologies Moore and Yamamoto (S) have developed concerning the construction of meaning through movement, facilitating accurate observation and “keeping the powers of perception fresh and acute” (1988, p. 214). The video analyses are also informed by the body of knowledge developed by nonverbal communication specialists. McNeill (S) connects gesture, thought and communication: “gestures [are not only] objects of cognitive inhabitation [but also] agents of social interaction” (2006, p. 10). Michael Argyle (S) studies gaze as communicational channel. He argues: “the act and manner of looking [...] have meaning as signals, showing for example the amount of interest in another person [...]. Gaze is both signal and channel, a signal for the recipient, a channel for the gazer” (1975/2010, p. 153). David Efron (S) (1972) compares the evolution of gestures among immigrants in New York. He remarks on gestural space, rhythm, regularity, duration, and bodily parts involved. Tsuyoshi Kida (S) continues this research. He notes in his abstract: “gesture and language are independently learnt, indicating the existence of a gesture repertoire, which is a part of a larger culture of visual communication” (2005).

This literature has produced categories and concepts that apply to their specific fields. However, Garnett argues, “but few if any are exact fits” for conducting (2009, p. 51). It may be “surprising that there has been so little interest in musical gesture among nonverbal communication specialists and so little interest in nonverbal communication studies among researchers in conducting” (Ibid., p. 51). Moreover, as evidenced in their testimonies, the practitioners rarely, if ever, refer to any scientific approach to nonverbal communication and interpersonal corporeal behaviour.

Drawing partially on the above-mentioned body of knowledge, and partially informed by my practice as a conductor, the video analyses aim to describe and compare Bernstein's and Boulez's conducting, implicitly inferring what players and singers may see. Moore and Yamamoto (S) remark: "perception [itself] appears to be a creative psychological process as well as a mechanical physiological one" (1988, p. 44). They add: "we are able to perceive a movement event, evaluate it, and fabricate a response in rapid succession, without having to give the matter much conscious thought" (Ibid., p. 88). Given this subliminal aspect, the video analysis only hypothetically relates the observed data (the conductors' actions) to the players' perceptions and musical responses.

This comparative video analysis is incomplete for various reasons. The footage does not show the conductors in the entire symphony, preventing this study from assessing their corporeal discourse as a whole. The videos rarely show the players' immediate reaction to the conductors' gestures, which would have helped corroborate visually the sonic utterance of the orchestra. Videos displaying working sessions were not available either. Given the "link between the verbal language used by conductors in rehearsal and the gestures they use" in performance (Garnett, 2009, p. 49), comparing these two situations would have allowed a more thorough understanding of the process. Furthermore, the footage does not always show the conductors as the players see them. The concert halls and orchestras display dissimilarities of acoustics, setting and performing traditions. Finally, the difference of quality between recordings, dating thirty-one years apart, reveals important technical evolutions. The definition of Bernstein's facial features in distant images makes it challenging to correlate his facial expression with his overall bodily demeanour. Additionally, the audio tracks of these videos are technically so different that any comparison of the conductors' sound through these recordings would show severe limitations. Not only did recording techniques evolve, but also post-production manipulations may have altered the initial orchestral sound according to the conductors' desires. Although knowledge in audio and video editing techniques partakes of what practitioners expect from conductors, analysing the sound generated by these hypothetical manipulations is not relevant to the present study. For all these reasons, this study does not claim a laboratory-like rigour.

These videos constitute, nonetheless, a valuable real-life document and provide relevant material for a comparative examination. Both conductors are highly respected pedagogues and demonstrate a passion for communication. They display different conducting styles, providing different angles on the phenomenon. Bernstein was an acclaimed Mahlerian whose role in reviving Mahler's music is widely acknowledged, whereas Boulez devoted his life to the propagation of contemporary music. More technically, Bernstein uses a baton whilst Boulez does not, which contradicts the received idea that "conducting with a baton is about the nature of the music being performed" (Konttinen (S) 2008, p. 192). As will be seen, these conductors have divergent opinions about the conductor's role and their interactions with the orchestra. Moreover, Bernstein conducts from memory, Boulez does not. They have acquired their conducting skills through different processes: Bernstein attended conducting classes, Boulez did not. Finally, they come from different cultural backgrounds and have produced very different kinds of music, both as composers and conductors.

Video analysis

Several caveats may be helpful to better comprehend the following section. The angles and proximity of the images showing the conductors' movements do not always correspond to the performers' perception from where they were located. Only one visual option is offered to the viewer, whereas players see conductors from a multitude of angles and distances, depending on the players' positions. Moreover, performers choose to look at one part of the conductor or the other depending on their musical needs of the moment, whereas the images analysed were selected by the video editors, following their own agenda rather than the players' necessities. Wöllner (S) (2008, p. 249) highlights various types of information that players infer from the different parts of the conductors' body: the face would be the locus of expressivity, the hands would harbour most musical information, and the conductor's general posture would help contextualise all the above.

I analysed the excerpts through numerous repetitions of the same passage (sometimes in silent mode), allowing a progressive construction of meaning, whereas players react in real time to a

split-second stimulus. Other elements make the video analysis different from the players' actual experience. Players, Nakra (S) points out, are able to capture, through muscle tension perception, some of the conductor's physical signals that would be visible only through video slow motion (2000, p. 132). Additionally, rehearsals allow players to form specific expectations towards their particular conductor and tune their perceptual acuity accordingly, facilitating this split-second reaction by restricting the field of possibilities of the conductor's gesticulations. Finally, the overall musical context plays an important role in disambiguating the conductor's gestures, whereas the videos are sequential, lacking, as mentioned above, the conductor's general gestural discourse.

The above-mentioned limitations are inherent to real-life situations. By not seeing exactly what performers see and not knowing what they really look at, it is only possible to hypothesise how they relate to the visual information and how they transform it into vocal or instrumental gestures. Further research could investigate this topic by interviewing performers about their specific performance, although studies (Nakra, 2000, p. 23, and Moore and Yamamoto, 1988, p. 88) suggest that players operate to a large extent unconsciously.

The next section describes the conductors' corporeal discourses. It proposes gestural analyses, suggests causality between gestures and aural results, but does not venture into a meticulous study of the orchestral sonic properties. The first analysis follows the chronology of the musical event and connects aspects of these performances to issues raised in Chapters Two through Six. In a second stage, this study connects the video observations to the Continuum and the Matrix according to the specific organisation of these models. Some of the conductors' traits are recurrent in several excerpts, some are specific to a given fragment but partake nonetheless of the conductors' personas, which the Continuum and the Matrix aim to reveal.

Analytical description

1. First Movement

Excerpt No. 1: 1st Movement, bars 1-5, Bernstein: 1:13-1:47; Boulez: 0:49-1:11.²⁶

Both conductors sweep the entire orchestra with their eyes, a fairly standard gesture for conductors. The flow of their look, however, is quite different. Boulez has a regular movement from right to left, whereas Bernstein interrupts his sweeping (from left to right) at every head of section, in order to establish a longer eye contact with each group of players. It may be inferred that Bernstein's eyes speak to individuals, whereas Boulez addresses the orchestra as a whole.

Keith Thomas (S) points out: "modern writing on [human movements] starts from the assumption that gesture is not a universal language, but is the product of social and cultural differences" (Bremmer J. and Roodenburg, H, 1991, p. 3). Moore and Yamamoto (S) (1988) partially agree with this opinion. They divide human movements into universal, culture-specific, context-specific, and person-specific gestures. Bernstein's and Boulez's gazes are both universal (this is what people in observational mode do) and context-specific (partaking of concert etiquette). Boulez clearly separates the gaze moment from the music-making, briefly enunciating something to the effect of "all right, let us start" and commences the music. Bernstein glides imperceptibly from his gaze to a bodily movement (opening and closing his arms) in order to capture the full attention of the orchestra, and pursues to the first up-beat, using the same gestural continuum until the music starts, and even slightly after.

These behaviours speak to the players of the conductors' nature (Being), but they also tell them about the relation each conductor wishes to establish with the players (Relation with the Orchestra). Bernstein seemingly aims for human contact, whereas Boulez induces musical collaboration. They tell of the part of the players' personalities these conductors want to address: Bernstein seems to request a full emotional commitment from his musicians; Boulez apparently demands an acute musical concentration from his. It is not unreasonable to imagine that the conductors' respective attitudes will produce different kinds of music. The practitioners often

²⁶ The timings refer to Bernstein's and Boulez's commercial DVDs mentioned in the Discography.

comment on the conductor's ability to produce a distinctive interpretation and/or distinctive sound. In addition to tangible elements such as tempo, dynamics, musical articulations or orchestral balance, it may be in moments such as the ones described above that conductors make their expectations known and, subliminally, solicit different attitudes from the players, resulting in the activation of other musical skills and, arguably, another kind of orchestral utterance.

By way of his first up-beat, Bernstein starts his performance with a slashing concentric movement, performed energetically with both arms mirroring each other, as if hugging himself. The release of this energy constitutes, in a gashing centrifugal movement, his first down-beat. He seems to break some sort of imaginary chain, to answer these life and death questions: "What is this life – and this death? Do we have an existence beyond it?" (Schram (S) 1985, p. 23). Boulez, by his neutral gaze and preparatory gesture of holding his thumb against his first finger, both hands mirroring each other, seems to focus solely on the music to be made. Argyle notes: "gaze [...] can be measured in a fairly straightforward way [but] involves observations by human judges" (1975/2010, p. 153), pointing both to the objectivity of the phenomenon and the subjectivity of its observation. It is perceptible that after his first down-beat, Bernstein does not direct his gaze to the orchestra any more. He looks down, in a reflective posture -- let us recall that he is conducting without a score -- and seems to witness some sort of dramatic imaginary scene. Boulez, moving his eyes between score and players several times, seems to want to control the orchestral utterance. It is significant that all the practitioners highlight the importance of the conductor's gaze. However, they rarely, if at all, comment on what information this gaze may convey. Here may be a meaningful example of what the conductor's eye may reveal.

The ensuing seconds confirm the conductors' respective preparations. Bernstein takes the posture of a fencer and, using his baton as a sword, seems to embark on a duel with the players, while also shaping the dynamics of the orchestra. Boulez, with a clear and energetic beat pattern, displays a temporal and dynamic frame for the orchestra. He leads the players through a rubato for the first ascending scale. Bernstein capitalises on the metaphorical potentialities of his gestures. Alan Cienki and Cornelia Müller (S) suggest: "we are calling metaphoric gestures the

ones which have the potential to engage an active cross-domain mapping” (2008, pp. 485–486). McNeill further remarks: “metaphoricity is a fundamental property of gesture” (2006, p. 2). Bernstein uses this cross-domain mapping at its fullest: his baton stands for a sword, his metric movement for fencing and his immobility for silence. He sets the stage for what may be viewed as a painful struggle for resurrection but also suggests the rhythmic value of the semiquavers. There is no beat pattern to be recognised in his gestures; his circular movements evoke a continuous unfolding of time rather than the division of a bar, whereas Boulez clearly displays a steady 4/4. The text-based part of this study has discussed the possible misunderstanding between beat patterns and musical intelligibility. Both conductors may be said to clearly convey their musical message, in very different ways. Boulez, indeed, resorts to a distinct time-beating, whereas Bernstein relies on the appropriateness of his gestural metaphors.

Both conductors set a horizontal reference field through a moment of total immobility. Boulez keeps this field stable, whereas Bernstein refers to it in a more flexible way, counting on his muscular tension to convey to the orchestra the starting point and speed of his gestures. Both conductors, but Boulez more than Bernstein, use their right arm to express the active side of the music and their left hand to hold and adjust the volume of the sound between the active passages.

Excerpt No. 2: 1st Movement, bars 27-38, Bernstein: 3:04-3:47; Boulez: 2:17-2:53.

According to Parks Grants’ analysis (2003, pp. 4–7) and my own, bars 27-38 present the second half of the first theme of this sonata-allegro movement, which coincides with the first entrance of the flutes. Instead of a clear beat pattern Bernstein displays here only the pulse of each count. In a gliding but heavy movement, he mimes the bow movement of the violins and shows their expressive crescendo by opening his arms, capitalising on a wider-is-more effect. Through thrusting movements, he shows the accents for the violins on bar 29, and by carrying an increasingly heavy imaginary weight he continues the build-up of the crescendo at bar 30, culminating at bar 32 with the syncopated accent. He turns to all basses to obtain a heavy sound for their descending scale at bar 35. The beating field has moved downward from waist level at

the opening of the symphony to hip level, except for the winds' accent in bar 32, which he shows at chest level, possibly to compensate by a higher plane for the distance of these players. In the exuberance of the music, Bernstein slightly raises his heels to anchor himself more solidly afterwards and, through a whole-body thrust, hammers the descending orchestral unison. Although this gesture is functional by nature and may be seen as universal, as podium etiquette it is fairly person-specific, consistent with later examples of Bernstein energetically rising on his toes, even jumping out of exuberance. In Labanian terms, Bernstein displays in this passage a thick interrupted *flow* and a heavy *weight* of what may be seen as a thrusting *effort*. In order to avoid any possible musical stagnation, he bends slightly forward to inspire some sort of forward movement, without, however, conveying an *accelerando* signal. Bernstein's facial expression shows pain. He often glances over the players or looks to the floor, or occasionally shuts his eyes, all of which is consistent with the inner narrativity evoked earlier. Only rarely does he look at the players to cue them in.

Boulez's corporeal discourse is less complex. Coherent with the opening of the symphony, his gestural apparatus comprises a clear beat, accentuated thrusts supported by muscular tension, amplitude of arm movements validated by facial expression and wide open eyes conveying dynamic expansion, with extra loops in the beat patterns to gain arm speed and momentum. Both hands often mirror each other, and when they do not, the left arm is disengaged or turns pages. Boulez conducts the music and nothing else. No drama is visually perceptible, and sentiments seem subliminal to the notes. Boulez appears to share the musical space with the orchestra, which, in turn, seems to respond with gratefulness and excitement in their playing, on the evidence of their facial expression and lively, chamber music-like behaviour. As stated in Chapter Three, Peck (P) notes about Boulez: "on the podium he encourages and allows the orchestra to express itself musically" (2007, p. 17). In a way, he lets Mahler's music do the work, possibly seeing his role more as a framer of the orchestra than a doer of the sound, consistent with Karajan's idea that "the real art of conducting is to realise that music comes implicitly, by itself" (Matheopoulos, 1982, p. 223). Faber speaks of "allowing the [music] to progress through its natural flow" (2012, p. 16).

The flow of Boulez's gestures is not as interrupted as Bernstein's. One can see his beat patterns as a continuum, with inner speed variations to mark every count. Boulez moves within a smaller space than Bernstein. The lower part of his body seems barely engaged, the weight of his movement being concentrated in his arms and supported, every now and then, by his chest to gain power. He rarely stares at the orchestra in its full depth for a long time, possibly in order to read the score. However, he looks at the players intermittently to renew eye-contact and solicit their sound.

Excerpt No. 3: 1st Movement, bars 244-254, Bernstein: 13:35-13:58; Boulez: 12:37-13:01

About Mahler's music Grant argues: "[it is] so closely knitted [...] that it would be well-nigh impossible to lay one's finger on the exact spot where" one section ends and the next starts (2003, p. 4). I analyse bar 244 as the beginning of the development of the first movement. By contrast with the exposition, the absence of fermata gives this passage its dynamism, typical of developments, where the discourse heats up and the thematic elements collide with each other. Mahler underlines this by requiring this passage to be played *Schnell* (Fast).

Bernstein's excitement on the video expresses this spirit. There are reminders of the gestural discourse he uses at the beginning of the symphony. However, his energetic drive is in line with the spirit of the development. Bernstein combines again in his gestures imagery and functionality, the one helping the other. Within ten seconds, he cues the strings, the timpani, the flute and oboe, goes back to the strings, and back to the flute and oboe, manages an *accelerando* and cues again the timpani. He takes advantage of these bodily movements to convey the frenzy of the passage. He uses again the sword gesture that recalls the initial duel displayed in the exposition, echoing Mahler's musical structure through the consistency of his gestural discourse. Given the level of excitement, he needs the weight of his whole body to calm down the musical flow in bar 250 and convey the rhythm of the quaver triplet. Turning to the basses, he bends his body in a soft movement (resembling a father-like demand to his children), and seems to beg for the *decrescendo al niente* required by Mahler – literally "decrease to inaudibility" [bis zur Unhörbarkeit abnehmen].

Boulez, too, is consistent in his gestural discourse, always displaying a clear beat pattern. He adapts the tonicity of his movements to the musical fragment. Moments of sound production are conveyed to the orchestra with full impetus, his arms reaching higher up and lower down compared to his standard time-beating and his hands featuring at times clenched fists, a culture-specific gesture for power. In moments of passivity, when the orchestra either does not play or holds notes, Boulez pulses softly the passing of time. At the end of the passage, he conveys a strong decrescendo by slightly raising his beating field, supporting this diminuendo with some sort of ‘attention/mystery/hold-your-breath’ facial expression. His gestures are rooted in universal concepts, coming close to Garnett’s work on spatial metaphors (2009, pp. 144–145): bigger-is-louder, smaller-is-softer, and higher-is-lighter. His only individual cue is for the timpani at bar 249, as their *forte* is incongruent with the general *pianissimo*. Needing to stand out, this isolated *forte* may require support to the players, as the common orchestral usage promotes blending rather than protruding. The players often comment on the conductor’s role of breeding self-confidence in players. Boulez’s gesture to the timpani may be seen to partake of this process. Conversely, he trusts the orchestra for their autonomous rhythmic control over their triplet of minims (to be placed against his four crotchet pulses) whereas Bernstein shows to the players every note of this triplet, *dictating* this rhythm – to use Meier’s vocabulary.

Excerpt No. 4: 1st Movement, bars 372-383, Bernstein: 20:04-21:11; Boulez: 18-39-19:23

This excerpt features a musical fragment coming about five minutes before the end of the first movement, when all thematic elements are supposed to have been presented and developed. As a way to capture the listeners’ attentiveness, composers sometimes resort to the use of new elements at the end of a movement or a piece. However, in Mahler’s compositional style, where all themes seem to be born from one another, having this long melody coming seemingly out of nowhere as a spontaneous generation is quite striking to the analyst. Without delving too much into musical exegesis, I suggest that this musical idea has another kind of filiation with the previous musical material. The desperate energy of the introduction and the hopeful and radiant happiness of the second theme seems to have produced (in an almost biological sense) this

serene resignation, this acceptance of fate, which may have to do with the overall programme of the symphony: a resurrection of the soul through the suffering of the body. It is in this excerpt more than in any previous ones that the difference of tempo between the conductors is so obvious. In rapid passages Bernstein is usually faster than Boulez, in slow passage he is usually slower. Here, Bernstein's tempo ($\text{♩} = \pm 50$) is almost one third slower than Boulez's ($\text{♩} = \pm 72$). Bernstein's rubatos being more substantial, this passage ends up being one third longer under his baton than under Boulez's.

Several traits characterise Bernstein corporeal behaviour. His arms do not describe any discernible beat pattern and most of the time they are mirroring each other. He pulses the time in large and supple circles that also speak of softness of sound through a thin and hesitating, sometimes interrupted, flow of movement. At several moments Bernstein suspends his beating (seemingly freezing the passing of the time), or slows down the tempo through subdivisions of the beat. Both hands appear indeed as "time-beaters and interpreters" (Bernstein, 1954, p. 139). When not mirroring his right hand, his left hand has five consecutive roles: at the beginning of the sequence, Bernstein seems to display a delicate shaking that not only indicates to the violinists their vibrato but also, to the entire orchestra, the extreme fragility of this newborn melody; then, the left hand seems to carry this delicate musical being, still somewhat shaking; later on he holds this thin stream of melody between his fingers and, by opening his palm, metaphorically supports it with more (sonic) presence and comfort; finally, in an ambivalent culture-specific gesture, he reaches to his mouth, capitalising on the double meaning of this gesture (soft kiss or soft sound), and then retreats his left hand to direct the players' attention towards his right arm. Bernstein moves here in an expanded kinesphere, a personal space that allows him to slowly swing his whole body in full steps, shifting his weight from one leg to the other. Also to be noted are his seemingly father-like encouragement for 'soft-talking' (that is, soft-playing) and what appears as a facial expression of gratitude when receiving this soft sound (which Bernstein seems to translate into sweet sentiment) from the orchestra. Chapters Two through Six have emphasised that the players' expectations towards the conductor at times exceed musical boundaries. Bernstein's general attitude towards the orchestra seems to suggest his readiness to meet the players on

non-musical grounds, proposing a close human contact with the orchestra in addition to their musical intercourse.

Although Boulez's demeanour and eye expression may be seen to convey something between sadness and hopefulness, possibly related to the serene resignation evoked earlier, his corporeal behaviour speaks exclusively of sound, textures, phrases, impulses, accents, *ritenutos* and freezing of the time flow. This possible sadness Boulez expresses is of another kind than Bernstein's. Thomas (S) argues: "there is no attribute of the human body, whether size, shape, height or colour, which does not convey some [...] meaning to the observer" (Bremmer, 1991, p. 1). Paul Ekman (1997) further remarks on the difference between involuntary *expression* and more voluntary *communication*. Seeing (and knowing) Boulez's removed nature and Bernstein's extroverted one, Ekman's distinction appears pertinent here, as both conductors seem to convey something different to the orchestra, having to do with the demarcation between expression (displayed by Boulez) and communication (conveyed by Bernstein). This difference, further discussed through the Matrix (more specifically under Relation to the Orchestra), may be rooted in the way each conductor conceives his role and the role of the players. All through this symphony, there is no acting in Boulez's conducting, whereas for Bernstein, there is that almost all the time.

Boulez's arms and hands move in a continuous flow, changing speed to convey accents and impulses. Both arms hang lightly, in a relaxed way. They solicit from the orchestra an equally light and relaxed sound, even for the accents, and move mostly in *monolinear* gestures (that is, one articulation at a time, in contrast to Bernstein's *polylinear* movements), mostly from the shoulder. This is likely to convey an impression of monolithic stability, preventing any possible excitement coming from the relatively fast tempo, or any undesired floppiness coming from the relaxation of the arms. Bernstein's more active gesticulations seem to express in greater detail every musical idea, compensating for his very slow tempo.

Boulez's gaze takes care of the orchestral balance, looking at instruments which he would like to hear more. His arms are sometimes mirroring each other but less so than Bernstein's. Like Bernstein he displays culture-specific gestures: open palm for sound encouragement, "a gestural [...] metaphor [identified as] the Palm Up Open Hand" (McNeill, 2006, p. 2); or closed fingers, as if pulling a thread, for tenuous sound. These gestures are close to what Bräm and Bräm (2000, p. 147) identify as handshapes for heavy (a) and light (b) objects within the Deaf Signs repertoire of gestures (Figure 7.1).



Figure 7.1
Hand shapes in Bräm and Bräm

Boulez displays some corporeal swaying too, not sideways as with Bernstein but forward with his upper body. He conveys the swaying of the music and pushes it forward, keeping his arms light so as not to induce any weighing on the dynamics nor thickening of the texture.

Excerpt No. 5: 1st Movement, bars 404-428, Bernstein: 22:35-24:01; Boulez: 20:31-21:36

This excerpt displays the last dynamic build-up and decrease of the first movement, starting at bar 404 with *ppp*, climaxing at bar 418 with *ff* and coming back to *ppp* at bar 422, about twenty seconds before the final surge and the end of the first movement.

Bernstein develops here a sophisticated corporeal discourse, drawing on context-specific gestures and capitalising on earth gravity, made visible through virtual falling objects and imaginary increased weight. The sequence opens with Bernstein slightly shaking his baton to indicate the arpeggio of the first flute. It is unclear to what extent this gesture is really useful and helps the flautist play his part. If 'useful' means that the flautist would not have played his passage without the conductor shaking his baton, then the gesture is probably dispensable. However, if 'useful' means that Bernstein, through his gesture, informs the player about the brevity of the notes (which he seems to want somewhat shorter than the strict rhythmic value assigned by Mahler) then his gesture acquires interpretational legitimacy. Additionally, Bernstein

seems to propose a meaning to these short notes as being lightly thrown in the air, like birds released to freedom with joyful calls, proposing a descriptive layer to his interpretation. Therefore, the flautist is not only likely to play this passage in a more congruent way with Bernstein's vision, but also to comprehend, through the conductor's corporeal imagery, why it is important that these notes be performed in this way, accepting that he and Bernstein, at this very moment, are "bound together by the tiny but powerful split second" (Bernstein, 1954, p. 155). Bernstein then displays a repeated bodily swing that enhances the repetitive nature of the segment. This behaviour may mean, in this context, the acceptance of fantasy and unpredictability, in addition to being an anticipation of what Mahler, in his last movement, explicitly refers to as birdcalls.

Through a culture-specific gesture of the left palm facing down, Bernstein and Boulez seem attentive to keep the orchestra quiet and not to commence the crescendo too soon, although by standing back at bar 408 Bernstein seems to give way to the dynamics to grow, freeing the orchestra from the *pianissimo* pressure and inducing a discernible beginning of the crescendo. What occurs then at bar 412 is not the starting point of a crescendo, as indicated by Mahler, but a crescendo that has already been engaged. Until this moment, Bernstein displayed a recognisable beat-pattern. From now on, the beat pattern vanishes. Bernstein only shows the pulses, the first beat prevailing only by the amplitude of the conductor's bending, engaging his whole upper body. Sustained tempo, continuous flow, heavy weight, concentrated space, are the characteristics of Bernstein's corporeal display, coming close to Laban's category of "thrusting/punching" effort, supported by a suffering facial expression. In 'The Art of Conducting' Bernstein remarks: "in practice a conductor seldom beats [...] squarely. The motion can, in fact, [be] very curvaceous" (1954, p. 137). However, textbooks rarely, if ever, signal the possibility for the conductor not showing any beat pattern at all. Garnett's idea resonates quite loudly here: "[one] should [...] not assume that textbook conducting technique actually matches what practitioners do. [...] There are widely used gestures that are either absent from the instruction manuals, or are even directly prohibited by them" (2009, p. 45).

Another deviation from Mahler's indication is Bernstein's stopping the musical flow at the end of bars 418 and 419, possibly in order to prepare the steep change of dynamics, decreasing from *ff* to *pp* in two bars. This stopping may be the cause of Bernstein's unsuccessful pizzicato at bar 420, as he attempts, within one second, to stop the orchestra, to start it again, and then, simultaneously, to indicate the pizzicato to the cellos and to cue in two flutes and the cor anglais. As a result of this busy corporeal agenda, his hands are on slightly different levels. Some cellists may have timed their pizzicato according to one hand, and others to the other. This stopping of the flow testifies to Bernstein's freedom towards the score, or, as some conductors would put it, his obedience to the spirit rather than the letter.

The end of this excerpt shows Bernstein swinging again, possibly to induce anew a certain meaning into the repetition of the music, a gesture coming close to depiction of the final swaying of a child's swing or the gradual fall of a tree leaf, consistent with the movement displayed at the beginning of the sequence. It may be helpful to recall here the meaning of the word *gesture* proposed in previous chapters, referring to the conductor's physical gesticulation rather than the virtual movement inhabiting the music. I have proposed that both meanings connect but are not necessarily coterminous. However, in many of Bernstein's corporeal behaviours both aspects are so closely related than it is difficult to pinpoint whether the gesture accompanies the music or whether the music accompanies the gesture, had it not been for the chronological anteriority of Mahler's score. Yet, it is not impossible that, for certain passages, some kind of virtual gesture was present in Mahler's mind when composing his music, and his notes would then be an attempt to fix on paper these "moving arabesques drawn in the air" (Laban, 1970, p. 19) having the "biological [...] significance" (Hatten, 2004, p. 94) referred to in Chapter Five. This would then reverse the chronological order of events and the chain of causality, validating the idea that Mahler's music is, indeed, accompanying Bernstein's movements in as much as these movements display universal gestural archetypes, sonorised, at a given point in time, by Mahler. Finally, by holding up his movements in some sort of bodily apnoea, which he suddenly releases to convey the musical accents, Bernstein proposes a corporeal translation to the *sf pp*, aiming not

only to ensure a timely performance and shared impetus of these accents, but also to suggest a meaning to these panting *sforzandi*.

Again, Boulez's bodily behaviour is less sophisticated. He shows the vast crescendo-decrescendo arch through the amplitude of his gesture and the tonicity of his muscles. He complements this with a sudden acceleration of his gestural flow on each count, requiring extra arm loops to be performed properly and provoking his head to shake as a testimony of the muscular vigour he puts into the gesture. He keeps control of the orchestral dynamics at bar 410 and prevents the crescendo from bursting out too soon, which he achieves through this culture-specific gesture of holding, for almost a full bar, both palms facing down. Near the end of the crescendo he opens the space with his gaze, looking left to the double-basses at bar 417, which bears the indication *molto crescendo* for the entire string section. However, it is to the double-basses that he turns his eyes for the extra reserve of sound he needs to implement Mahler's requirement, capitalising on the inner dynamics of the orchestra – that is, the ability for the bass section not only to raise their own voice but also, by doing so, to lift up the entire orchestra and to be an incentive for all instruments to unleash their full power. On this particular topic, Ripley (P) remarks: "if [the basses] feel you are engaged with them [...] it will make all the difference in the sound you get" (2003, p. 85). Later on, it is also by looks that Boulez seems to control the *ppp* of the horns at bar 423, making his sonic expectation visible to the orchestra and supporting the idea that "by simply thinking [the conductor] can produce an entirely different performance" (Mackerras in Jacobson, 1979, pp. 94–95), in as much as thinking translates into facial expression.

2. Second movement

The previous section has pointed to the conductors' main characteristics. The analysis of the second movement delves further into the study of the conductors' movements.

Excerpt No. 6: 2nd Movement, bars 5-12, Bernstein: 25:56-26:17; Boulez: 23:14-23:28

A great difference of tempo (Bernstein, ♩ = ± 72; Boulez, ♩ = ± 100) explains Bernstein's occasional subdivision of the beat, which also allows him to shape the phrases in greater details

and, through ample and fluent arm movements, to call for a flowing, singing and light quality of tone. One may also see at 25:59 Bernstein briefly alluding to a waltz step, and his agreeable facial expression during this excerpt expresses/communicates to the orchestra the happy character of the music. Boulez moulds only the general shape of the phrases, and, by bending his chest (capitalising on the smaller-is-softer metaphor) and through the context-specific gesture of both palms facing down, points to the *pp* at bar 9. His general demeanour seems as relaxed as the music, but his attentive gaze calls for a great vigilance from players. Attending Bernstein's rehearsals would have permitted one to assess whether the missing *pp* at bar 9 is the result of a shared decision with players or simply the conductor's omission, which the orchestra follows up on, in contrast to Blackman's opinion that "[players] will correct in performance any of [the conductor's] indications which seem out of context with the composer's notation in their parts" (1964, p. 40).

Grant analyses this movement as a ABABA: "a song-form with repeated trio (middle section); but Mahler's well-nigh invariable custom of employing varied repetition, and hence allowing for natural organic growth, produces a form-scheme more accurately described as A1 B1 A2 B2 A3" (2003, p. 5). B2 is lengthy and passionate, contrasting and incommensurate with the rest of the movement. The next three excerpts feature the ends of A1, A2 and A3, and their analysis aims to trace possible variations of the conductors' gestural discourse relative to the same musical idea.

Excerpt No. 7: 2nd Movement, bars 30-37, Bernstein: 27:07-27:32; Boulez: 24:02-24:17

Excerpt No. 8: 2nd Movement, bars 121-132, Bernstein: 30:45-31:22; Boulez: 26:51-27:16

Excerpt No. 9: 2nd Movement, bars 265-276, Bernstein: 36:00-36:40; Boulez: 31:17-31:40

The beginnings of the passages from which these excerpts are extracted read:

No. 7: *Andante moderato*.

No. 8: *Tempo I*.

No. 9: *Tempo I*, followed by *Breit* (Broad), *wieder gehalten* (again sustained) and, at the very beginning of the third excerpt, *Nicht eilen. Gehalten* (Do not rush. Sustained).

Bernstein's tempos are:

No. 7: ♪ = ± 60 (quite a bit slower than his initial 72) with some tempo variations

No. 8: ♪ = ± 58, with more substantial (although unwritten) tempo variations than the first excerpt (mostly *ritenutos* and *a tempos*)

No. 9: ♪ = ± 56, with even more substantial tempo variations (also unwritten).

Boulez's tempos are:

No. 7: ♪ = ± 92

No. 8: ♪ = ± 90

No. 9: ♪ = ± 102

Bernstein and Boulez agree on the slower tempo at the end of A1 and A2 compared to the beginning of the movement. They also agree on the slightly slower tempo of the end of A2 compared to A1. Given the musical events occurring in the eighty bars between A1 and A2, being able to recover in A2 a tempo so close to A1 denotes a very fine control over the tempo as a structuring element. This is a quality that all categories of sources (manuals, conductors and players) expect from conductors. However, the tempos Bernstein and Boulez take at the end of A3 suggest radically different visions: Bernstein takes a slower tempo at every occurrence of the passage; Boulez (contrarily to Mahler's indications) aligns A3 with the general tempo of the movement (♪ = ±100), and even rushes it slightly. As a result, Bernstein's tempo in A3, more in line with Mahler's requirements, is nearly half of Boulez's.

In excerpt No. 7, Bernstein displays a fairly regular beat, both arms often mirroring each other as if marching calmly through a thin flow (that is, in Laban's terms, a movement that does not meet much resistance). His beat is ample and fluent, bouncing on a fairly high field (chest level) and

even higher as he cues the harp, which is consistent with the players' requirement for conductors to adapt their beat to the topography of the orchestra. Bernstein starts excerpt No. 8 with a beating field around waist level, and then resumes his chest level field, which he raises for the final pizzicato. Both arms mirror each other all the time, except for the very beginning of the sequence. At the end of the fragment, his left hand becomes totally inactive, possibly to channel the players' attention towards his right arm. The gestural flow seems thicker in this excerpt and corresponds to a thicker orchestral texture. Finally, in excerpt No. 9, Bernstein's right arm recovers the waist level and seem to travel through an even thicker flow. With a sense of actorliness, his clenched-fisted left hand shows his pain by shaking first and then staying at heart level, until both hands start mirroring each other again. Bernstein beats at shoulder level first, then chest, waist level, and chest level again. He ends this sequence with a culture-specific gesture (fingers on the lips) supported by a context-specific gesture (palm facing down and flickering fingers) to convey the very soft dynamics that he desires.

There are several common threads running through Bernstein's three excerpts. First, the very substantial mirroring that he displays conflicts with what manuals and players recommend. Coming from Bernstein, it is unlikely that this mirroring would result from his inaptitude to do otherwise, but more probably aims to express something coming close to embracing the whole orchestra. Second, Bernstein's gradual tempo decrease parallels an increase in muscular tension (as if moving through an increasingly thicker flow). However, the dynamics of the excerpts are respectively (1) *pp* (2) what may be understood through context as a *pp*, and (3) *p*. It is thus not to the tempo or the dynamics that Bernstein's corporeal behaviour seems to react, but to the gradual thickening of the orchestral texture and expansion of pitch register. Third, Bernstein's gestural discourse frequently changes beating field, not always for topographical reasons but also for expressive ones. Again, this contradicts the pedagogues' standard prescriptions of keeping a steady beating field and considering "up" as being "more".

Boulez's gestures, too, are consistent. His are supple and organic arm movements, wing flapping-like, coming close to Laban's polylinear movements, initiated here from the shoulders. Most of the times, the beating field remains steady around chest level. The left arm either mirrors

the right or remains still, hanging alongside the body. The amplitude of Boulez's movements seems to connect to tempo rather than dynamics. For example, at bars 121 and 273 he suddenly enlarges his right arm movements to indicate a *ritenuto* (in both cases leaving his left arm passive), although Mahler, at these very places, indicates only the beginning of a crescendo. Finally, both conductors seem to agree on conveying the *pp subito* at bar 122 in a fairly fluent way rather than as a sudden (*subito*) event.

It is worth noting that manuals rarely – if at all – require students to connect muscular tension to orchestral texture and/or register (rather than to the dynamics), which Bernstein does in this excerpt, or to relate their beat size to tempo changes (rather than to dynamic changes), which Boulez does.

3. Fifth Movement

The fifth movement provides the opportunity to observe both conductors relating to choral singing. As seen many times in the text-based part of this study, practitioners require from conductors to master both orchestral and choral conducting. The next excerpt provides a musical fragment with choir and offers the opportunity of exploring the conductors' approaches to singing and the implied narrativity attached to words.

Excerpt No. 10: 5th movement, bars 708-719, Bernstein: 1:28:03-1:29:00; Boulez: 1:22:25:-1:23:03

Bernstein starts his *ritenuto* at bar 708 with $\text{♩} = \pm 84$ and ends it at 711 with $\text{♩} = \pm 46$. Then, as Mahler requires, the ♩ becomes the ♩ of the *Pesante*, which Bernstein sets at $\text{♩} = \pm 44$.

Conducting manuals expect conductors to establish meaningful tempo relations and some conductors discuss tempo as a structuring element. Excerpt No. 10 may be seen as a implementation of these principles. Bernstein's *ritenuto* leads quite naturally to the *Pesante* ($\text{♩} = \pm 44$), the latter being about twice as slow as the beginning of the *ritenuto* ($\text{♩} = \pm 84$). Although in total accordance with Mahler's indications, Bernstein's tempo is very slow indeed. In their testimonies, some players require the conductor to mediate the composer's indications with their

instrumental or vocal possibilities. Here Bernstein chooses not to do so, and at 1:28:26 one can see the soprano solo needing to take an extra breath to hold her long high-pitched note. The effort he imposes on both soloists and the choristers possibly has to do with the out-of-this-world character he wants to assign to this fragment. The superhuman capabilities connoted with resurrection may, indeed, partake of the hidden meaning of the music which practitioners often expect conductors to unveil. Bernstein imposes this strain on himself too, as from the beginning of this fragment he displays through his entire body an exceptional level of energy which translates into muscular tension, shaking of the arms, swinging of the body, and intense gaze, all of which passionate conductors may be seen to be doing when dealing with powerful and emotional music. Nakra points to Karajan reaching “150 [heartbeats per minute] when conducting the Beethoven Leonore overture with the Berlin Philharmonic” (2000, p. 34), which is faster than his heart-rate when flying his plane through a dangerous manoeuvre.

When conducting the choir, Bernstein shouts silently every word, possibly to elicit from the choristers the necessary energy to build the climax of the symphony. There are vague traces of beat patterns in his gestural discourse. Most of his movements consist of an interrupted flow of heavy thrusts hammered into what appears to be very dense matter, or in shaking his arms to maintain the vibrancy of the sound. The beating-field is above head level, partly for topographic reasons (the choir is far away) but possibly also as a culture-specific gesture swaying between a fervent prayer and a spiritual victory. Bernstein not only mouths the words, his facial expression reveals the meaning they carry for him, possibly to provoke the same sentiments from his singers and induce a certain aural result. In spite of this utter excitement, he manages to survey the sound balance between the brass and the choir, asking the trombones to wait the required moment before commencing their crescendo.

The analysis of Bernstein’s videos points to the exuberance of his corporeal discourse, and the question arises as to the reason for such bodily behaviour. As mentioned above, Ekman distinguishes between expression and communication, remarking that the difference may lie in the level of intentionality accompanying a given behaviour. Paul Watzlawick (S) proposes: “we

cannot not communicate” (1967, p. 29) as a result a one’s actions or attitudes, whether intentionally or not. It is unlikely that Bernstein, for whom “nothing exists unless you can share it” (Matheopoulos, 1982, p. 9), would be unaware of the communicative potentiality of his corporeal demeanour. Knowing the high demands he puts on himself in terms of musical excellence, it is also unlikely that Bernstein, in the long run, would display attitudes that would show poor musical results, convinced as he was that the orchestra “plays only as well as you can conduct” (Ibid., p. 8).

Exploring whether effervescent conducting is likely to improve the players’ rendition, and if so on what grounds, this study now discusses two factors that may inform this process. The first has to do with the Facial Feedback Theory, which may be roughly summarised by the “smile and you will be happy” phenomenon. It proposes that the physical expression that is provoked by a specific feeling may also provoke this very feeling. Ross Buck points out: “skeletal muscle feedback from facial expressions plays a causal role in regulating emotional experience and behavior” (1980, p. 811). This would mean that choristers displaying a certain facial expression would experience part of their feelings because of this demeanour, which is also likely to affect their vocal outcome (much the same way the smile of a speaker is audible in their voice). What happens with singing in relation to facial expression may also happen with instrumental playing in relation to muscular tonicity. A loosened physical posture often provokes a relaxed psychological attitude, both of which may affect the sound quality. On the other hand, Jean-Pierre Changeux (2008, p. 243) points out: “men do not communicate [...] directly from brain to brain. They communicate [...] through the intermediary of specialised processes in communication”,²⁷ one of them being the mirror-neuron-system, which allows humans to “understand the actions of others [by] the observation [and] imitation learning” (Rizzolatti and Craighero, 2004, p. 169). The concatenated phenomena described by Rizzolatti and Craighero, and Buck, may explain how the corporeal message conveyed by Bernstein first travels from the conductor to the players and choristers through their observation and imitation, and how the orchestra and the choir then make sense of this message through Facial Feedback.

²⁷ “Les hommes ne communiquent pas [...] directement de cerveau à cerveau. Ils communiquent [...] par l’intermédiaire de processus spécialisés dans la communication”.

On the other side of the spectrum, Boulez displays very little facial expression and works more on the musical material than on the sentiments it arouses. It may be noted that he chooses a different setting for the soloists from Bernstein's, placing them just in front of the choir, slightly before the choristers, possibly as a way to apply Mahler's requirement for the soprano solo voice "not to be brought out in the slightest" [ohne im Geringsten hervorzutreten] (bar 472), although there is no placement instruction in the score. Other differences in the orchestral setting (first violins sitting on the left side of the conductor, second violins on the right) seems to result more from the orchestra's convention than the conductor's decision, as this placement seems to be a permanent feature of the ensemble, whatever the conductor.

Boulez commences his *ritenuto* at bar 708 at $\text{♩} = \pm 80$ and ends it at 711 at $\text{♩} = \pm 48$, all of which is comparable to Bernstein's tempos. However, he takes the *Pesante* at $\text{♩} = \pm 69$, in spite of Mahler requiring the ♩ of the *Pesante* to be performed at the same tempo as the former ♩ . One may wonder what Mahler means by "former ♩ ". Is it the exact tempo at the end of the *ritenuto* (which is Bernstein's reading) or the general pulse preceding the *Pesante* (which Boulez seems to choose somewhere along this *ritenuto*)? My understanding is that Boulez's interpretation draws less on this possible ambiguity than on his own musical intuition, applying Silbelius's advice to Boult: "if ever your musical instinct wants you to do something different from my markings, please obey your instinct" (Boult in Jacobson, 1979, p. 196). In contrast to Bernstein, Boulez seems to adapt his interpretation to the singers' and choristers' vocal possibilities. His adaptability may also be traced in the way he follows and absorbs tempo deviations rather than imposing his pre-established concepts over the orchestra and the choir. At 1:22:33 the timpani rolls lasts for longer than Boulez seems to have anticipated, but, applying here Monteux's advice to Dickson: "it is the wise conductor who knows when to follow the orchestra" (Dickson, 1969, p. 36), Boulez follows, indeed, the orchestra and lets the choir do the same.

At the beginning of the sequence Boulez displays a very clear 2/2 and a fairly standard *diminuendo* gesture (left-hand downward movement, palm facing down) followed by the corresponding gesture for *crescendo* (left-hand upward movement, palm facing up). During the

following passage he never mouths the lyrics, but, in energetic gestural thrusts conveys Mahler's *marcatos*. At bar 717, 1:22:50, he seems to support the sopranos for their high B flat with his open mouth and a very energetic directional movement of his left hand. This gesture appears as a metaphor for vocal production (projecting the voice forward) more than a reference to the structure of the music (the highest note of this choral prayer) or to the meaning of the word "Herz" (Heart), on which this highest note is placed. There then follows Boulez's *marcato* time-beating, possibly more to help the choir determine the exact placement of words and *melismas* at bar 718 than out of a real desire for a *marcato* sound. The orchestra utters, indeed, a lush legato. These choices confirm Boulez's collaborative approach to singers and players rather than his strict obedience to the instructions of the score, whether structural, narrative or textural.

Boulez displays a clear beat. The left-hand often mirrors the right hand, but otherwise remains inactive, except for the actions mentioned above. His facial expression is fairly neutral. Ekman (1993, p. 389) remarks: "there is evidence that people [who] show no change in visible facial activity [...] report feeling emotions and manifest changes in autonomic nervous system activity". Assuming that Boulez feels emotions while conducting Mahler's music appears evident. However, the dichotomy between Boulez's reduced range of facial expressions and his sensitive music-making raises the question of how players perceive "what is expected from them" (Rudolf, 1950/1995, p. 414), the conductor's verbal explanations during rehearsals answering the question only partially, as suggested by Walter and Blackman.

Contact points with the Continuum and the Matrix

The next section examines Bernstein's and Boulez's performance through the Continuum and the Matrix and aims to explore to what extent these models are instrumental in analysing symphonic performances. It does so regardless of the chronology of the musical event and aims to emphasise the conductors' general personas. This approach is an implicit critique of the models (how much can they reveal of the performance) but also, since these models were inferred from

the practitioners' testimonies, a critique of the verbal approach to conducting (how accurately people talk about conducting).

It has been pointed out that language and music share common traits: they both unfold in time, convey their substance through sound and rely on memory to construct their meaning. By displaying this cognitive resemblance they seem qualified to speak of one another. However, they also have specific realms, and categories applying to verbal testimonies about conducting may fail to fully describe conducting as a musical and gestural event. It may be conceived that analytical models may specialise in assessing actions and musical content, even when using words as vectors, but this is clearly not the case with the Continuum and the Matrix. These models were designed to analyse verbal testimonies and, as may be expected, cannot tell the whole story about a musical performance. However, this does not mean that they cannot tell any story at all. The next section attempts to grasp as much as possible of Bernstein's and Boulez's performance through the Continuum and the Matrix, and to compare the information inferred from the conductors' performances to the one inferred from the practitioners' testimonies.

Referring to the Visible Action Continuum, Bernstein and Boulez display very different Beings. In the first excerpt, Bernstein is more than "the servant of the composer" (Boult in Chesterman, 1976, p. 37). He seems to *be* the composer, or rather to enact his music. Boulez appears as an attentive and cordial pedagogue. The second excerpt confirms Bernstein as a charismatic actor of Mahler's music, and Boulez as a careful musical guide. The third fragment shows a passionate Bernstein, generous in his movements, whereas Boulez appears more calm and removed. By conducting from memory, Bernstein displays a thorough Knowledge of the symphony. Both conductors, in different ways, show their expertise of the inner dynamics of the orchestra (that is, how communication and musical flow circulate between the orchestral sections or among musicians of the same section). For example, Bernstein capitalises on the string players' contact with their principals who, therefore, constitute Bernstein's main visual focus. Boulez builds a *molto crescendo* through the double-basses and seems to rely on the impact this section will have on the rest of the orchestra.

One may assume that Bernstein's Preparation of this piece was longer than Boulez's, whether in terms of score study or life-long personal research about the composer's life and style.

Bernstein's performance of the symphony from memory suggests a much longer period of work on the score. Rudolf (M) remarks: "to spend many hours on memorizing [...] could be a waste of time that might be put to better use by probing more deeply into the background of a composition" (1950/1995, p. 324). Previn (C) notes, however, that the conductor's previous knowledge of a composer's style helps them understand any other work of this composer, possibly facilitating the memorisation process (Wagar, 1991, p. 208). Karajan (Matheopoulos, 1982, p. 230) speaks of the conductor's inner preparation (reading and analysing the score) and outer preparation (knowing the composer and feeling psychologically ready to perform their music). Bernstein's background and artistic identification with Mahler supports the idea that both inner and outer preparations have been thoroughly internalised by the time he recorded this video. On the contrary, Boulez's favourite repertoire consisting in twentieth-century music, it is likely that he did not commit himself to this inner and outer preparation to the same extent. Additionally, the frequency of his eye movements between the score and the orchestra supports the idea that the score constitutes a necessary and constant source of information. Seeing Bernstein's fast and complex movement sequence in the third excerpt, it seems probable that this Preparation has included rehearsing meticulously his movements in passages such as this one. Boulez's gestures appear more generic and do not convey the impression of having been rehearsed from a gestural point of view.

Bernstein's corporeal Aptitude appears quite clearly too, including the extrovert acting abilities evoked earlier. Both conductors seem equally in control of tempo stability and dynamic management. The conductors' Attitudes are very different. Bernstein imposes his vision on the orchestra, breeding artistic domination. Boulez seems to share the space with the players, respecting their musical freedom and inspiring musical interaction. Both Actions display precision, clarity and confidence, and emphasises the gestural complexity of the conducting art. In comparison, the way manuals and scholarly sources sometimes describe the process appears a simplification, similar to the sign in relation to its object. Both the complexity of the process and

the risk of its potential oversimplification may explain the conductors' reluctance to engage with exhaustive physical descriptions of what they actually do, all the more so when this description is out of musical context.

When analysing the videos through the Matrix, it appears that the conductors show very different Relations to the Composer. Bernstein enacts Mahler's music whereas Boulez appears as a humble guide to it. This difference impacts the conductors' Relation to the Score, Bernstein conducting the symphony from memory and engaging his Mental Construct. As mentioned in Chapter Three, Norrington suggests: "you can compose the piece when you conduct by memory. With the score you are following someone else's piece" (Wagar, 1991, p. 203). This is precisely what Bernstein does. On the one hand, conducting from memory leaves him open to errors: in the fifth excerpt he starts a crescendo sooner than instructed by the score, possibly to match the specific expressive needs of the moment, or maybe just by over-excitement; he inserts very short conclusive moments at bars 418 and 419, which endangers the ensemble of the ensuing pizzicato. But on the other hand, his reading echoes his inner feeling of the work. Boulez seems, indeed, to follow 'someone else's piece', but his rendition is generally closer to Mahler's indications. Most times, however, the conductors' Relation to the Score shows great fidelity to the written text. There is no right or wrong, it should be stressed, in the case of such experienced conductors, but they represent two radically different options, not only about Mahler's music *per se* but also concerning the conductors' role towards the composer and the players, respectively by applying scrupulously his indications or not, and by imposing their feelings to the orchestra or not. As evoked earlier, Walter reports Mahler telling him: "your Beethoven is not my Beethoven" (Bamberger, 1965, p. 193). A similar interpretational flexibility may legitimise Boulez's Mahler not being Bernstein's Mahler.

The above-mentioned differences of Being impacts also the conductors' Relations to Sound, Bernstein reaching from the outset towards the Spirit of the Music, whereas Boulez seems to concentrate on the sound itself rather than the story it tells. Bernstein, too, has advocated this point of view, notably in the chapter "What Do You Mean, Meaning?" in *The Joy of Music*. He

argues: “it always seems strange to a musician when the literary mind begins associating music with all kinds of extra-musical phenomena” (1954, p. 29). However, his actions in this video tell another story, loaded as they are with extra-musical gestural metaphors. The Spirit of the Music seems, indeed, to depart significantly from the sound itself.

The second excerpt offers a chance to discuss Ekman’s (S) distinction between expression and communication (1997). Bernstein not only communicates his intentions to the orchestra, but also reacts emotionally to the orchestral sound (that is, to the aural result of his own conducting), showing the players how successful they are in their musical rendition. Chapter Four emphasised the conductors’ commitment to make their emotions visible. Here is what they might mean.

There is a slight distinction to be made here between two micro-phases of the process. The first phase of Bernstein’s conducting points to the top-down communication he imposes on his orchestra versus the collaborative way in which Boulez interacts with his. The immediate second phase refers to the conductor’s attitude once the sound is produced, that is, being or not a ‘consumer’ of the event. It seems that both conductors implement a different teamwork spirit. Boulez is collaborative in building the music with the orchestra, Bernstein is so by letting himself be moved by the players’ rendition. These stances both impact and are the result of the conductors’ Inner State, which could be summarised as calm and concentrated for Boulez, and intense and extrovert for Bernstein. As is already clear, the latter conducts from memory – *by heart* could be said to express more fully his emotional commitment, echoing the pedagogues’ encouragement for students to look for everything in the music that could be memorised, including sentiments and atmospheres. Bernstein’s ability to memorise such a long and complex work shows the proficiency of his Mental Construct, and may partially explain his prestige in the players’ eyes and define the register of his Leadership.

Both conductors’ Inner States display high concentration. Bernstein seems to locate his artistic universe in a subjective narrativity whereas Boulez remains in the register of aural concentration alone. Bernstein’s Physicality displays a full corporeal involvement, meeting the pedagogues’ and

conductors' requirement that conductors express the music through their entire body, whereas Boulez confines his gestures to his arms and hands. Both conductors exhibit intense gaze. It could be that Bernstein's Instrumental Knowledge informs his fencing gestures as a way to inform the players' bow movements. Both conductors display a close relation to the orchestra but in different registers: Bernstein addresses them as imaginary spectators of his story; Boulez relates to them as collaborative musicians. His Adaptation may be traced in his split-second waiting time, at the beginning of the symphony, for a musician to be ready, but more essentially in the moulding of the timing, speed, and amplitude of his gestures according to the orchestral response. The conductor and the orchestra seem to knit a common fabric, whereas Bernstein's communicational mode appears more as a top-down stream: the conductor informs the orchestra.

According to the reshuffling principle, presented in the Introduction and applied all through this dissertation, the same topics may be distributed into the Continuum and the Matrix, and, through a different environment, elicit different discussions. However, this principle also permits us to momentarily merge both models, compounding, for example, Being with Inner State and Attitude with Relation to the Orchestra.

Bernstein's Being appears as exuberant as Boulez's seems removed, both traits connecting directly to their respective Inner State while conducting. Through a natural symbiosis, the players are likely to get emotionally carried away when playing under Bernstein and more careful and meticulous when playing under Boulez. It is not unlikely that this is precisely what these conductors expect from their orchestras. Chapter Four has listed a series of personal qualities emerging from the conductors' testimonies, and emphasised that these qualities are presented neither as personal traits that conductors say they possess nor as normative qualities that they say all conductors should possess. These qualities only reflect what may be naturally understood through the conductors' accounts. The players' mimeticism in relation to these qualities (observed or inferred) may partake of the conductor's style and explain phenomena such as the 'Karajan

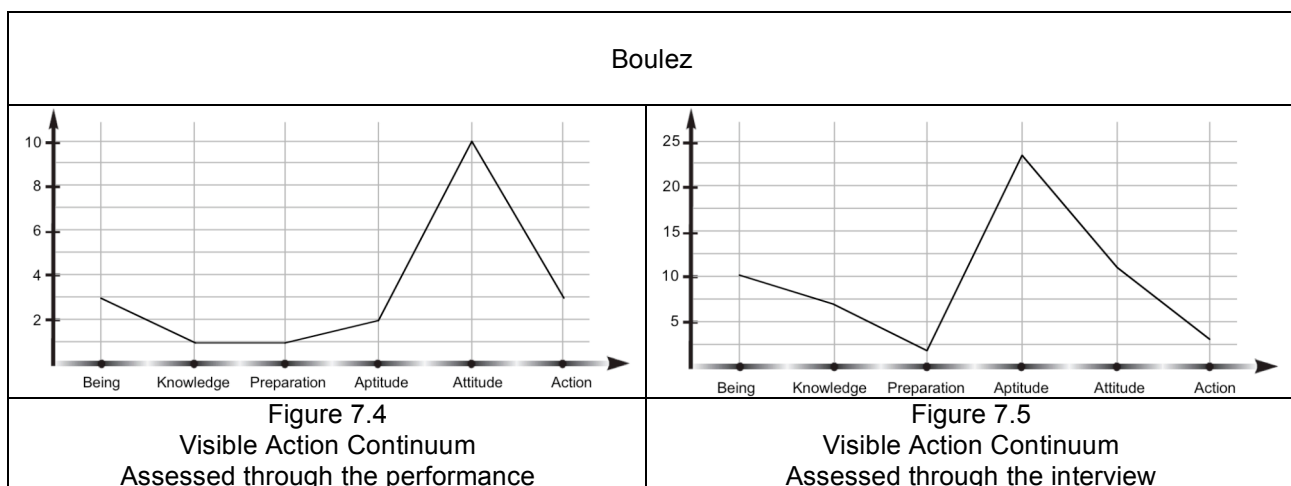
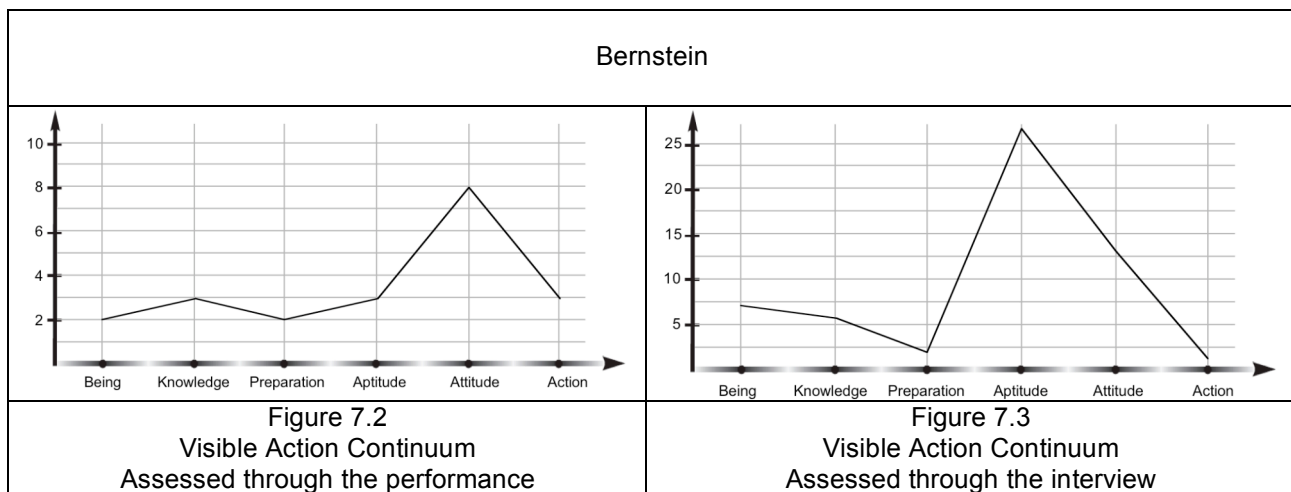
line' or the 'Ormandy sound'. It seems legitimate to speak here about a 'Bernstein atmosphere', specific to this conductor.

The same thing may be said about Attitude/Relation to the Orchestra. Bernstein addresses the players as first spectators of his joys and suffering. This attitude defines a certain relation to the orchestra, the top-down stream evoked earlier, which is natural for a conductor-orchestra relationship but is pushed here to extremes. There is no behavioural tyranny towards to orchestra, but there may be some sort of a *sentimental tyranny*, which may be inferred from the players' relatively passive facial expression, a tyranny which guarantees unity but prevents personal commitment. On the contrary, Boulez's attitude to the orchestra seems not to enter the realm of personal passions, leaving everyone free to feel about this music in his or her own way. He displays an emotional reserve and allows players more space for their own sentiments. This study does not delve into the discussion of how much sentimental reserve is appropriate when performing Romantic music, as this topic may vary with interpretational traditions and personal taste. However, by reading the corporeal tonicity of Boulez's players, there seem to be a great commitment and enjoyment in the orchestra. Players appear happy to have their personal space and to share the glory with the conductor. Boulez seems to capitalise on this relative "let go" attitude, making the players take their responsibilities and letting them "carry [him] instead of [him] carrying them" (Karajan in Matheopoulos, 1982, p. 222).

In addition to Bernstein's and Boulez's differences of temperament, there is also a chronological trend of the orchestral spirit to be observed, proceeding from less to more freedom granted to players. This difference corroborates other aspects of the musicians' current autonomy towards conductors, such as the management of the orchestra (be it by having a say in their work conditions or by voting in their music directors). Chapters Two through Six have pointed to the evolution of conductors' personas, going from being the pedagogues of the orchestra to becoming the players' collaborators. This is made quite visible in these videos, Bernstein appearing as the players' pedagogue and Boulez (thirty-one years later) as their musical partner.

The next section compares the conductors' Continua and Matrices derived from the conductors' interviews to those inferred from their performance.

Figures 7.2 and 7.4 (inferred from the performances as described in previous sections) display a smaller scale than Figures 7.3 and 7.5 (derived from the conductors' interviews). This seems quite natural, since symphonic performances are not primarily aimed as a contribution to knowledge about conducting. However, a musical event does not only tell about the composer's work but also about the performer's skills.



It is striking how Figures 7.3 and 7.5 resemble each other. Although displaying very different conducting styles, Bernstein and Boulez discuss conducting within a comparable frame, which the Continuum echoes (regardless of the actual content of their topics). For Bernstein and Boulez, conducting seems first and foremost a question of Aptitude, then Attitude and Being, all

of which possibly steers the conductor's Knowledge, Preparation and Actions. It is also striking how much the circumstances define the contribution. The Continuum of Boulez-the-interviewee resembles more the Continuum of Bernstein-the-interviewee than the one of Boulez-the-performer. Figures 7.2 and 7.4 focus on Attitude. Action gains visibility by virtue of the musical performance.

Knowledge, Preparation and Aptitude are higher for Bernstein. However, this should be carefully read since they apply to a performance of Mahler's music to which Bernstein committed himself in a very special way. The higher Being for Boulez is due, according to my analysis, to his personal stance and has little to do with the intensity of the Beings, but concerns the diversity of this point of the Continuum. Bernstein appears as the composer's charismatic servant (or an incarnation of his music, as it has been proposed), which casts the conductor in a certain fictionality. Boulez, on the contrary, appears as a real person, with a wider range of human qualities, which the Continuum reflects. This 'real-personness' may also induce from the players a wider range of human interactions, whence their higher personal commitment, if we judge by their facial expression and bodily demeanour. Since Actorliness is possibly an important part of the conductor's panoply, conductors may think of conceiving their 'roles' with the widest possible gamut of human nuances.

Reshuffling the topics of the Continuum onto the Matrix induces different discussions. Boulez's inferred pedagogical attitude lives here in the fourth string (Interaction with the Orchestra) around Work and Relation with the Orchestra, all of which concerns Boulez's general approach to the players and his task. Although the video excerpts highlight his adaptive stance towards the orchestral performance, it may be that this adaptation concerns his general approach to conducting. For example, he adapts to the orchestral setting (first and second violins facing each other), he adjusts the musical flow to the timpani rolls, he seems to match his tempo with the singers' possibilities, he complies with Mahler's requirement for the soprano solo not to dominate the choir and adapts the soloists' placement accordingly.

As was the case for the continua, the matrices inferred from the interviews (Figures 7.7 and 7.9) show more commonalities, quantitatively and qualitatively, than the ones inferred from the performances (7.6 and 7.8). It is intriguing that Bernstein does not delve into memory issues in his interview, whereas this aspect plays a major role in his performance. However, his two contributions (performance and interview) display consistency in that the five themes not addressed in his interview are not inferred from his performance either. Finally, Figures 7.6 and 7.8 (performances) both concentrate on the first, second and fourth strings of the Matrix (respectively, Musical Material, The Conductor's Self, and Interaction with the Orchestra). This has more to do with the design of the models than with the characteristics of the performance, and one may wonder to what extent the higher part of the model could possibly be inferred through a symphonic concert. Chapter Eight (Conclusions) delves into further discussion of the qualities and limitations of my models and proposes paths for further research.

It has been proposed that dismissing words for not telling all the story about a musical event is counterproductive, as they may nonetheless tell a significant part of it. Similarly, models which do not convey the full content of a performance may, however, reveal important aspects of it. The section devoted to the analytical description and the one devoted to studying the contacts points with the Continuum and the Matrix convey different information, both approaches being instrumental to comprehending the conductor's contribution to the performance.

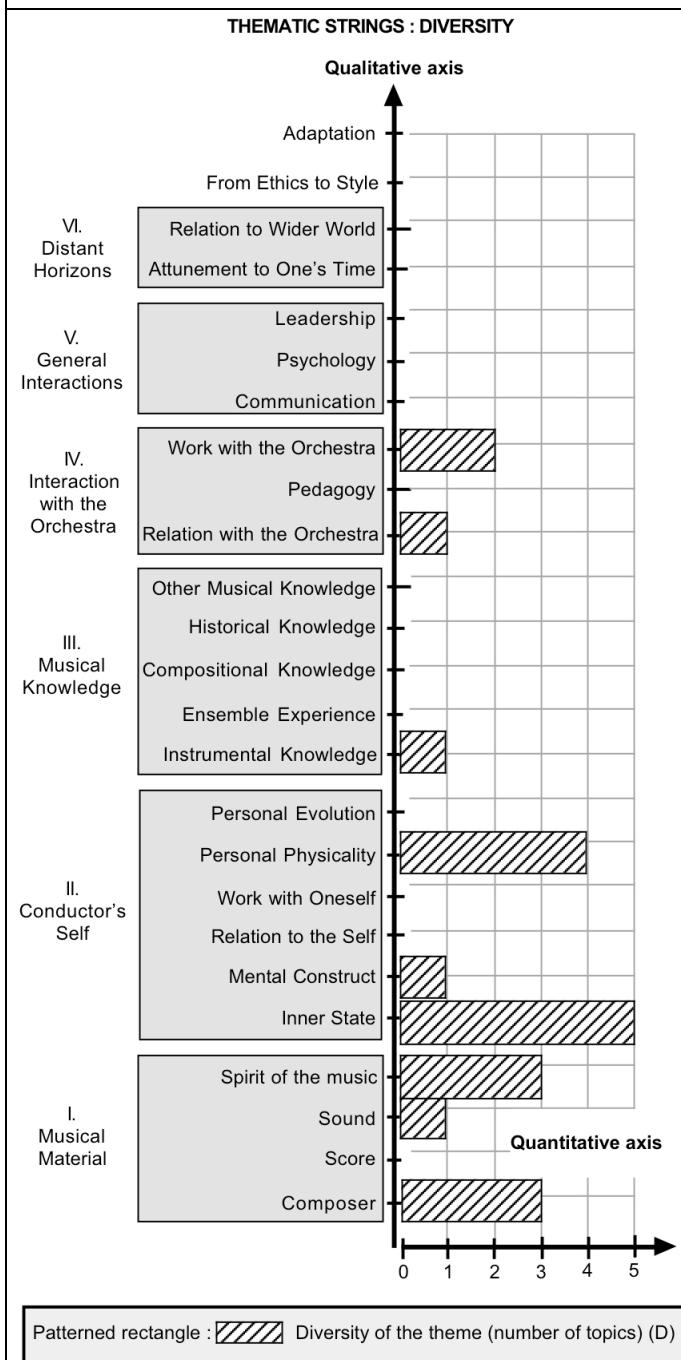


Figure 7.6
Thematic String Matrix
Assessed through the performance

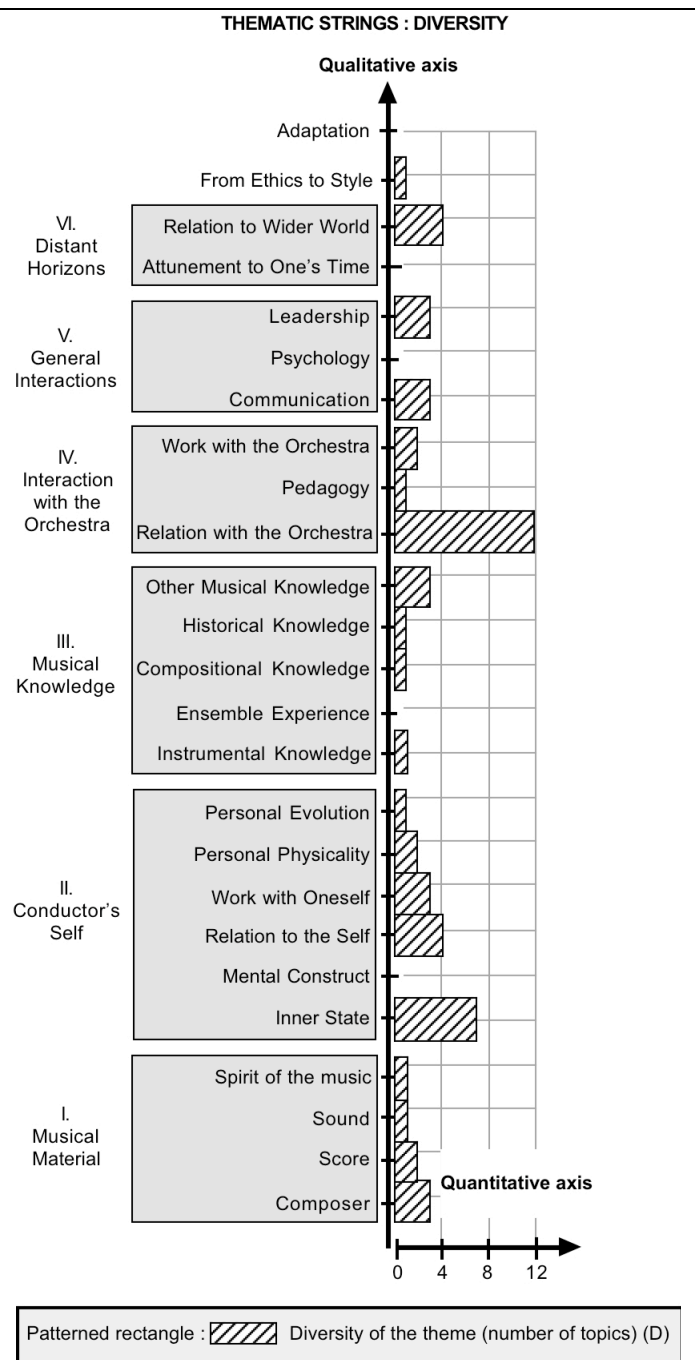


Figure 7.7
Thematic String Matrix
Assessed through the interview

Boulez

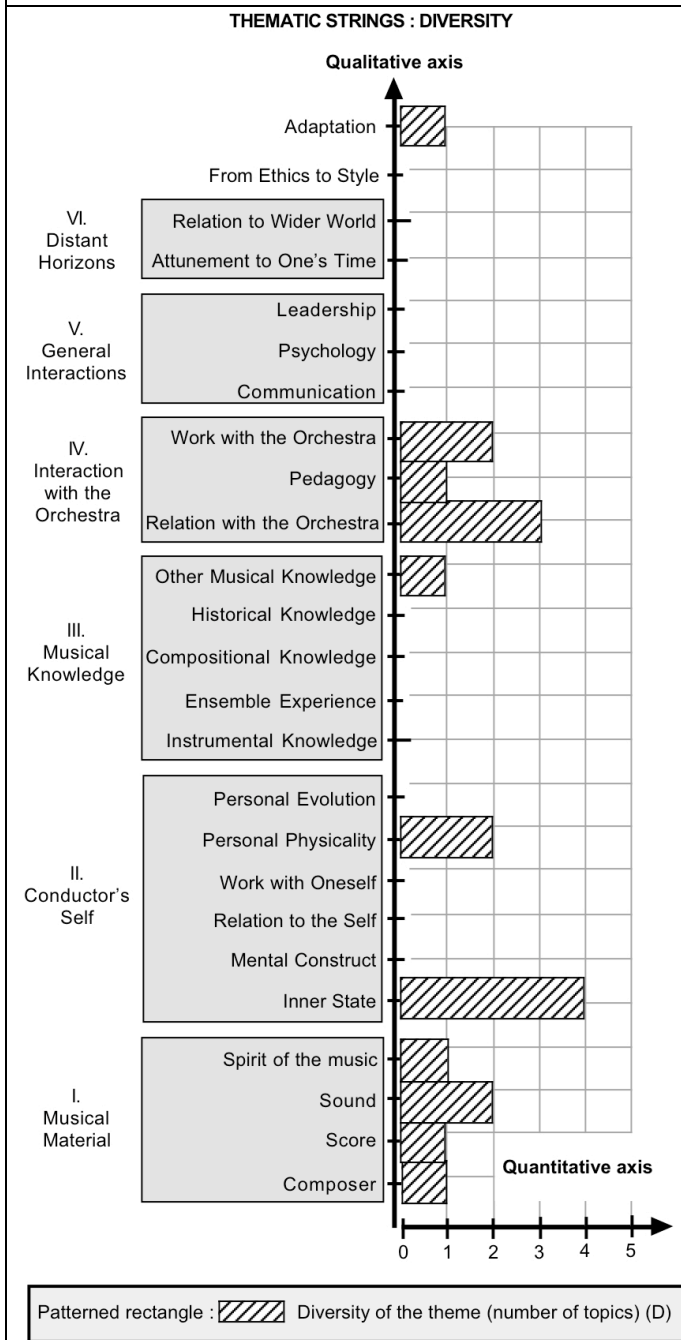


Figure 7.8
Thematic String Matrix
Assessed through the performance

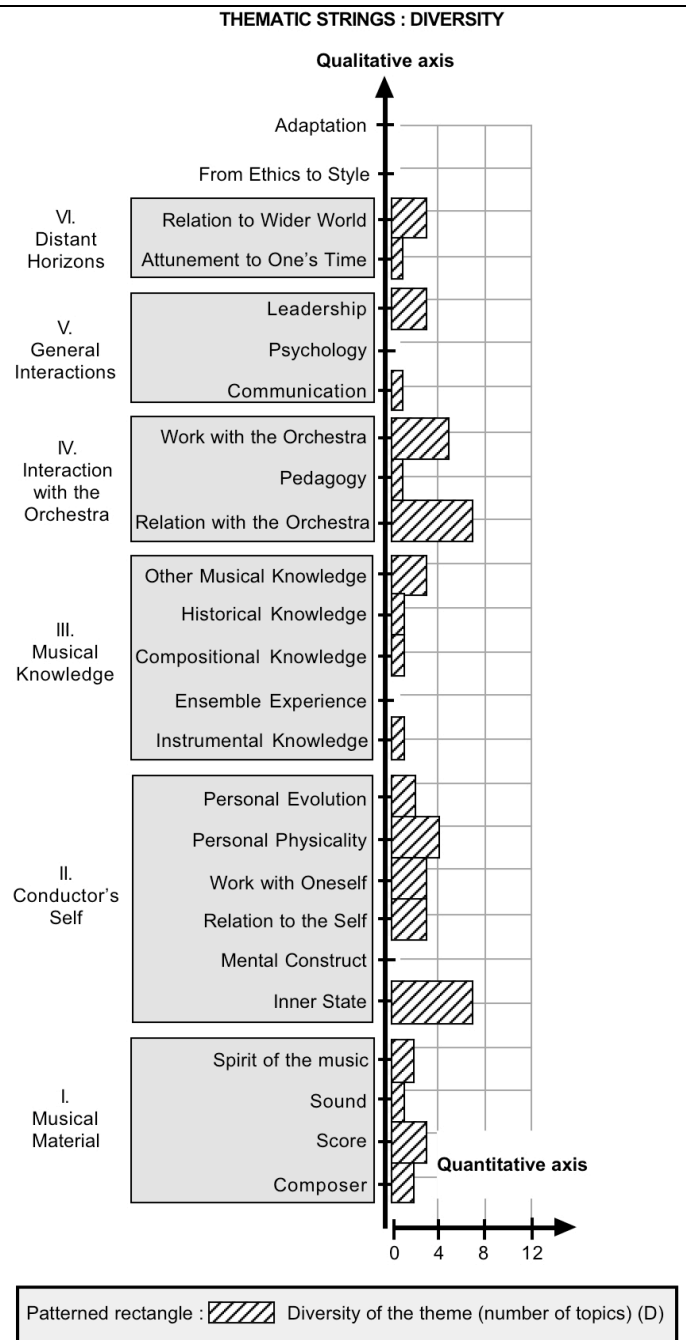


Figure 7.9
Thematic String Matrix
Assessed through the interview

Conclusions

Chapter Seven has analysed and compared Bernstein's and Boulez's conducting styles, and mapped the performances onto the Continuum and the Matrix. Due to their real-life situation, these videos do not permit a complete comparison between the two entire performances.

However, the material they provide allows a discussion of the conductors' styles and a correlation with the practitioners' testimonies. The video analyses were grounded in two main bodies of knowledge: artistic (Laban Movement Analysis), and scientific (nonverbal communication research).

The comparison between the videos has suggested that Bernstein conducts the content of the music (that is, the meaning he ascribes to sound) and addresses the orchestra as much on a human level as on a musical level, whereas Boulez works almost exclusively on the sonic parameters of the music. As a first consequence of their respective approaches, Bernstein displays what Rudolf calls a *free style* (1950/1995, Chapter 24), nurturing his gestures with metaphoricity, whereas Boulez displays a more textbook gestural discourse in which clarity appears the primary characteristic, and possibly the conductor's principal aim. As a second consequence, this study has proposed that Bernstein's style results in a more dominant conducting, whereas Boulez displays a more collaborative style. However, in spite of his authoritative conducting, Bernstein displays a direct gratefulness towards the orchestra by showing appreciation of the players' rendition, whereas Boulez proposes an open space for players to inhabit and into which to project their feelings. The analysis of Bernstein's conducting has also discussed the psychological mechanisms possibly enabling his gestures to translate into sound: observation/imitation learning, and facial feedback.

Chapter Seven has compared the Continua and the Matrices derived from the interviews to the ones inferred from the performance, and emphasised the role circumstances play in conveying information about conducting. Indeed, this comparison has highlighted the resemblance between Bernstein's and Boulez's Continua and Matrices derived from the interviews, versus the resemblance of the conductors' Continua and Matrices inferred through the performances. This chapter has also emphasised the limitations of the models in assessing musical events, as they were primarily designed to analyse verbal testimonies. However, by covering a wide range of

categories, these models have provided helpful tools to examine aspects of the phenomenon that may have not been identified and discussed otherwise.

The first conclusion I draw from the comparison between the practitioners' testimonies and the video analyses concerns the divergences between literature and praxis: the former requires that the beating field remains steady but Bernstein constantly changes his; conducting manuals prohibit mirroring but is practised by both conductors; according to textbooks, beat patterns should be clearly drawn but they are often indiscernible in Bernstein's gestures. In addition, some mappings proposed by manuals (bigger is louder, smaller is softer, up is light) do not match the conductors' gestures and the orchestral rendition.

The second conclusion points to the paucity of contact points between the written testimonies and the actual performance. Garnett has pointed to the benefit of cross-examining opinions about conducting and observations of musical performances (2009, p. 56). Although the visible part of the phenomenon supposes the previous integration of elements identified in Chapters Two through Six (by turning around the subject), this visible part has little to do with the vastness of the underlying process. It has been proposed that this integration is only possible through the conductor's intuition (by entering into the subject), which assists the simplification of an otherwise complex process. Moreover, as icebergs do not always show the same parts and immerse the same other parts, the visible tips change physiognomy according to circumstances: Bernstein's Mental Construct is visible through his conducting from memory; Boulez's Adaptability is probably more perceptible in a live concert than it would be in a studio recording (which offers the possibility of retakes and may elicit from the conductor a stronger reaction when things differ from how he had conceived them).

Finally, this study has remarked on the scarce collaboration between nonverbal communication specialists, researchers about conducting and practitioners of conducting. Blackman does point to the conductor's "descriptive arm and hand movements, which people in every walk of life have

been using as far back as history can trace” (1964, p. 87), referring to the anthropological roots of human gestures, which could inform the conductor’s gestures as well. However, practitioners do not seem keen to closely examine where these movements are grounded (culturally, physiologically, psychologically or otherwise). At the same time, the specialists of nonverbal communication, who study the roots and evolution of gestures, show little interest in conducting gestures. A closer collaboration between these bodies of knowledge would probably elicit a substantial increase of comprehension regarding the phenomenon. Reflecting on the subject, Johannsen and Nakra propose: “taking a holistic approach and including eye movements, facial expressions, posture, and whole-body movement, [would help] to better understand the complex and many-faceted art of music conducting” (2010, p. 294).

Chapter Eight: Overall Conclusions

In concluding this thesis, I set out to assess to what extent (1) this thesis has answered my research questions (2) the premises on which I base this study were pertinent, and (3) the methodologies I used were effective. I also aim to propose paths for further research. The first research question had to do with what practitioners say about orchestral conducting. This research has addressed the issue of representativeness: how much do ninety-four practitioners represent the entire community of orchestral practitioners and how many practitioners would ideally represent this community? Theoretically, one may say, the more, the better. As mentioned in the Introduction, this study has been limited by the available sources (ninety-four practitioners) and the brainpower processing the testimonies (a single researcher). However, on the evidence of the data that this study has drawn from the practitioners' accounts (qualitatively and quantitatively) I am confident that it has contributed to a better understanding of the orchestral phenomenon. Indeed, as important as the sheer number of testimonies it has analysed is the precaution this study has taken to fully comprehend their content, that is not only to understand what the practitioners say but also what they mean. Given the limitation of the everyday language in addressing artistic issues, this research has emphasised the risk of assuming that what is said is what is meant. By substantially quoting the practitioners' own words, by cross-examining the testimonies and by discussing them in the context of related academic studies, this dissertation has endeavoured to closely approach what practitioners think.

This cross-examination has helped identify what the practitioners seem to view as 'the most important thing about conducting'. As may be expected, they are divided on the matter, citing tempo, dynamics, inspiration, rehearsal techniques, psychological skills, score analysis, communication and physical proficiency. No particular pattern is traceable among the practitioners, but it seems that each source views the essence of this art differently, as suggested by the number, physiognomy and content of their Top Themes and Key Topics. It may be argued that the essence of this art could reside in the common grounds between all sources. This study

has identified three common Top Themes: Personal Physicality, Working Methods with the Orchestra and Relation with the Orchestra. The essence of the art of conducting would then lie in the interaction between the conductor and the orchestra, whether through the conductor's physicality and working methods or thanks to the working atmosphere that conductors induce. This idea is supported by the two common Key Topics that this research has detected: an efficient conducting technique (which is to display a host of qualities) and a proper rehearsal procedure (which the conductor is expected to adapt to a variety of circumstances).

The second research question refers to the segmentation of the phenomenon, and the possible impact of this segmentation on our understanding of the process. First, this segmentation has been instrumental in identifying the fragments that constitute orchestral conducting. It has also been instrumental in detecting divergent opinions about the phenomenon, first *between* sources (manuals, conductors and players), then *within* sources, and finally between opinions expressed by the same conductor. With no discernible pattern, the sources appear to conflict about a fair number of topics. Some practitioners require the conductor to explain verbally the piece and discuss with the players interpretational issues, while others expect them to refrain from talking; some practitioners advocate score rearrangement while others oppose this idea, some practitioners ask the conductor to absorb the players' input while others request that they display crystallised ideas from the first rehearsal; some practitioners highlight the necessity of acquiring a vast repertoire while some conductors prefer to restrict themselves to selected pieces; the conductors of the first generation, more than the second, see themselves as the players' pedagogues while the second generation of players, more than the first, views the conductor in this pedagogical role; some players request the conductor to beat ahead of time while others require ictus and music to coincide; some practitioners expect authority from the conductor while others praise their partnership spirit; some practitioners expect the conductor to respect traditions while others ask them to question those; some practitioners show interest towards the bodily aspect of conducting while other do not; some practitioners recommend listening to recordings while others prohibit this method; some practitioners advocate performing from memory while

others counsel not to; some practitioners highlight the importance of analysis while others declare not to engage with this; some conductors see in performance the most important part of the process while others view it as the less significant side; some players require the conductor to master baton technique while others rave about conductors who never studied conducting; some practitioners praise the conductors who develop their own orchestral sound while others admire those who adapt the tone colour of the orchestra to every composer. More recently (Sizer, 2013, online), the Israeli conductor Lior Shambadal has declared that he seeks to obtain a different sound for every orchestra. Finally, some practitioners advocate the use of the baton, work in front of a mirror, and the study of the score on the piano while others refrain from these methods.

This study has also highlighted some specific topics that both players and conductors have addressed: Davis supports the players' interpretational freedom and personal involvement in the orchestral process, and several players praise Boulez, Davis and Beecham for engaging with this attitude; Walter, Blomstedt, Kleiber and Blackman agree that, during performances, the conductor is to display the composite persona of the composer and their own; Slatkin and Blackman remark on the conductor's necessary self-teaching attitude.

It is beyond the scope of this study to judge any opinion more or less valid than any other. On the contrary, each idea is worth acknowledging and enriches the field. Identifying these complementary opinions and common ground has been made possible through the Continuum and the Matrix (applying the segmentation principle), which may grant these models the methodological efficiency for doing so. However, further analysis (possibly computerised) may discern the proportion of practitioners favouring one opinion or another within a given source. It must be emphasised also that this segmentation does not only aim to compare sources but also to expand knowledge. Indeed, identifying and understanding divergences of opinion results in more refined knowledge, that is – to put it simply – more knowledge. As things stand, no more divergences seem to occur between sources than within sources, the same conductor displaying

divergent beliefs as well (as was the case with Previn). This is, by itself, a significant piece of information.

Although it is a challenge to the rational mind to engage with the intangible aspect of some of the above-mentioned topics, negating them altogether does not constitute a productive approach, and the Continuum and Matrix have been designed to capture all types of opinion, whether they relate to apparent or unapparent phenomena, and whether these phenomena sit within musical boundaries or not. By the very *etic* stance of this study, not interfering to the slightest extent with the practitioners' testimonies, this research was unable to ascertain reasons for these differences, nor discern contexts clarifying these reasons. Further studies may investigate the practitioners' opinions in a more interactive way, exploring how they construct their beliefs about conductors and conducting. Do they primarily evaluate conductors through visual or auditory cues? Do they connect to conductors kinesthetically? Do they relate to conductors through their intellect or their affect? How much intuition or context comes into play in their opinions? In what circumstances do they promote one idea or the other? Although this more *emic* method would gain precision as to the extent of the practitioners' words and possible divergences, it also carries the risk of influencing opinions, and represents for the researcher the permanent challenge of being at the same time present in, and absent from, the investigation field.

The sources show, nonetheless, a fairly robust consistency when it comes to their Continua and Matrices (representing the practitioners' *general approach* to conducting), as opposed to the topics they address (displaying their *specific opinions* about the phenomenon). It seems that situational factors (that is, speaking as pedagogue, conductor or player) influences more *how* the practitioners address the phenomenon (i.e. which themes they develop) than *what* they say about it (i.e. which topics they address), since they develop a host of subjects in a fairly unpredictable way. Supporting this idea, all three practitioners displaying double status show clear resemblances with their root-sources in their Continua and Matrices, but only minimally address similar topics. It seems that the models have segmented the phenomenon in a meaningful way,

enabling efficient cross-examination between sources and displaying results that seem consistent with other scholarly studies and acknowledged chronological trends. However, the consistency of the models as opposed to the variance of the topics they house may require further research.

My first and second premises are that the practitioners' testimonies constitute, indeed, a valuable source for understanding the orchestral phenomenon and that segmenting the phenomenon through the Continuum and the Matrix was instrumental to this understanding. This study has benefited from the practitioners' plural voice (one of the founding principles of my methodology), each practitioner addressing some aspects of the phenomenon, but all of them covering a substantial territory. This study has allocated the practitioners' topics to the Continuum and the Matrix according to logic, contextual inference and the researcher's informed intuition. This method promotes consistency of criteria and the results stemming from the models seem to qualify this method as valid. However, further studies may involve several categories of observers, who, by virtue of their plural understanding, would provide more robustness to the analysis. They would display different observational abilities according to their personal credentials and professional training, some observers possibly remarking consciously what others absorb subliminally. Such a panel might also set up a computerised system allowing a finer categorisation of the topics, although it seems unlikely that any system would function without the human input. McNeill and Nakra have highlighted the need for human judges to evaluate gaze and map the conductor's gestures on to the orchestral sound. One may thus wonder whether text analyses referring to other environments than linguistic (engaging with metaphors related to visual, kinaesthetic, psychological and aural concepts) would be within current computational capabilities. It is revealing that words exist for concepts such as synonyms, antonyms and homonyms but, to my knowledge, no specific expression designates a word changing significance according to context. This is, however, what researchers meet when dealing with the orchestral phenomenon, a process mainly rooted in non-linguistic grounds. It is significant that ASIMO, the Honda robot that conducted the Detroit Symphony Orchestra on May 13, 2008 (Clark, 2008, online), could display all the programmed gestures necessary for effective

conducting, but was unable to react to, or interact with what the orchestra was proposing, whether in terms of tempo, musical sounds or instrumental gestures. The idea that the orchestral phenomenon would, indeed, be above autonomous computer capabilities may be a testimony of its complexity and, in a way, support the practitioners presenting it as mysterious or unfathomable. However, the careful supervision of a computerised system may be invaluable in detecting topics more precisely, refining categories, and establishing stable criteria for allocating topics into categories.

I emphasised in the Introduction the difference between the apparent and the visible. The distinction seems pertinent, and often is. However, this distinction may not always be applicable, as observers may sometimes hardly distinguish between something that is unapparent to them (and which they have no reason to believe is apparent to someone else) and something that is not visible at all. The practitioners often remark on the conductor's ability to improvise in concerts. To the newcomer, some of the conductor's attitudes may seem improvisatory, as they do not know the conductor's habits, whereas the regular player may be more apt to assess whether the conductor is following beaten or unbeaten tracks. It has been proposed in Chapter Seven that "the ability to detect movements in performance is secondary to understanding their meaning" (McCaleb, 2012, p. 12). I argue that an improvisatory gesture carries a different meaning from a prepared one. Therefore, a given gesture may carry one meaning for some observers and another for some others, depending on how acquainted these observers are with the conductor's style. For a chorister, the gestures of the orchestral conductor, different from those of his usual choral conductor, will have another vibrancy, hence significance, compared to the regular player of the orchestra. The same holds true for a substitute player as opposed to a veteran player working under the same conductor for years. In other words, the connection between the conductor's gesture during the concert and his or her gestures during rehearsals will be apparent to one musician and unapparent to the other. By the same token, the improvisatory nature of the conductor's gesture will appear differently to each player, depending on the gestures that they have seen the conductor display in the past. For as much as gestures are primarily visual cues,

the distinction between improvisatory and non-improvisatory gestures is visible/apparent to one player and not to the other. Needless to say, musicians have various ways of assessing conductors (visual, aural, kinesthetic and less palpable channels such as intellect and feelings) but it is beyond the scope of this research to investigate them. My aim was to focus on what players say about conducting and conductors, inferring at times what they mean, but, for a lack of sufficient information, refraining from exploring how they have constructed their opinions. This construction of opinion seems to be a worthwhile field of investigation but requires a more interactive approach between the players and the researcher than this study has adopted.

Studies have pointed also to phenomena that are physically perceptible but not consciously detected, through lack of perceptual time, free brain space at a given moment or whatever other cognitive reason. It is unlikely that players would all be aware of the same things and uniformly perceive all the others subliminally, whence the usefulness of the plural voice. However, it has been proposed that some aspects escape most performers' consciousness. Further research may methodically investigate the players' reactions in real time, and compare those with their own comments on the same event, filmed and replayed (repeatedly or in slow motion). The players would then become the analysts-spectators of their own performances. Going one step further, and given people's multiple identities, players may also be spectators, "outside of the ensemble, looking in", as McCaleb puts it (2012, p. 12), a situation that may change their perception of the phenomenon. This study has examined the testimonies of three practitioners displaying dual status. What applies to these practitioners may also apply to players acting as spectators, and further studies may investigate their testimonies, possibly revealing aspects they would not have addressed as players but which could remain unapparent/invisible to the uninformed spectator.

This study has remarked on the limitations of the common vocabulary in addressing the orchestral phenomenon. I pointed to the possible ambiguity of Konttinen's concept of stability regarding beat patterns. It has also been hypothesised that some players use the term of baton

technique but could actually mean metrical or even musical intelligibility. In his testimony Ormandy views himself as a good musician rather than a great conductor; Bernstein emphasises that it takes a rare musician to be a great conductor; and Karajan states that a bad musician can still be a good conductor. What do these words really mean? A significant part of the message lies in what Umberto Eco calls 'the role of the reader' (1979b), that is, the reader's imagination filling possible semantic gaps. This study brings to light the insufficiency of words in reflecting nuanced musical concepts. Some practitioners attempt to measure the orchestral phenomenon. Comet suggests that 95% of the conductor's work consists in analytical work, 4% in rehearsals, and 1% in performances; Rostropovich proposes that technique is only 30% of the process; Chailly proposes that the conductor's role is only 50% about music; players refer to third-, second-, and first- rate conductors. These figures only signify what the reader accepts them as signifying and may partake of what Garnett calls the 'mythologies' surrounding conductors and conducting, referred to in the Introduction. The Matrix seems to function as far as connecting words and inferring meanings are concerned (through logic, context or informed intuition). However, the very design of this study makes it impossible to verify the precise semantic content attached to each word. Additionally, the quantitative difference between pedagogues, conductors and players (regarding as much the number of practitioners involved as the extensiveness of their testimonies) makes it challenging to validly discuss the concept of consensus. These shortages open a potential field for further investigation (possibly more interactive than this study) and other tools may be required for a finer evaluation of the field.

My third research question has to do with validation: can words and actions validate one another? Let us recall that my last premise concerns itself with the relation between the practitioners' testimonies, and Bernstein's and Boulez's gestural discourses. On the one hand, the introduction to Chapter Seven has highlighted the limitations inherent in the video analyses proposed by this dissertation, recognising nonetheless their possible positive outcome. On the other, scholars have expressed concern about how accurately language conveys the nuances of the subject which it is speaking about, several of them dismissing the validity of words to describe music. The

practitioners, too, may have been sceptical about words being able to convey musical and gestural significance. However, other scholars, through the thousands of pages that they have collectively devoted to music, implicitly accept that words can tell, if not the whole story about music and actions, at least a significant part of it. The present dissertation belongs to this body of knowledge. However, as remarked in Chapter Seven, there seems to be little mutual interest among specialists of non-verbal communication and orchestral practitioners in their respective fields, preventing the establishment of a common body of knowledge, the possible development of a standard and more adequate vocabulary, and the subsequent refinement of concepts regarding this field.

Chapter Seven has explored the videos through non-verbal theories and movement analysis on the one hand, and the Continuum and the Matrix on the other, each procedure revealing different aspects of the phenomenon. Following the chronology of the music, the first approach consisted in a descriptive analysis and addressed the conductors' gazes, facial expressions, arm movements, kinespheres, efforts, beat patterns, postures, general muscular tonicity, gestural metaphoricity, actorliness and relation to narrativity. It has provided ways to construct possible meaning of the conductors' movements and trace gestural coherence. However, this study has not engaged with how the players may have perceived, analysed and translated the conductors' behaviours into musical acts. Additionally, this analysis has only examined the final stage of the production (the performance) and only parts of it (the ones displaying the conductors' images). Further studies may extend their analyses to entire performances, comparing more than two conductors in more than one piece, and relating rehearsals to concerts. Former studies have attempted similar projects. But, more often than not, they have not analysed leading conductors working with world-class orchestras, possibly lacking artistic validation of their rigorous scholarly work. This kind of study would probably require from renowned conductors and eminent orchestras a collaborative approach to academia, breaking free from the "musicology's historically odd relationship to performance" (Cook, 2010, p. 3). Practitioners and scholars, notably Garnett, Wöllner and Blackman, have remarked on the possible benefit of this kind of

collaboration, Wöllner specifically expressing his interest in the conductors' work on their facial expressions. Dickson has alluded to the important role this aspect plays in the communicational process between the conductor and the players, taking Danny Kaye as an example of successful corporeality. This collaboration may go one step further and include discussions between musicologists, non-verbal specialists and players, the latter analysing anew the filmed versions of their own performances.

Analysing the videos through the Continuum and the Matrix have helped induce causality between topics. Bernstein's memory (Mental Construct) seems to enable him to unleash his actorliness (Physicality); his life-long acquaintance with Mahler's music (Relation to the Composer) could feed his Knowledge of the piece. Boulez's adaptability (Relation with the Orchestra) and his use of eye gaze (Physicality) may be rooted in his Knowledge of the inner dynamics of the orchestra. In this way, the models were helpful. However, a very reduced material, if meaningful, has been drawn from this interface, compared to the number of issues that the practitioners raise in text-based part of this research. Further studies may connect several conductors' testimonies to their own performances, possibly building more contact points between words and actions, instead of bridging 114 testimonies to performances held by only two conductors.

The conclusions to this dissertation have discussed the outcomes and limitations of this study, identifying possible reasons for its deficiencies and potential paths for further research. The result of a research project may be somewhat disappointing compared to the researcher's initial expectations. A phenomenon is always greater than any study of it, much in the same way that "the music is invariably greater than [...] any performance of it" (Previn in Matheopoulos, 1982, p. 57). In their survey, 'Musician Evaluations of Symphony Orchestra Conductors', the Symphony Orchestra Institute (Illinois) remarks:

In retrospect, we are disappointed that we were unable to develop
[...] the broad and reliable base [...] which might have permitted more

comprehensive, detailed, useful, and interesting insights into [...] orchestra players' evaluations of their conductors. This may be a task which others will pursue; we wish them good luck!

(Symphony Orchestra Institute, 2002, p. 7)

I would like to extend a similar wish to all further researchers in the field.

Appendix 1

Analytical models

Table 1.1 : Visibility Factor Continuum (Max Rudolf, *The Grammar of Conducting*)

Being	Knowledge	Preparation	Aptitude	Attitude	Action
1. Trained musician 2. Hard and systematic worker 3. A genuine person 4. Authoritative with humility 5. An educator 6. A knowledgeable person	1. Composition 2. Analysis 3. Styles 4. Performance practice 5. An instrument 6. Techniques and possibilities of orchestral instruments and voice (e.g. to provide expression) 7. Group psychology 8. How to rehearse efficiently 9. All beat patterns (German/Italian style, and asymmetric measures) 10. When to display in your beat the local music/articulation and when not to 11. Different types of holds 12. Know that players' contact with your baton depends on their technique, alertness and difficulty of the passage 13. Know when to lead and when to follow (soloists & orchestra), 14. The modern notation systems for contemporary music 14. Players' natural interactions 15. How much in advance to cue 16. Play piano 17. Know the source of intonation problems (other than just tuning) 18. Past and	1. Study the score 2. Practise your technique – segment by segment - to gain artistic freedom 3. Self-warming up routine 4. Progressive study of the baton technique, 5. Develop consciousness of every corporeal articulation and muscular activity 6. Master the uneven speed/distance between beats 7. Work in front of a mirror and check the independence and smoothness of your gestures 8. Project in your mind the presence of the orchestra 9. Develop a fine differentiation and stability of tempos 10. Develop a vast and personal vocabulary/gamut of gestures 11. Work with and without a baton 12. Develop shades of gestural intensity 13. Master the starting of a piece on every count, practiced in several time signature, several tempos, several dynamics, several rhythmical values and several articulations 14. Master the showing of the dynamic changes 15. Master the independence between beating of the tempo and showing dynamic changes 16. Work on hand/arm independence 17. Choose/prepare the proper beat patterns according to tempos, meters and the fabric/content of	1. For team work 2. To convey musical intentions through gestures 3. To read an orchestral score (pitch and balance) 5. To work fast 6. To define clearly what you want and to get it 7. To choose what to show and what not to 8. To spread carefully dynamics 9. To master fractional values/beat subdivisions 10. To decide when and how to subdivide 11. To reflect on and find the right pulse/tempo and to choose the beat pattern accordingly 12. To feel asymmetric measures in 1 beat 13. To understand the various functions of beating (phrasing de music, counting de rests, preparing for next start 14. To correct (moderate or sharpen) the playing in real time 15. To express the general density rather than the local articulation 16. To master different types of holds and cutoffs 17. To accompany well 18. To anticipate/master tempo changes, with or without metric	1. Stimulate your players 2. Develop/achieve/display a general attitude of comfort, and a relaxed and controlled physical behaviour 3. Relate/parallel your conducting gestures to instrumental gestures, 4. Help players by your gestures 5. React to your players' reactions 6. Understand the effect of your gestures on players 7. Let players solve their problems on their own at times 8. Approach the beat pattern creatively to best match the music 9. Adapt your beat pattern to the level of your orchestra 10. Be attentive to the natural momentum of a change and don't disturb it 11. React in your beat to the orchestral playing (corrective function) 12. Adjust the type of holds and cutoffs to the music at hand, 13. Beware of misunderstandings while not beating all the counts 14. Learn by observing/being critical to other conductors and talking to their players 15. Be aware of, interact with and capitalise on the inner/ natural dynamics/interaction of the orchestra 16. Take into account the inner geography of the orchestra 17. Adjust your beating pattern to the specific	1. Right arm for baton, left hand for support, eyes for communication 2. Support arm movements 3. Harmonious gestures 4. Careful indication of dynamics by the size of your beat and the corporeal parts involved 5. Show basic information (tempo, start/stop of the music/sound) 6. Show phrasing, articulation and general expression 7. Display a coherent gestural discourse 8. Use a proper baton 9. Hold firmly the baton 10. If needed, depart from written beat pattern to accommodate more easily difficult rhythms 11. Use different bodily articulations/wrist angles in your beating pattern 12. Display various qualities of beating (legato, staccato etc.) 13. Keep the scale of your movements reasonable 14. Keep a quiet elbow 15. Mark clearly the beginning of a piece ("attention" + preparatory beat/breathing) 16. Look at your players before you start 17. Anticipate the tempo/music before starting 18. "Click" to emphasize the tonicity of the rhythm/music 19. Diversify your beatings 20. Adjust your conducting to the music and give just what is necessary (adequacy/economy)

Being	Knowledge	Preparation	Aptitude	Attitude	Action
	<p>present conductors/</p> <p>19. Conducting tendencies</p> <p>20. The historical background of operatic and symphonic writing</p> <p>21. Modern technology used in operas (monitors, amplification, machinery)</p> <p>22. The traps of recording sessions (e.g. tempo alteration due to fatigue and nervousness)</p> <p>23. Chamber music</p> <p>24. Know who to hire</p>	<p>the music</p> <p>18. Decide what players you conduct (depending on music difficulty and section's autonomy)</p> <p>19. Decide the inner division of asymmetric bars</p> <p>20. Practice various asymmetric beating</p> <p>21. Examine and prepare/correct score & orchestral parts incorporating your interpretive options</p> <p>22. Choose what part/character/layer of the music you want to show in your conducting (e.g. staccato/legato)</p> <p>23. Establish tempo relationships</p> <p>24. Musicological research (e.g. choose a reliable edition of the score, learn about the general/composer's background)</p> <p>25. Work out your interpretation with soloists before hand (e.g. starting tempo)</p> <p>26. Study thoroughly the solo part</p> <p>27. Build your inner image of the piece</p> <p>28. Play the score on the piano</p> <p>29. Develop your inner ear to read the score</p> <p>30. Analyse the score (segments, structure, harmony, counterpoint)</p> <p>31. Make decision for every single note</p> <p>32. Don't listen to recordings but develop your own ideas</p> <p>33. Hum/sing the score</p> <p>34. Record and analyse your own work with the orchestra</p> <p>35. Mark the score but don't make marking the score a compulsive routine, (add additional</p>	<p>equivalence</p> <p>19. To keep/feel a steady tempo</p> <p>20. To anticipate problems</p> <p>21. For memory (without being obsessed by this aspect)</p> <p>22. For hand/arm independence</p> <p>23. For expressive left hand</p> <p>24. To explain quickly/efficiently your intentions to the orchestra</p> <p>25. To sight read a score</p> <p>26. For efficient work/rehearsals</p> <p>27. For clear/articulate/concise verbal instructions</p> <p>28. To balance the orchestra</p> <p>29. To induce stylistic correctness</p> <p>30. For objective/unbiased listening</p> <p>31. To conduct symphonic and operatic works</p> <p>32. To reflect on performance practices, styles and traditions</p> <p>33. To deeply reflect on style, (good) taste, and practices</p> <p>34. To reflect on economic and sociological issues</p> <p>35. To lead people</p> <p>36. To market your self</p>	<p>atmosphere of the moment</p> <p>18. Develop your own way to express melodic lines</p> <p>19. Look for the hidden/secret meaning of music (behind the notes)</p> <p>20. Share your conception with players</p> <p>21. Adjust your beat to the musical flow</p> <p>22. Make the players feel unique</p> <p>23. Avoid monotony in your beating</p> <p>24. Develop your own style of conducting/rehearsing</p> <p>25. Adapt your gestures to your players, their needs, and the aural result</p> <p>26. Conduct more what is beyond the written, score</p> <p>27. Conduct more what has not been rehearsed</p> <p>28. Understand the proper use of gestures</p> <p>29. Address practical issues like mutes and page-turns</p> <p>30. Take into account players' musicianship (e.g. for solos)</p> <p>31. Inspire your players</p> <p>32. Free yourself from academic beat-pattern conducting to gain expressivity but without losing clarity</p> <p>33. Understand the extent/limits of your beating role</p> <p>34. Promote mutual listening (e.g. to ensure proper pitch)</p> <p>35. Combine flexibility and firmness in your beat</p> <p>36. Combine looking and listening to soloists</p> <p>37. Exercise constant aural control</p> <p>38. Investigate new trends of music and sound production</p> <p>39. Seek the help</p>	<p>)</p> <p>21. Show the character of the music from the upbeat</p> <p>22. Mark very sharply the rests before a rhythmic formula</p> <p>23. Adjust your muscular intensity to the music intensity</p> <p>24. Think of your movements as the trajectory of the tip of the baton</p> <p>25. Balance expression and clarity</p> <p>26. Adjust your style to your physique</p> <p>27. Support/soften the sound with your left hand</p> <p>28. Have both hands/arms support/complement each other</p> <p>29. Warn players for fast changes (dynamics/tempo/meter)</p> <p>30. Utilise full volume/all directions in your gestures for dynamic contrast</p> <p>31. Show musical structure and cues</p> <p>32. Inform players of conventions</p> <p>33. Prepare change of beat pattern</p> <p>34. Use baton for better visibility</p> <p>35. Show the end of the notes, according to the kind of end is needed/you desire</p> <p>36. Show the rests in your beat pattern</p> <p>37. Lead phrases through silences</p> <p>38. Support/cut-off with left hand</p> <p>39. For the same piece/tempo subdivide or not according to the music at hand</p> <p>40. Prepare the character of the piece during the opening rests</p> <p>41. Play on gestures density to achieve musical expression/phrasing</p> <p>42. Adapt your gestures to the specific group you are conducting</p> <p>43. Display a very clear preparation for pizz.</p> <p>44. Show ≠ types of holds and cutoffs, depending on the type of music and</p>

Being	Knowledge	Preparation	Aptitude	Attitude	Action
		<p>information to the score rather than highlight the printed info)</p> <p>36. Learn the principles of bowing to match/enhance your interpretive ideas</p> <p>37. Plan/prepare your rehearsal time</p> <p>38. Set your aims clearly to yourself</p> <p>39. Make only well-informed alterations to the score</p> <p>40. Investigate as many aspects of music and musical life as possible (instruments, pedagogy, acoustics)</p> <p>41. Learn all the words/meaning in an opera</p> <p>42. Learn the language (inflections) of the opera you are conducting</p> <p>43. Reflect on the use and the history of metronome</p> <p>44. Develop melodic/harmonic sense</p> <p>45. Develop instrumental aptitudes</p>		<p>of expert players for instrumental issues (bowing, percussion instruments, fingering, breathing)</p> <p>40. Manifest a humble attitude</p> <p>41. Achieve an emotional balance/control while conducting</p> <p>42. Keep an objective and alert listening attitude</p> <p>43. Give a meaning/content to the first contact with your orchestra</p> <p>44. Adapt to your orchestra habits (seating, schedule)</p> <p>45. Manifest willingness to change your concepts</p> <p>46. Keep deepening your musical style knowledge</p> <p>47. Develop an understanding of players' expectation towards you</p> <p>48. Be flexible with bowings</p> <p>49. Adapt your rehearsal technique to your players</p> <p>50. Elaborate a wise programming</p> <p>51. Display flexibility in your planning</p> <p>52. As a guest conductor, be careful with changing the orchestral seating but do dare experiments if necessary</p> <p>53. Cordial</p> <p>54. Make sure players' instruments are in perfect shape</p> <p>55. Limit the "read-through"</p> <p>56. Avoid fussing for wrong notes</p> <p>57. Establish the highest possible level</p> <p>58. Set the tone for the working atmosphere</p> <p>59. Use rehearsals as a way of building an orchestral spirit/community</p> <p>60. Adjust your rehearsing method to the piece at</p>	<p>the situation within the music</p> <p>45. Breathe with your singers while accompanying them</p> <p>46. Neutral-beating while just counting</p> <p>47. Indicate fermatas, cutoffs and restart clearly</p> <p>48. Indicate interruptions clearly (left hand if needed)</p> <p>49. Show accents/contrasts with right or left hand</p> <p>50. Keep/provide steady/firm rhythmic support during syncopations</p> <p>51. If you don't use a baton, build your own technique to achieve precision with your bear right hand</p> <p>52. Induce an accent on the start of syncopations</p> <p>53. Show phrases/structures (i.e. on a melodic and sectional level)</p> <p>54. Show (intensity of) the music with your general attitude</p> <p>55. Use your facial expression to convey the (intensity of the) music</p> <p>56. Work in sectionals</p> <p>57. Tune the orchestra again during rehearsals if necessary</p> <p>58. Open rehearsals with music-making first, then proceed with speeches</p> <p>59. Don't over-conduct</p> <p>60. Correct – with moderation, calm and a <i>propos</i> - players' performance with your beating (tempo/dynamics)</p> <p>60. When correcting the tempo, adjust first, then correct</p> <p>61. Don't beat long series of rests (cadenzas and recitatives)</p> <p>62. Stop beating to challenge players' attentiveness and improve their musical interaction</p> <p>63. Distribute appropriately the roles between both arms</p> <p>64. Subdivide only if necessary</p>

Being	Knowledge	Preparation	Aptitude	Attitude	Action
				<p>hand</p> <p>61. Be aware of group psychology</p> <p>62. Drawing the best out of your players</p> <p>63. Enthusiastic</p> <p>64. Humour</p> <p>65. Promote cooperation</p> <p>66. Keep players' enthusiasm alive</p> <p>67. Critical to yourself</p> <p>68. Admit guilt</p> <p>69. Enter composer's creative universe/process</p> <p>70. Communicate the deep meaning of music</p> <p>71. Tactful</p> <p>72. Alternate wisely criticism/encouragement</p> <p>73. Genuine</p> <p>74. Courteous cooperation with soloists</p> <p>75. Remain somewhat detached</p> <p>76. Combine rationality/intuition</p> <p>77. Adapt your conducting to the space (stage size/structure, lighting, seating)</p> <p>78. Reflect on good/bad traditions</p> <p>79. Attentive to but critical with composer's metronome markings</p> <p>80. Identify with opera singers (complexity of the task)</p> <p>81. Save singers voice during rehearsals</p> <p>82. Reflect on the difference between choral and orchestral conducting</p> <p>83. Show a total respect to the score</p> <p>84. Convey composer's universe</p> <p>85. Identify with composer</p> <p>86. Always keep learning</p> <p>87. Live with the music you are to conduct and integrate its pulse</p> <p>88. Except for motoric/rhythmic music, flexible tempo with an informed purpose</p>	<p>65. Adjust your conducting technique to modern pieces</p> <p>66. When needed, discuss your gestures with players (modern music)</p> <p>67. Define your field of beating by the tip of your baton rather than your hand</p> <p>68. Place your music stand in a way that does not interfere with your field of beating</p> <p>69. Change your field only if musically necessary</p> <p>70. Balance size and intensity of your gestures according to the music</p> <p>71. Adjust the size of your gestures to the size of your ensemble</p> <p>72. Use your eyes as much as possible (e.g. to cue), and look to the score as little as possible</p> <p>73. Have your gestures and your looks concur in expression</p> <p>74. Look at players in a way that makes them feel comfortable (e.g. don't stare before a solo)</p> <p>75. Display hand independence</p> <p>76. Do parallel movements in certain musical situations (e.g. climaxes)</p> <p>77. Use left hand for interpretation (phrasing, accents, dynamics) and cuing/call for attention/urgent signals</p> <p>78. Use left hand with parsimony</p> <p>79. Keep the left hand musical flow when turning pages</p> <p>80. Glance at your orchestra before starting</p> <p>81. Federate all players in a chord, regardless to their sound production mode</p> <p>82. Encourage orchestra's entrance with left hand</p> <p>83. Cue (always in advance and with expression) without over-cuing to secure</p>

Being	Knowledge	Preparation	Aptitude	Attitude	Action
				<p>89. Make the difference between metronome marking, pulse feeling and secure beating</p> <p>90. Realise the influence that present time/trends/fashion has on you</p> <p>91. Beware of stylistic diktat or generalisation (sometimes under the name of "tradition")</p> <p>92. Look for the "why" of score's content/peculiarities</p> <p>93. Make informed choices about re-orchestration (composer's sound, present and past instrumental technique, structural clarity etc.)</p> <p>94. Adapt your orchestral forces to the circumstances (acoustic and stylistic)</p> <p>95. Adapt your dynamic concept to orchestral forces</p> <p>96. Reflect on all the orchestral devices available to you for expression (doubling, div./units., pizz./arco, leg./tremol.)</p> <p>97. Always experiment</p> <p>98. Be a knowledgeable authority for your players</p> <p>99. Always question yourself</p> <p>100. Find your own methods for learning</p> <p>101. Curiosity</p> <p>102. Tolerance</p>	<p>stability and not embarrass players</p> <p>84. Prepare all new event occurring during the piece (expression, articulations, dynamic, tempo)</p> <p>85. Concentrate your gestures for the section/player(s) they are directed to</p> <p>86. Contrast "neutral" conducting and specific intentions/preparations</p> <p>87. Give clear/articulate/concise verbal instructions</p> <p>88. Favour specific to general comments</p> <p>89. Isolate layers of the texture to make it audible to all the players</p> <p>90. Connect your gestures to the desired <i>relative</i> dynamics rather than the <i>absolute</i> musical emotional content</p> <p>91. Help singers/soloists for their delivery</p> <p>92. Ensure continuous eye contact with the stage/pit, when conducting opera/choral pieces</p> <p>93. Display techniques that are understood by both choristers and instrumentalists</p> <p>94. Balance chorus/orchestra</p> <p>95. Breathe/mouth with the chorus</p> <p>96. Right hand orchestra/left hand chorus line</p> <p>97. Use "strict tempo test" in rehearsals</p> <p>98. Translate interpretive ideas into technical instructions</p>

Table 1.1 : Visibility Factor Continuum
Max Rudolf, *The Grammar of Conducting*

Figure 1.1 : Visibility Factor Continuum (Max Rudolf, *The Grammar of Conducting*)

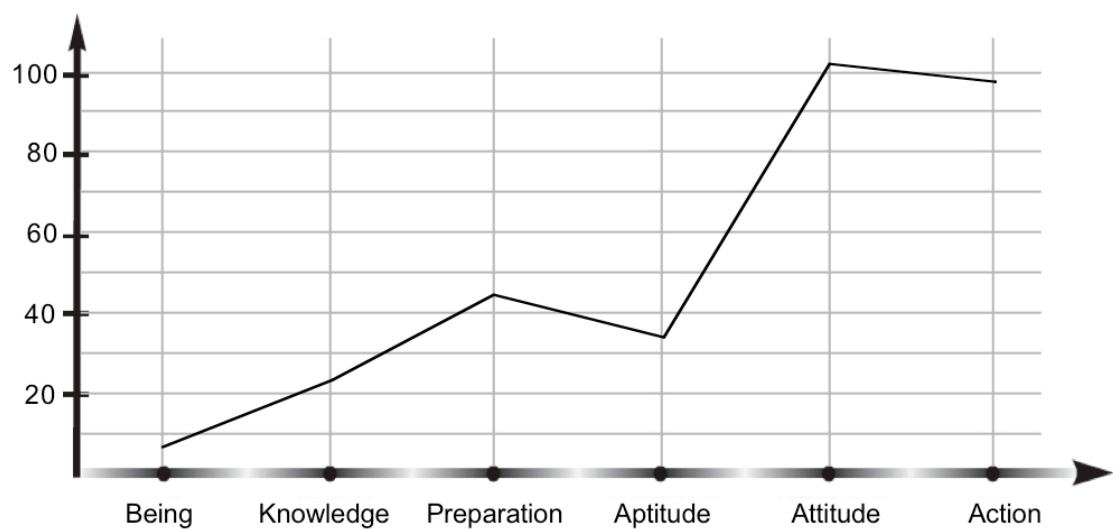


Figure 1.1 : Visibility Factor Continuum
Max Rudolf, *The Grammar of Conducting*

Figure 1.2 : Visibility Factor Continuum (First generation of pedagogues: Rudolf; Green, Labuta)

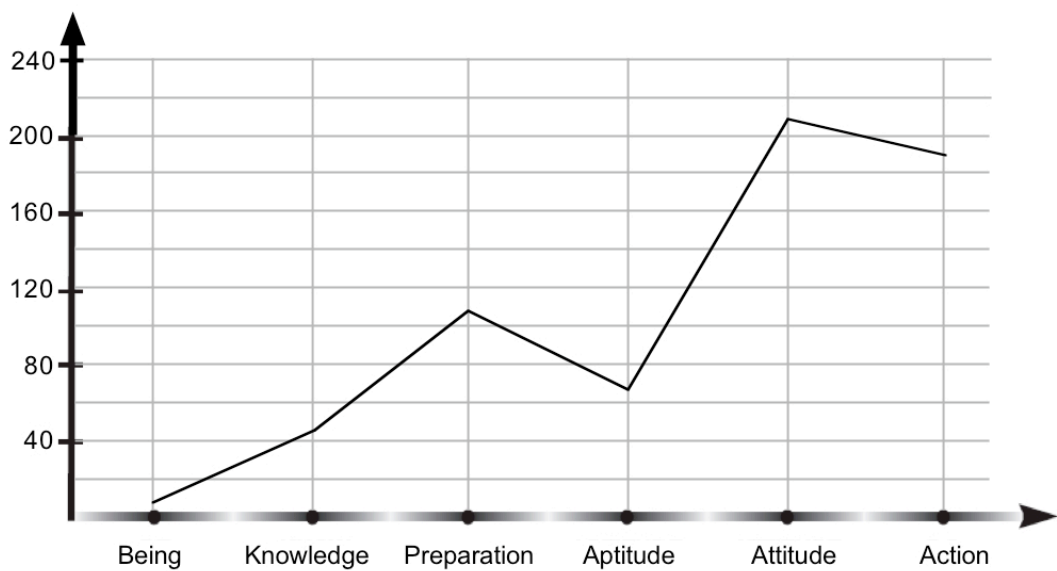


Figure 1.2 : Visibility Factor Continuum
First generation of pedagogues : Rudolf; Green, Labuta

Table 1.2 : 6+2 Thematic String Matrix (Max Rudolf, *The Grammar of Conducting*)

Themes	Topics	Themes	Topics
1. Relation to Composer	<ol style="list-style-type: none"> 1. enter composer's creative universe/process 2. attentive to but critical with composer's metronome markings 3. convey composer's universe 4. identify with composer 		<ol style="list-style-type: none"> conducting 7. develop an understanding of players' expectation towards you 8. cordial 9. tactful 10. genuine 11. remain somewhat detached 12. combine rationality/intuition 13. curiosity 14. tolerance
2. Relation to Score	<ol style="list-style-type: none"> 1. study / analyse the score 2. choose/prepare the proper beat patterns 3. decide the inner division of asymmetric bars 4. examine and prepare/correct score 5. establish tempo relationships 6. play the score on the piano 7. hum/sing the score 8. mark the score 9. make only well-informed alterations to the score 10. learn all the words/meaning in an opera 11. vow a total respect to the score 12. look for the "why" of score's content/peculiarities 13. make informed choices about re-orchestration 	6. Mental construct	<ol style="list-style-type: none"> 1. project in your mind the presence of the orchestra 2. build your inner image of the piece 3. memory (without being obsessed by it)
3. Relation to Sound	<ol style="list-style-type: none"> 1. balance the orchestra 2. balance chorus/orchestra 	7. Relation to the Self	<ol style="list-style-type: none"> 1. hard and systematic worker 2. critical to yourself 3. admit guilt 4. always question yourself
4. Spirit of the music	<ol style="list-style-type: none"> 1. to reflect on and find the right pulse/tempo 2. feel asymmetric measures 3. be attentive to the natural momentum of a change and don't disturb it 4. look for the hidden/secret meaning of music 5. conduct more what is beyond the written, score 6. flexible tempo with an informed purpose 	8. Working methods with yourself	<ol style="list-style-type: none"> 1. develop a fine differentiation and stability of tempos 2. examine and prepare/correct orchestral parts 3. musicological research 4. study thoroughly the solo part 5. develop your inner ear to read the score 6. make decision for every single note 7. don't listen to recordings, but develop your own ideas 8. record and analyse your own work with the orchestra 9. learn the principles of bowing to match/enhance your interpretive ideas 10. set your aims clearly to yourself 11. reflect on the use and the history of metronome 12. investigate as many aspects of music and musical life as possible 13. learn the language (inflections) of the opera you are conducting 14. anticipate problems 15. relate/parallel your
5. Inner state	<ol style="list-style-type: none"> 1. a genuine person 2. to hear well 3. objective/unbiased/alert listening 4. exercise constant aural control 5. manifest a humble attitude 6. achieve an emotional balance/control while 		

Themes	Topics
	<p>conducting gestures to instrumental gestures</p> <ol style="list-style-type: none"> 16. learn by observing/being critical to other conductors and talking to their players 17. live with the music you are to conduct and integrate its pulse 18. always experiment 19. right hand orchestra/left hand chorus line 20. find your own methods for learning 21. decide what players you conduct 22. choose what part/character/layer of the music you want to show 23. when and how to subdivide
9. Personal physicality	<ol style="list-style-type: none"> 1. master the beat patterns 2. progressive study of the baton technique 3. practise your technique – segment by segment - to gain artistic freedom 4. develop consciousness of every corporeal articulation and muscular activity 5. master the uneven speed/distance between beats 6. work in front of a mirror and check the independence and smoothness of your gestures 7. work with and without a baton 8. master the starting of a piece on every count 9. master the showing of the dynamic changes 10. master the independence between beating of the tempo and showing dynamic changes 11. work on hand/arm independence 12. spread carefully dynamics 13. master fractional values 14. understand the various functions of beating 15. master different types of holds and cutoffs 16. to anticipate/master

Themes	Topics
	<p>tempo changes</p> <ol style="list-style-type: none"> 17. to keep/feel a steady tempo 18. expressive left hand 19. approach the beat pattern creatively to best match the music 20. react in your beat to the orchestral playing (corrective function) 21. avoid monotony in your beating 22. understand the proper use of gestures 23. free yourself from academic beat-pattern conducting to gain expressivity but without losing clarity 24. understand the extent/limits of your beating role 25. combine flexibility and firmness in your beat 26. adjust the type of holds and cutoffs to the music at hand 27. adjust your beating pattern to the specific atmosphere of the moment 28. adjust your beat to the musical flow 29. right arm → baton, left hand → support, eyes → communication 30. supple arm movements 31. harmonious gestures 32. careful indication of dynamics by the size of your beat and the corporeal parts involved 33. show basic information (tempo, start/stop of the music/sound) 34. show phrasing, articulation and general expression 35. display a coherent gestural discourse 36. use a proper baton 37. hold firmly the baton 38. if needed, depart from written beat pattern to accommodate more easily difficult rhythms 39. use different bodily articulations/wrist angles

Themes	Topics
	<p>in your beating pattern</p> <p>40. display various qualities of beating (legato, staccato etc.)</p> <p>41. keep the scale of your movements reasonable</p> <p>42. keep a quiet elbow</p> <p>43. mark clearly the beginning of a piece ("attention" + preparatory beat/breathing)</p> <p>44. anticipate the tempo/music before starting</p> <p>45. "click" to emphasize the tonicity of the rhythm/music</p> <p>46. diversify your beatings</p> <p>47. adjust your conducting to the music and give just what is necessary (adequacy/economy)</p> <p>48. show the character of the music from the upbeat</p> <p>49. mark very sharply the rests before a rhythmic formula</p> <p>50. adjust your muscular intensity to the music intensity</p> <p>51. think of your movements as the trajectory of the tip of the baton</p> <p>52. balance expression and clarity</p> <p>53. adjust your style to your physique</p> <p>54. support/soften the sound with your left hand have both hands/arms support/complement each other</p> <p>55. utilise full volume/all directions in your gestures for dynamic contrast</p> <p>56. use baton for better visibility</p> <p>57. prepare change of beat pattern</p> <p>58. show the end of the notes, according to the kind of end is needed/you desire</p> <p>59. show the rests in your beat pattern</p> <p>60. lead phrases through silences</p>

Themes	Topics
	<p>61. support/cut-off with left hand</p> <p>62. for the same piece/tempo subdivide or not according to the music at hand</p> <p>63. prepare the character of the piece during the opening rests.</p> <p>64. play on gestures density to achieve musical expression/phrasing</p> <p>65. display a very clear preparation for pizz.</p> <p>66. show ≠ types of holds and cutoffs, depending on the type of music and the situation within the music</p> <p>67. neutral-beating while just counting</p> <p>68. indicate fermatas, cutoffs and restarts clearly</p> <p>69. indicate interruptions clearly (left hand if needed)</p> <p>70. show accents/contrasts with right or left hand</p> <p>71. keep/provide steady/firm rhythmic support during syncopations</p> <p>72. if you don't use a baton, build your own technique to achieve precision with your bear right hand</p> <p>73. induce an accent on the start of syncopations</p> <p>74. show phrases/structures (i.e. on a melodic and sectional level)</p> <p>75. show (intensity of) the music with your general attitude</p> <p>76. use your facial expression to convey the (intensity of the) music</p> <p>77. distribute appropriately the roles between both arms</p> <p>78. subdivide only if necessary</p> <p>79. adjust your conducting technique to modern pieces</p> <p>80. define your field of beating by the tip of your baton rather than your hand</p> <p>81. place your music stand in</p>

Themes	Topics
	<p>a way that does not interfere with your field of beating</p> <p>82. change your field only if musically necessary</p> <p>83. balance size and intensity of your gestures according to the music</p> <p>84. adjust the size of your gestures to the size of your ensemble</p> <p>85. use your eyes as much as possible (e.g. to cue), and look to the score as little as possible</p> <p>86. have your gestures and your looks concur in expression</p> <p>87. display hand independence</p> <p>88. do parallel movements in certain musical situations (e.g. climaxes)</p> <p>89. use left hand for interpretation (phrasing, accents, dynamics) and cuing/call for attention/urgent signals</p> <p>90. use left hand with parsimony</p> <p>91. keep the left hand musical flow when turning pages</p> <p>92. contrast “neutral” conducting and specific intentions/preparations</p> <p>93. connect your gestures to the desired <i>relative</i> dynamics rather than the <i>absolute</i> musical emotional content</p> <p>94. self-warm up routine</p> <p>95. develop a vast and personal vocabulary/gamut of gestures</p> <p>96. develop shades of gestural intensity</p> <p>97. practise various asymmetric beating</p>
10. Personal evolution	<p>1. develop your own way to express melodic lines</p> <p>2. develop your own style of conducting/rehearsing</p> <p>3. investigate new trends of music and sound production</p> <p>4. keep deepening your</p>

Themes	Topics
	<p>musical style knowledge</p> <p>5. always keep learning</p> <p>6. develop melodic/harmonic sense</p>
11. Instrumental/vocal knowledge	<p>1. an instrument</p> <p>2. techniques and possibilities of orchestral instruments and voice</p> <p>3. play piano</p> <p>4. develop instrumental aptitudes</p>
12. Ensemble experience	1. Chamber music
13. Compositional knowledge	1. composition
14. Historical/stylistic knowledge	<p>1. analysis methods/techniques</p> <p>2. styles</p> <p>3. deeply reflect on style, (good) taste, and practices</p> <p>4. modern notation systems for contemporary music</p> <p>5. past and present conductors/conducting tendencies</p> <p>6. the historical background of operatic and symphonic writing</p>
15. Other musical knowledge	<p>1. trained musician</p> <p>2. knowledgeable person</p> <p>3. conduct symphonic and operatic works conduct symphonic and operatic works</p> <p>4. reflect on the difference between choral and orchestral conducting</p> <p>5. make the difference between metronome marking, pulse feeling and secure beating</p> <p>6. realise the influence that present time/trends/fashion has on you</p> <p>7. beware of stylistic diktat or generalisation</p> <p>8. beware of stylistic diktat</p> <p>9. reflect on all the orchestral devices available to you for expression</p> <p>10. Know who to hire</p> <p>11. elaborate a wise programming</p>
16. Relation with the orchestra	1. know that players' contact with your baton depends

Themes	Topics
	<p>on their technique, alertness and difficulty of the passage</p> <ol style="list-style-type: none"> 2. team work 3. stimulate your players 4. develop/achieve/display a general attitude of comfort 5. be aware of, interact with and capitalise on the inner/ natural dynamics/interaction of the orchestra 6. make the players feel unique 7. take into account players' musicianship (e.g. for solos) 8. inspire your players 9. combine looking and listening to soloists 10. give a meaning/content to the first contact with your orchestra 11. manifest willingness to change your concepts 12. make sure players' instruments are in perfect shape 13. avoid fussing for wrong notes 14. establish the highest possible level 15. set the tone for the working atmosphere 16. bring the best out of your players 17. enthusiastic 18. humour 19. promote cooperation 20. keep players' enthusiasm alive 21. alternate wisely criticism/encouragement 22. courteous cooperation with soloists 23. identify with opera singers 24. save singers voice during rehearsals 25. look at your players before you start 26. breath with your singers while accompanying them 27. don't over-conduct 28. look at players in a way that makes them feel comfortable (e.g. don't stare before a solo)

Themes	Topics
	<ol style="list-style-type: none"> 29. glance at your orchestra before starting 30. federate all players in a chord, regardless to their sound production mode 31. encourage orchestra's entrance with left hand
17. Pedagogy	<ol style="list-style-type: none"> 1. be an educator to the orchestra
18. Working methods with the orchestra	<ol style="list-style-type: none"> 1. rehearse efficiently 2. know the source of intonation problems 3. work out your interpretation with soloists 4. plan/prepare your rehearsal time 5. work fast 6. when to display in your beat the local music/articulation and when not to 7. know when to lead and when to follow 8. how much in advance to cue 9. induce stylistic correctness 10. efficient work 11. correct the playing in real time 12. take into account the inner geography of the orchestra 13. react to your players' musical reactions 14. understand the effect of your gestures on players 15. let players solve their problems on their own at times 16. beware of misunderstandings while not beating all the counts 17. share your conception with players 18. conduct more what has not been rehearsed 19. address practical issues like mutes and page-turns 20. promote mutual listening 21. seek the help of expert players for instrumental issues (bowing, percussion instruments, fingering, breathing) 22. be flexible with bowings 23. display flexibility in your planning

Themes	Topics	Themes	Topics
	24. limit the “read-through” 25. use rehearsals as a way of building an orchestral spirit/community 26. adjust your rehearsing method to the piece at hand 27. warn players for fast changes (dynamics/tempo/meter) 28. show musical structure and cues 29. inform players of conventions 30. work in sectionals 31. tune the orchestra again during rehearsals if necessary 32. open rehearsals with music-making first, then proceed with speeches 33. correct – with moderation, calm and <i>a propos</i> - players’ performance with your beating (tempo/dynamics) 34. when correcting the tempo, adjust first, then correct 35. don’t beat long series of rests (cadenzas and recitatives) 36. stop beating to challenge players’ attentiveness and improve their musical interaction 37. when needed, discuss your gestures with players (modern music) 38. prepare all new event occurring during the piece (expression, articulations, dynamic, tempo) 39. concentrate your gestures for the section/player(s) they are directed to 40. favour specific to general comments 41. isolate layers of the texture to make it audible to all players 42. use “strict tempo test” in rehearsals 43. translate interpretive ideas into technical instructions 44. help singers/soloists for their delivery		45. insure continuous eye contact with the stage/pit, when conducting opera/choral pieces 46. apply techniques that are understood by both choristers and instrumentalists 47. breathe/mouth with the chorus 48. cue (always in advance and with expression) without over-cuing to secure stability and not embarrass players
		19. Communication	1. convey musical intentions through gestures 2. express bodily the general density of music 3. clear/articulate/concise verbal instructions to the orchestra 4. communicate the deep meaning of music
		20. Psychological skills	1. group psychology
		21. Leadership	1. be a knowledgeable authority for your players 2. to lead people
		22. Attunement to one’s time	1. know about modern technology used in operas 2. know the methods and traps of recording sessions
		23. Relation to the wider world	1. reflect on economic and sociological issues 2. marketing yourself
		A. From ethics to style	1. reflect on good/bad traditions
		B. Adaptation to the musical reality	1. accompany well 2. adapt your gestures to your players, their needs, and the aural result 3. adapt your conducting to the space 4. adapt your orchestral forces to the circumstances (acoustic and stylistic) 5. adapt your dynamic concept to orchestral forces 6. adapt your gestures to the specific group you are conducting 7. adapt your beat pattern to the level of your orchestra
			8. adapt your rehearsal technique to your players 9. adapt to your orchestra habits

Table 1.2 : 6+2 Thematic String Matrix
Max Rudolf, *The Grammar of Conducting*

Figure 1.3 : 6+2 Thematic String Matrix (Max Rudolf, *The Grammar of Conducting*)

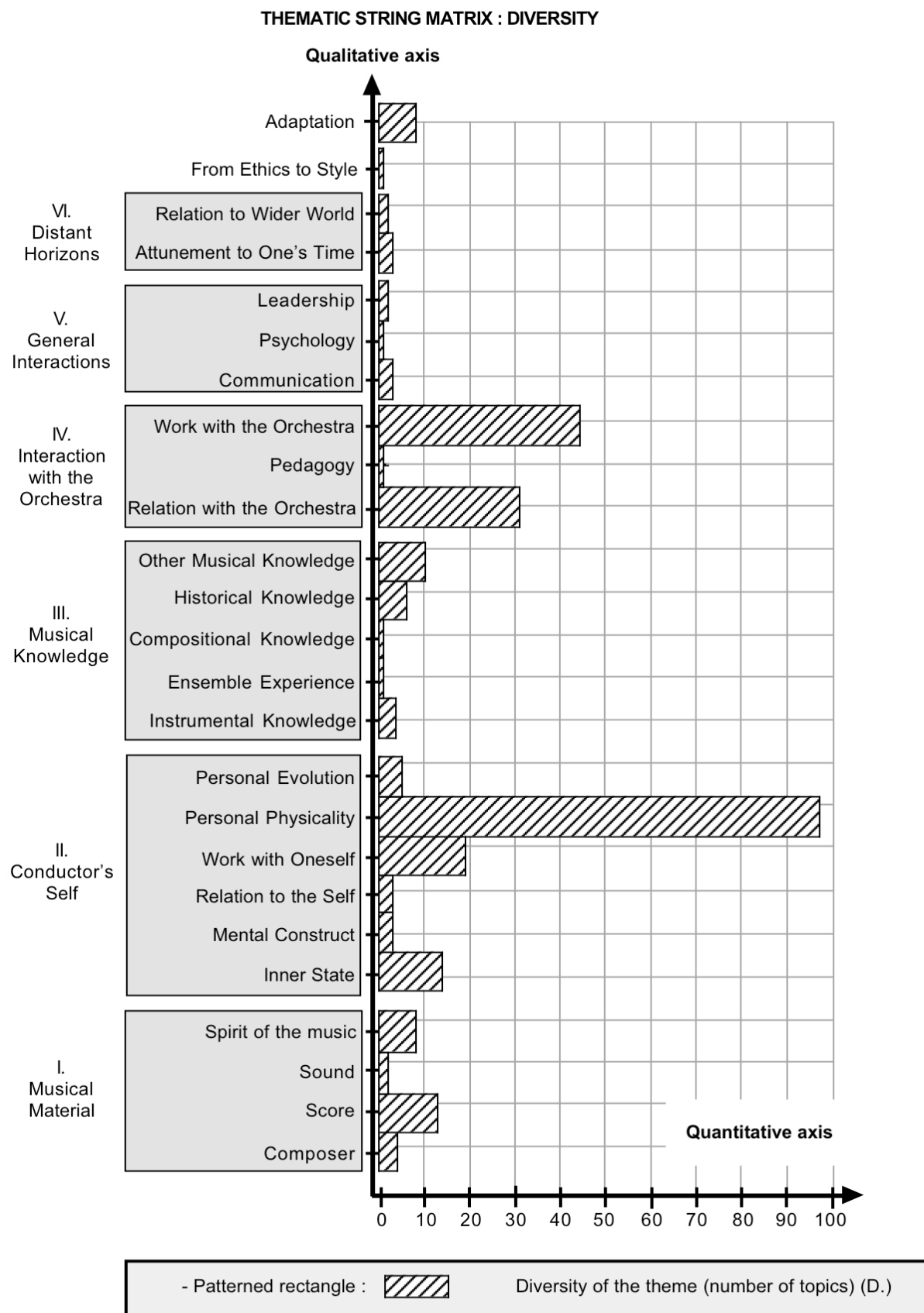


Figure 1.3 : 6+2 Thematic String Matrix
Max Rudolf, *The Grammar of Conducting*

Table 1.3 : 6+2 Thematic String Matrix (First generation of pedagogues: Rudolf; Green, Labuta)
(The numbers between parentheses designate the number of occurrences of a given topic.)

Themes	Topics
1. Relation to Composer D=9;ACR=1.1;W=10	<ol style="list-style-type: none"> enter composer's creative universe/process (2) attentive to, but critical with composer's metronome markings convey composer's universe identify with composer know composers' specific use of terms open to contemporary music do not forget, and respect the composer discover composer's intentions the composer's spirit more important than the letter
2. Relation to Score D=14;ACR=1.7;W=24	<ol style="list-style-type: none"> study / analyse the score (3) choose/prepare the proper beat patterns decide the inner division of asymmetric bars examine and correct score play the score on the piano (3) hum/sing the score (3) mark the score (structure + cues) (4) make only well-informed alterations to the score learn all the words/meaning in an opera vow a total respect to the score look for the "why" of score's content/peculiarities make informed choices about re-orchestration (2) know the score thoroughly study very carefully the soloist's part and its interaction with the orchestral fabric
3. Relation to Sound D=11;ACR=1.2;W=13	<ol style="list-style-type: none"> balance the orchestra (2) balance chorus/orchestra work on the tone colour ensure a good sound balance, specially when accompanying soloists beware of tone colour/quality ensure good balance/synchronisation stage/pit in operatic pieces beware of the sound specificities of the instruments ensure dynamic continuity between instruments mould the sound according the dynamic range of the instruments ask for dynamics relative to the orchestral sections (2) build contrasts/climaxes
4. Spirit of the music D=21;ACR=1.2;W=25	<ol style="list-style-type: none"> to reflect on and find the right pulse/tempo feel asymmetric measures be attentive to the natural momentum of a change and do not disturb it look for the hidden/secret meaning of music (2) conduct more what is beyond the written score flexible tempo with an informed purpose (3) choose what part/character/layer of the music you want to show Identify with the music musical integrity pay attention to metronome markings, if authentic build tempo relations within the piece (2) enhance the melody make all words of a song understandable ensure an overall rhythmic drive to theatrical performances capitalise on the magic of the

Themes	Topics
	<ol style="list-style-type: none"> theatre reveal the spirit of the music convey the spirit of the music through your hands, and connect all your gestures to a musical content show clearly the intensity during, and the restart after a fermata, in all metrical situations sustain legato lines display a great variety of tempos in operas build an interpretation
5. Inner state D=14;ACR=1.2;W=17	<ol style="list-style-type: none"> to hear well objective/unbiased/alert listening manifest a humble attitude achieve an emotional balance/control while conducting develop an understanding of players' expectation towards you cordial tactful genuine (2) remain somewhat detached combine rationality/intuition curiosity tolerance methodical always connect to the aural result of your conducting (3)
6. Mental construct D=6;ACR=1.8;W=11	<ol style="list-style-type: none"> project in your mind the presence of the orchestra/the geography of the ensemble build your inner image of the piece (3) memory (without being obsessed by it) (3) develop inner hearing (2) project the music ahead develop an inner tempo grid
7. Relation to the Self D=5;ACR=1.4;W=7	<ol style="list-style-type: none"> hard and systematic worker critical to yourself (including during and about your rehearsals and performances) (3) admit guilt keep your tools in good shape (mind and body) sincere and honest musicianship
8. Working methods with yourself D=39;ACR=1.2;W=46	<ol style="list-style-type: none"> develop a fine differentiation and stability of tempos (2) examine and prepare/correct orchestral parts musicological research develop your inner ear to read the score make decision for every single note do not listen to recordings, but develop your own ideas know when and how to subdivide record and analyse your own work with the orchestra (2) learn the principles of bowing to match/enhance your interpretive ideas set your aims clearly to yourself (2) reflect on the use and the history of metronome investigate as many aspects of music and musical life as possible learn the language (inflections) of the opera you are conducting anticipate problems and solutions (3) learn by observing/being critical to other conductors and by

Themes	Topics
	<p>talking to their players (2)</p> <ol style="list-style-type: none"> live with the music you are to conduct and integrate its pulse find your own methods for learning prepare before the first rehearsal starts develop awareness of the change of phrasing/density establish where you stand regarding the score (understand it, like it, adapted to your ensemble) develop the attitude of a listener ("objective" listening) solve your conducting problems by a proper musical approach consider the rehearsal as a performance for you study with recordings/compare interpretations/be aware of their specificities identify conducting problems build up our skills very methodically work with the metronome asses the overall shape of the piece creative approach to conducting hands-on attitude rather than theoretical technical work relate to great conductors as models balance score analysis and personal intuition "If it works, it's right" attitude concentrate at all times on what you hear inform your interpretive decisions by historical and stylistic arguments detect the melody analyse the harmony (2) gain independence from the score decide what players you conduct
9. Personal physicality D=144;ACR=1.3;W=189	<ol style="list-style-type: none"> master the beat patterns (3) progressive study of the baton technique practise your technique – segment by segment - to gain artistic freedom develop consciousness of every corporeal articulation and muscular activity master the uneven speed/distance between beats work in front of a mirror and check the independence and smoothness of your gestures (5) work with and without a baton (2) master the starting of a piece on every count master the showing of the dynamic changes master the independence between beating of the tempo and showing well-staged dynamic changes (2) work on hand/arm independence spread carefully dynamics master fractional values understand the various functions of beating to anticipate/master tempo variations/changes (3) to keep/feel a steady tempo (2) expressive left hand (2) approach the beat pattern creatively to best match the

Themes	Topics
	<p>music and gain expressivity, without losing clarity</p> <ol style="list-style-type: none"> react in your beat to the orchestral playing (corrective function) avoid monotony in your beating understand the proper use of gestures understand the extent/limits of your beating role combine flexibility and firmness in your beat adjust the type of holds and cutoffs to the music at hand adjust your beating patterns and qualities to the musical flow and texture, and the specific atmosphere of the moment (2) right arm → baton, left hand → support, eyes → communication supple arm/wrist movements (2) harmonious gestures careful indication of dynamics by the size of your beat and the corporeal parts involved (2) show basic information (tempo, start/stop of the music/sound) (2) show phrasing, articulation and general expression (2) display a clear/coherent gestural discourse (2) use a proper baton hold firmly the baton (2) if needed, depart from written beat pattern to accommodate more easily difficult rhythms use different bodily articulations/wrist angles in your beating pattern keep the scale of your movements reasonable keep a quiet elbow mark clearly the beginning of a piece ("attention" + preparatory beat/breathing) (3) "click" to emphasize the tonicity of the rhythm/music diversify your beatings adjust your conducting to the music and give just what is necessary (adequacy/economy) show the character of the music from the upbeat mark very sharply the rests before a rhythmic formula adjust your muscular intensity to the music intensity think of your movements as the trajectory of the tip of the baton (4) balance expression and clarity adjust your style to your physique support/soften/stop the sound with your left hand (3) have both hands/arms support/complement each other utilise full volume/speed/size/density of your gestures for dynamic contrast and phrasing (3) use baton for better clarity/visibility (2) prepare change of beat pattern show the end of the notes, according to the kind of end is needed/you desire show the rests in your beat pattern lead phrases through silences for the same piece/tempo

Themes	Topics
	subdivide or not according to the music at hand
	58. when subdividing beats in slow tempo, distinguish well between main/subordinate beats
	59. prepare the character of the piece during the opening rests.
	60. display a very clear preparation for pizz.
	61. show ≠ types of holds and cutoffs, depending on the type of music and the situation within the music (3)
	62. neutral-beating while just counting
	63. indicate fermatas, cutoffs and restarts clearly
	64. indicate interruptions clearly (left hand if needed)
	65. show accents/contrasts with right or left hand
	66. keep/provide steady/firm rhythmic support during syncopations
	67. if you do not use a baton, build your own technique to achieve precision with your bear right hand
	68. induce an accent on the start of syncopations
	69. show phrases/structures (i.e. on a melodic and sectional level)
	70. show (intensity of) the music with your general attitude
	71. use your facial expression to convey the (intensity of the) music
	72. distribute appropriately the roles between both arms (e.g. right hand orchestra/left hand chorus line) (2)
	73. subdivide only if necessary
	74. adjust your conducting technique to modern pieces
	75. place your music stand in a way that does not interfere with your field of beating
	76. change your beating field only if musically necessary
	77. adjust the size of your gestures to the size of your ensemble
	78. use your eyes as much as possible (e.g. to cue), and look to the score as little as possible (3)
	79. have your gestures and your looks concur in expression
	80. display hand independence
	81. do parallel movements in certain musical situations (e.g. climaxes)
	82. use left hand for interpretation (phrasing, accents, dynamics) and cuing/call for attention/urgent signals (3)
	83. use left hand with parsimony
	84. keep the left hand musical flow when turning pages
	85. contrast "neutral" conducting and specific intentions/preparations
	86. connect your gestures to the desired relative dynamics rather than the absolute musical emotional content
	87. self-warm up routine
	88. develop a vast and personal vocabulary/gamut of gestures
	89. develop shades of gestural intensity (3)
	90. practise/invent/master various asymmetric beating (3)
	91. perform your drill regularly to gain artistic freedom and train

Themes	Topics
	your neurones
	92. master your relaxation ability
	93. develop physical awareness of your muscles, limbs, and movements
	94. develop awareness of verticality/horizontality
	95. develop a sense of the rebound
	96. work beat patterns by mirroring
	97. practise various amplitudes of gesture
	98. acquire an automated beating (2)
	99. find flexibility in your gestures to convey flexibility in the music
	100. train both hands, according to their specificities (2)
	101. choose your baton carefully
	102. practise holding/moving the baton with the help of inner images
	103. beat a different beat-pattern with each hand
	104. build your technique in your neuronal brain first
	105. reflect on your gestures
	106. mark the ictus
	107. start the music with an impulse
	108. give the preparatory beat in the opposite direction than the beat itself
	109. hold the baton in a way that reflects the music
	110. avoid circular baton movements to ensure visibility
	111. conduct pianos also with big gestures and fortes also with small gestures
	112. show very clearly last consonants of a phrases
	113. stop the movement for staccatos
	114. mark clearly the syncopation gesture
	115. show accents, specially non-metrical, anticipatively
	116. use left hand to help signal the tempo in syncopations cases
	117. use a specific gesture for the passing of silences
	118. change beating field and use up-ictus to lighten the sound or delay the downbeat (2)
	119. cue right side of the ensemble with right hand/left side with left hand
	120. keep a stable/confident posture (2)
	121. comment your right hand, or the present sound, with your left hand
	122. relate/parallel your conducting gestures to instrumental gestures (2)
	123. practise your exercises in various tempos
	124. walk while beating
	125. let gravity guide your movements
	126. build "inevitability" in your gestures
	127. keep your left-hand ready for action
	128. show confidence by the way you walk
	129. always show your intentions in anticipation
	130. hold your baton centred in front of your body
	131. imbue your time-beating with phrasing, style and expression between the beating points
	132. perform preparatory beat with arm, breath, chin, head nod and facial expression

Themes	Topics
	133. show tempo, dynamic and articulation/texture in your preparatory beat 134. start your preparatory beat from immobility 135. display convincingly a great variety of fermatas (attack, duration, termination, intensity) 136. Support fermatas with left hand 137. when cueing show attack, dynamics, style, and expression 138. cue with left hand, baton, or head 139. show the rise and fall of phrases (left-hand and right-hand collaborating) 140. connect all your gestures to the sound 141. have your gestures be guided by your aural inner image 142. take into account the inner geography of the orchestra 143. concentrate your gestures for the section/player(s) they are directed to 144. use music stand almost flat for a better visibility
10. Personal evolution D=5;ACR=1.6;W=8	1. develop your own way to express melodic lines 2. develop your own style of conducting/rehearsing (2) 3. keep deepening your musical style knowledge 4. always keep learning (3) 5. develop melodic/harmonic sense
11. Instrumental/ vocal knowledge D=4;ACR=1.8;W=7	1. 12 an instrument (2) 2. techniques and possibilities of orchestral instruments and voice (3) 3. play piano 4. develop instrumental aptitudes
12. Ensemble experience D=2;ACR=1.0;W=2	1. chamber music 2. develop your listening skills as an ensemble player too
13. Compositional knowledge D=2;ACR=1.0;W=2	1. composition 2. theory, harmony, counterpoint, analysis, orchestration
14. Historical/ stylistic knowledge D=6;ACR=1.7;W=10	1. analysis methods/techniques 2. history/styles (3) 3. deeply reflect on style, (good) taste, and practices (2) 4. modern notation systems for contemporary music 5. past and present conductors/conducting tendencies (2) 6. the historical background of operatic and symphonic writing
15. Other musical knowledge D=17;ACR=1.1;W=19	1. trained/fine musician (2) 2. knowledgeable person 3. conduct symphonic and operatic works 4. the different type of ensembles (choirs, bands, orchestras), and related conducting styles 5. make the difference between metronome marking, pulse feeling and secure beating 6. realise the influence that present time/trends/fashion has on you 7. beware of stylistic diktat or generalisation 8. beware of stylistic diktat 9. reflect on all the orchestral devices available to you for expression 10. know who to hire 11. clefs, transpositions, and transposing instruments and their history (2) 12. 20 th Century score conventions 13. know what is involved in a good

Themes	Topics
	recitative conducting 14. know what is involved in a good operatic conducting 15. aptitude to structure the piece's rendition (climaxes) 16. reflect on the musical phenomenon 17. choral conducting
16. Relation with the orchestra D=60;ACR=1.1;W=66	1. know that players' contact with your baton depends on their technique, alertness and difficulty of the passage 2. team work (2) 3. stimulate your players 4. develop/achieve/display a general attitude of comfort (2) 5. be aware of, interact with and capitalise on the inner/ natural dynamics/interaction of the orchestra 6. make the players feel unique 7. take into account/capitalise on players' musicianship (e.g. for solos) 8. inspire your players (3) 9. combine looking and listening to soloists 10. give a meaning/content to the first contact with your orchestra 11. manifest willingness to change your concepts 12. make sure players' instruments are in perfect shape 13. avoid fussing for wrong notes 14. establish the highest possible level 15. set the tone for the working atmosphere 16. bring the best out of your players 17. enthusiastic 18. humour 19. promote cooperation 20. keep players' enthusiasm alive 21. alternate wisely criticism/encouragement 22. courteous cooperation with soloists 23. identify with opera singers 24. save singers voice during rehearsals 25. look at your players before you start 26. breathe with your singers while accompanying them 27. do not over-conduct 28. look at players in a way that makes them feel comfortable (e.g. do not stare before a solo) (2) 29. federate all players in a chord, regardless to their sound production mode 30. do not over-cue not to embarrass players 31. magnetic 32. share your musicianship 33. pace the progress of the orchestra 34. guide the orchestra 35. build up the orchestra (technically and artistically) 36. have the orchestra play "with you" rather than "under" you 37. think of players' perception of your gesture (2) 38. balance creativity/intelligibility in your gestures 39. develop the dynamic range of the orchestra 40. isolate the music making moment from the burden of daily life 41. choose carefully the works according to your ensemble

Themes	Topics
	42. display self-confidence 43. share the success with your orchestra 44. master everything at the same time while conducting 45. Thank your players after the performance 46. be an example for your players 47. work out your interpretation with the soloist before the orchestral rehearsal 48. start playing with a single count preparation 49. display an appearance of spontaneity in concert 50. use all possible means to convey your message to the players 51. adapt your rehearsal method to the ensemble involved 52. demonstration is better than talks 53. display a positive attitude 54. demanding attitude 55. punctual 56. convey as much as possible through gestures 57. provoke feedback from players 58. promote the search for, and satisfaction of improvement 59. ensure your visibility for players/singers 60. help singers/soloists for their delivery
17. Pedagogy D=5;ACR=2.2;W=11	1. be an educator to the orchestra (3) 2. Clarify problems to the orchestra (rhythm, tempo, dynamics) 3. give oral instructions on your conducting gestures 4. give oral instructions, including verbal imagery, to convey your musical stylistic and pedagogical options (5) 5. teach your players interpretation, style, and rhythmic precision
18. Working methods with the orchestra D=59;ACR=1.3;W=79	1. rehearse efficiently (3) 2. know the source of intonation problems 3. work out your interpretation with soloists 4. plan/prepare your rehearsal time (3) 5. work fast (2) 6. when to display in your beat the local music/articulation and when not to 7. know when to lead and when to follow 8. know how much in advance to cue 9. induce stylistic correctness 10. correct the playing in real time (2) 11. react to your players' musical reactions 12. let players solve their problems on their own at times 13. beware of misunderstandings while not beating all the counts 14. share your conception with players 15. conduct more what has not been rehearsed 16. address practical issues like mutes and page-turns 17. promote mutual listening (2) 18. seek the help of expert players for instrumental issues (bowing, percussion instruments, fingering, breathing) (2) 19. be flexible with bowings 20. display flexibility in your

Themes	Topics
	planning 21. limit the "read-through" 22. use rehearsals as a way of building an orchestral spirit/community 23. adjust your rehearsing method to the piece at hand 24. warn players for fast changes (dynamics/tempo/meter) 25. show musical structure and cues 26. inform players of conventions 27. work in sectionals (2) 28. tune the orchestra again during rehearsals if necessary 29. open rehearsals with music-making first, then proceed with speeches 30. correct in real time – with moderation, calm and a propos - players' performance with your beating (tempo/dynamics) (2) 31. when correcting the tempo, adjust first, then correct 32. do not beat long series of rests (cadenzas and recitatives) 33. stop beating to challenge players' attentiveness and improve their musical interaction/mutual listening (2) 34. when needed, discuss your gestures with players (modern music) 35. prepare all new event occurring during the piece (expression, articulations, dynamic, tempo) 36. favour specific to general comments 37. isolate layers of the texture to make it audible to all players 38. use "strict tempo test" in rehearsals 39. translate interpretive ideas into technical instructions 40. insure continuous eye contact with the stage/pit, when conducting opera/choral pieces 41. apply techniques that are understood by both choristers and instrumentalists 42. breathe/mouth with the chorus 43. build up a well tuned chord 44. refine the pitch adjustments of your ensemble 45. harmonise articulations between instruments 46. stop the orchestra only if you know what to say, and how to say it 47. always experiment 48. compare/align the orchestral rendition to your inner image (3) 49. have the parts marked (bowing, measure numbers, dynamics) 50. detect and correct errors 51. demonstrate musical examples 52. balance analysis/synthesis in rehearsals 53. pace your rehearsal with dynamism 54. prioritise the issues to be corrected 55. practise synthesis/analysis/synthesis rehearsal format 56. provide feedback for your players 57. all beginnings by heart to ensure eye contact 58. set your tempo inwardly first 59. anticipate the tempo/music before starting (3)
19. Communication	1. clear/articulate/concise verbal

Themes	Topics
D=4;ACR=1.5;W=6	<ul style="list-style-type: none"> instructions to the orchestra (2) 2. speak loudly/clearly 3. convey musical intentions through gestures (2) 4. express with your body the general density of music
20. Psychological skills D=1;ACR=1.0;W=1	<ul style="list-style-type: none"> 1. group psychology
21. Leadership D=6;ACR=1.2;W=7	<ul style="list-style-type: none"> 1. be a knowledgeable authority for your players 2. Inspiring leader (2) 3. Unify the ensemble through the sureness of your gestures 4. elicit a unified response from players 5. create your own ensemble 6. develop a leader attitude
22. Attunement to one's time D=3;ACR=1.0;W=3	<ul style="list-style-type: none"> 1. modern technology used in operas 2. the methods and traps of recording sessions 3. investigate new trends of music and sound production
23. Relation to the wider world D=9;ACR=1.1;W=10	<ul style="list-style-type: none"> 1. conceive a wise programming (2) 2. reflect on economic and sociological issues 3. marketing yourself 4. mesmerise the audience 5. seek success 6. clarify the content of the music for the audience 7. identify with the audience when choosing a program 8. respect the stage etiquette 9. guide the audience with your gestures
A. From ethics to style D=1;ACR=1.0;W=1	<ul style="list-style-type: none"> 1. reflect on good/bad traditions
B. Adaptation to the musical reality D=13;ACR=1.4;W=18	<ul style="list-style-type: none"> 1. accompany well, including recitatives (3) 2. adapt your gestures to your players, their needs, and the aural result (3) 3. adapt your conducting to the space (2) 4. adapt your orchestral forces to the circumstances (acoustic and stylistic) 5. adapt your dynamic concept to orchestral forces 6. adapt your gestures to the specific group you are conducting 7. adapt your beat pattern to the level of your orchestra 8. adapt your rehearsal technique to your players 9. adapt to your orchestra habits 10. integrate last minute gestures if need be 11. adjust your gestures to the music 12. constantly adjust your tempo to the music 13. adjust note lengths to acoustic needs for clarity and synchronisation

Table 1.3 : 6+2 Thematic String Matrix
First generation of pedagogues : Rudolf; Green, Labuta

Figure 1.4 : 6+2 Thematic String Matrix (First generation of pedagogues: Rudolf; Green, Labuta)

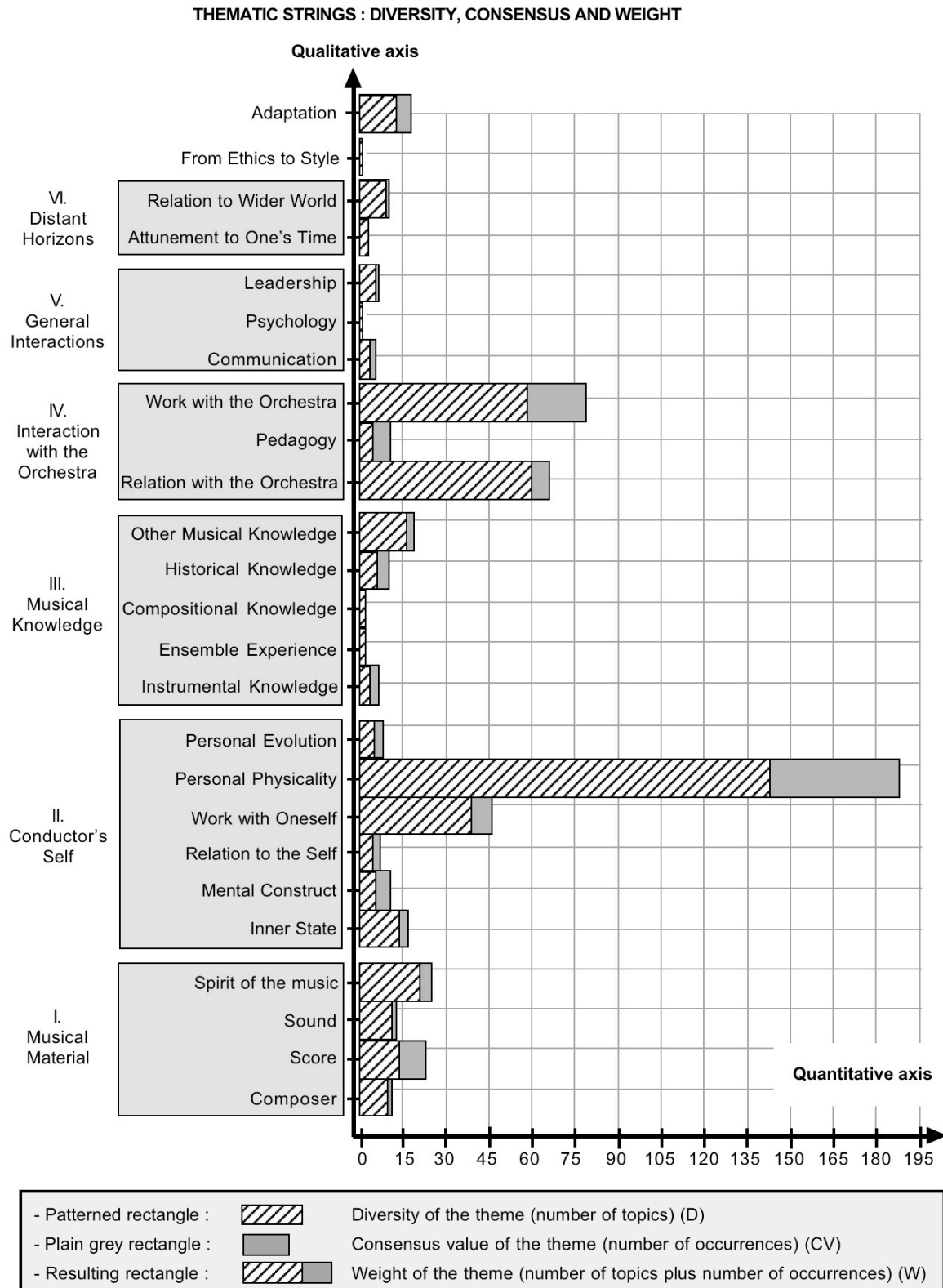


Figure 1.4 : 6+2 Thematic String Matrix
First generation of pedagogues : Rudolf; Green, Labuta

Appendix 2

The pedagogues' four Top Themes (the numbers between parentheses designate the number of occurrences of a given topic.)

2.1. Working Methods with Oneself

Long term [D=40;ACR=1.6;W=64]		Short Term [D=34;ACR=1.6;W=53]	
On the self [D=29;ACR=1.7;W=48]	On the music [D=11;ACR=1.5;W=16]	On the self [D=17;ACR=1.8;W=30]	On the music [D=17;ACR=1.4;W=23]
<ul style="list-style-type: none"> Learn by observing/being critical to other conductors and by talking to their players (5) Develop a fine differentiation, stability and memory of tempos (4) Inform your interpretive decisions by historical and stylistic arguments, and all reliable sources (4) Target memory for a better knowledge of the score/contact with musicians (2) Reflect on the use, the history and the accuracy of metronome (2) Develop the attitude of a listener ("objective"/selective listening) (2) Solve your conducting problems by a proper musical and stylistic approach (2) Reflect in depth about your conceptions/interpretation (2) Develop a good/complete ear (2) Musicological research (2) Develop your inner ear in order to read the score (2) Learn the principles of bowing to match/enhance your interpretive ideas (2) Investigate as many aspects of music and musical life as possible Find your own learning methods Develop awareness of the change of phrasing/density Identify conducting problems Build up our skills very methodically Creative approach to conducting Evaluate orchestras and conductors Balance your innate and your learned skills Approach conducting in acting terms Be precise in your imagination Work hard to be ready for the job Work on one different speed every day Establish your priorities Use your knowledge as an instrumentalist Compare conducting realities to instrumental realities Learn from historically informed approach/performances Learn from the current performance practice 	<ul style="list-style-type: none"> Study with recordings/compare interpretations/be aware of their specificities (3) Explore different ways to approach a piece and the conducting thereof, depending on the context (composer, genre, period and the style) (2) Do not listen to recordings, but develop your own ideas (2) Balance score analysis/knowledge and personal intuition (2) Work with the metronome Hands-on attitude rather than theoretical technical work Look for musical example in chamber music and solo literature for further assessment of phrasing and articulations Know and discuss the limitations of the written score vs. real sound Nuance/diversify your interpretation in terms of musical articulations Look for good taste (<i>bon goût</i>) Take all musical parameters into account when analysing a piece 	<ul style="list-style-type: none"> Anticipate problems and solutions (5) Record and analyse your own work with the orchestra (4) Compare the overall structural image of the piece and its linear image (3) Reflect in depth on your aesthetical/stylistic choices before you face the orchestra (2) Take into account the spatial element (2) Be ready with your gestures from the first rehearsal (2) Set your aims clearly to yourself (2) Live with the music you are to conduct and integrate its pulse Know when and how to subdivide Establish where you stand regarding the score (understand it, like it, appropriate for your ensemble) Consider the rehearsal as a performance for you "If it works, it's right" attitude Attend operatic stage rehearsals and correct the singers only if necessary Realise that players will probably stumble on the same difficulties as you in reading the score Determine when beating is not necessary Determine when and how to subdivide beat patterns Determine when to opt for one to the bar and how to perform it 	<ul style="list-style-type: none"> Examine and bow/prepare/correct orchestral parts (4) Analyse the harmony (2) Assess the difficulty of a passage/piece (2) Make your own score/parts (on a computer), with all your indications (2) Make decision for every single note Detect the melody Learn the language (inflections) of the opera you are conducting Do not shoehorn a piece into a pre-established structure Analyse the phrases and their directions Go from general to detail and back Compare your early table work with later reality (rehearsals/concerts) Define your tempi Discern the instrumental blocks Prepare reference points at the end of cadenzas to bring the orchestra back in Prepare a general opera chart displaying all musicians involved Synchronise rehearsals numbers of your score with players' orchestral parts Decide the cueing, cutoffs, and beat patterns

Table 2.1.
Working Methods with Oneself

2.2. Working Methods with the Orchestra

General [D=4;ACR=2.3;W=9]		Semi-specific [D=34;ACR=1.5;W=50]		Specific [D=48;ACR=1.2;W=57]	
Practical [D=2;ACR=3.5;W=7]	Theoretical [2] [D=2;ACR=1.0;W=2]	Practical [D=17;ACR=1.6;W=28]	Theoretical [17] [D=17;ACR=1.3;W=22]	Practical [D=37;ACR=1.1;W=41]	Theoretical [D=11;ACR=1.5;W=16]
<ul style="list-style-type: none"> Plan/prepare your rehearsal time (6) Always experiment 	<ul style="list-style-type: none"> Know the benefits and limitations of every working methods Communicate your concepts to the orchestra 	<ul style="list-style-type: none"> Promote mutual listening (4) Work fast to maintain players' fun/concentration/extension/ excitement (4) Work in sectionals (3) Rehearse efficiently (3) Apply conducting techniques/approaches that are understood by both choristers and instrumentalists (2) Work methodically Provide feedback to your players Work out your interpretation with soloists Display flexibility in your planning Show musical structure and cues Prepare all new event occurring during the piece (expression, articulations, dynamic, tempo) Translate interpretive ideas into technical instructions Conduct more what has not been rehearsed Refine the pitch adjustments of your ensemble Harmonise articulations between instruments Demonstrate musical examples Treat orchestral solos like operatic solos 	<ul style="list-style-type: none"> Compare/align the orchestral rendition to your inner image (4) Discuss interpretation with your players and soloists (musicians or dancers) (3) Induce stylistic correctness Know when to lead and when to follow Use rehearsals as a way of building an orchestral spirit/community React to your players' musical reactions Adjust your rehearsing method to the piece at hand Favor specific to general comments Capitalise on the specific sound of the orchestra Balance analysis/syntheses in rehearsals Prioritise the issues to be corrected Rehearse what needs to be rehearsed and not what you previously decided to rehearse Choose the performance practice that you are the closest to, and stay with it Do not interfere in instrumental technique In operas, prepare the orchestra separately Work with the sections that need more attention How much time to allow for a piece/ programme 	<ul style="list-style-type: none"> Detect/correct intonation issues and mistakes (only if they occur twice), and identify their cause (3) Tune the orchestra (again during rehearsals if necessary) (3) Correct in real time – with moderation, calm and a <i>propos</i> - players' performance with your beating (tempo/dynamics) (3) Stop beating to challenge players' attentiveness and improve their musical interaction/mutual listening (2) Seek the help of expert players for instrumental issues (bowing, percussion instruments, fingering, breathing) (2) When to display in your beat the local music/articulation and when not to Let players solve their problems on their own at times Address practical issues like mutes and page-turns Be flexible with bowings Limit the "read-through" Warn players for fast changes (dynamics/tempo/ meter) Open rehearsals with music-making first, then proceed with speeches When correcting the tempo, adjust first, then correct Do not beat long series of rests (cadenzas and recitatives) In rehearsals, isolate layers of the texture to make it audible to all players Use "strict tempo test" in rehearsals Breathe/mouth with the chorus Build up a well tuned chord Have the parts marked (bowing, 	<ul style="list-style-type: none"> Anticipate the music before starting (3) Stop the orchestra as little as possible (and only if you know what to say, and how to say it) (3) Inform players of conventions (e.g. <i>tacets</i> in recitatives) (2) When needed, discuss your gestures with players (e.g. modern music) Know how much in advance to cue Beware of misunderstandings while not beating all the counts Pace your rehearsal with dynamism Practise synthesis/analysis/synthesis rehearsal format Describe the sound you want Search for musical solutions but do not persist in mistakes Beware of, and avoid over-conducting in early stages of the work

General [D=4;ACR=2.3;W=9]		Semi-specific [D=34;ACR=1.5;W=50]		Specific [D=48;ACR=1.2;W=57]	
Practical [D=2;ACR=3.5;W=7]	Theoretical [2] [D=2;ACR=1.0;W=2]	Practical [D=17;ACR=1.6;W=28]	Theoretical [17] [D=17;ACR=1.3;W=22]	Practical [D=37;ACR=1.1;W=41]	Theoretical [D=11;ACR=1.5;W=16]
				measure numbers, dynamics) ▪ All beginnings from memory to ensure eye contact ▪ Set your tempo inwardly first ▪ Listen to the sound from high up (podium) ▪ The exact placement of your players ▪ Work with principals before sectionals ▪ Seek the help of assistant to assess the dynamic balance in the hall ▪ Give a special attention to the bass line ▪ When accompanying a singer, focus on text and breathing ▪ Relate everything to text in operatic music ▪ In opera, read on lips and body language ▪ Balance detailed work for inner groups/interesting rehearsal for all ▪ Let assistant or principals lead sectionals ▪ Split your working day into sectionals (<i>strings</i>)/tutti/sectionals (<i>winds</i>) ▪ For syncopation, capitalize on players who play on the beat ▪ Allow the singers/players to pace themselves with a run-through ▪ Identify <i>unisoni</i> passages, and work on them with players ▪ In rehearsals, do not talk while musicians are playing ▪ Rehearse <i>piano</i> to help players hear each other better	

Table 2.2.
Working Methods with the Orchestra

2.3. Relations with the Orchestra

Awareness [D=19;ACR=1.5;W=29]		
Psychological [D=7;ACR=1.4;W=10]	Musical [D=7;ACR=1.7;W=12]	Physical [D=5;ACR=1.4;W=7]
<ul style="list-style-type: none"> Be aware of, interact with and capitalise on the inner/natural dynamics/interaction of the orchestra (4) Know/meet musicians' expectations Know the power struggle involved between star soloists and conductors Although there are many issues to solve in conducting a piece, do not look at it this way Be aware of the way musicians see you (2) Do not let shaky rehearsals alter your ideal vision Deal with rejections 	<ul style="list-style-type: none"> Take into account players' issues/ and capitalise on their musicianship (e.g. for solos) (3) Identify with players/singers (2) Choose carefully the works according to your ensemble (2) Know on what parameter can a conductor act (2) Know that players' contact with your baton depends on their technique, alertness and difficulty of the passage Establish a hierarchy of who needs you the most Divide your attention among the musicians, going from one instrument group to the other, according to their needs 	<ul style="list-style-type: none"> Look at your players before you start (2) Think of players' perception of your gesture (2) The limits of your players (control, attention, fatigue) Combine looking and listening to soloists Project yourself into the orchestral/instrumental playing of the orchestra

Table 2.3a
Relations with the Orchestra: Awareness

Interaction [D=97;ACR=1.3;W=133]				
Positivity [D=15;ACR=1.5;W=23]	Flexibility [D=5;ACR=1.4;W=7]	Teamwork [D=42;ACR=1.4;W=57]	Musical [D=28;ACR=1.2;W=35]	Physical [D=7;ACR=1.6;W=11]
<ul style="list-style-type: none"> Inspire/ignite your players (4) Develop/achieve/display a general attitude of comfort (2) Humour (2) Encourage young musicians (2) Make the players feel unique (2) Enthusiastic (2) Keep players' enthusiasm alive Alternate wisely criticism/encouragement Isolate the music making moment from the burden of daily life Display a positive attitude Promote the search for, and satisfaction of improvement Show your esteem to the orchestra (2) Provoke passion from your players Magnetic Display self-confidence 	<ul style="list-style-type: none"> Supple with the orchestral setting (2) Manifest your willingness to change your concepts (2) Courteous cooperation with soloists Listen to orchestra's elasticity (dynamic and tempo) Improvise according to the moment 	<ul style="list-style-type: none"> Set the tone for the working atmosphere (3) Refrain from talking (3) Team work (2) Drawing the best out of your players (2) Balance heavy work and fresh spontaneity (2) Provoke/accept feedback from players (2) Be an enabler more than a doer (2) Help musicians for their delivery rather than loosing them with words (2) Fairness and justice (2) Trust your orchestra (2) Listen carefully to the players in their human/social issues too (2) Promote cooperation (2) Have the orchestra play "with you" rather than "under" you (2) Share the success with your orchestra (2) Thank your players after the performance Be an example for your players Demonstration is better than talks Use all possible means to convey your message to the players Demanding attitude Punctual To combine your precision as a conductor with players' creativity Negotiate with the orchestra about all Musical Materials Enroll your players in the work Give the orchestra a good reason to work hard for you 	<ul style="list-style-type: none"> Build up/improve the orchestra (technically and artistically) (2) Use the inner dynamics/the leading effect/role of some instruments within the orchestra (2) Balance risks/passion/inspiration and control (2) Save orchestra from critical/unexpected situations (2) Make sure players' instruments are in perfect shape (2) Establish the highest possible level (2) Federate all players in a chord, regardless to their sound production mode (2) Share your musicianship Pace the progress of the orchestra Guide the orchestra Develop the dynamic range of the orchestra Master everything at the same time while conducting Work out your interpretation with the soloist before the orchestral rehearsal Know the difference between guest and principal conductor's role In concerts, balance between reproducing the rehearsal situation and being open to the emotion of the moment Combine time-beating and musicality 	<ul style="list-style-type: none"> Support the singers (breathing, tempos, dynamics) (2) Do not over-conduct (2) Look at players in a way that makes them feel comfortable (e.g. do not stare before a solo) (2) Spare singers voice during rehearsals (2) Do not over-cue not to embarrass players Ensure your visibility for players/singers Think to the comfort of your players

Interaction [D=97;ACR=1.3;W=133]				
Positivity [D=15;ACR=1.5;W=23]	Flexibility [D=5;ACR=1.4;W=7]	Teamwork [D=42;ACR=1.4;W=57]	Musical [D=28;ACR=1.2;W=35]	Physical [D=7;ACR=1.6;W=11]
		<ul style="list-style-type: none"> ▪ Natural and firm in your relationship with the orchestra ▪ Demand the results that you are aiming for ▪ Avoid aesthetical verbal digressions ▪ Admit your errors ▪ Do not avoid one-to-one discussions with musicians ▪ Base your authority on your competence ▪ Do not be bossy ▪ Reciprocity ▪ Communicate with your players orally too ▪ Use the human resources of your orchestra to meet musical or situational challenges ▪ Display a polite attitude towards players ▪ Seek mediation in cases of conflicts ▪ Project musical involvement ▪ Give a meaning/content to the first contact with your orchestra ▪ Avoid fussing for wrong notes ▪ Develop charming relationship with the orchestra ▪ Leave space for the players ▪ Do not show off, it reduces your attentiveness 	<ul style="list-style-type: none"> ▪ Conduct without rehearsals ▪ Conduct the whole orchestra, not only the melodic line ▪ Work out the differences of opinion ▪ Listen well to the orchestra ▪ Display musicianship ▪ Acknowledge the work done with the orchestra by previous conductors ▪ Work with the singers and the accompanist ▪ Work out concepts with the stage director beforehand ▪ Ensure synchronisation between stage and pit through clear rhythm and bass line, despite the distance and constant moving on stage ▪ Do not conduct soloists, even within the orchestra ▪ Experiment for best divisi setup ▪ Prioritise the fast playing section and/or the majority of players 	

Table 2.3b
Relations with the Orchestra: Interaction

2.4. Personal Physicality

General [D=20;ACR=1.6;W=31]		
Baton technique [D=8;ACR=1.8;W=14]	Gestures [D=9;ACR=1.3;W=12]	Music [D=3;ACR=1.7;W=5]
<ul style="list-style-type: none"> ▪ Master the beat patterns (3) ▪ Progressive study of the baton technique (3) ▪ Use baton for better clarity/visibility (3) ▪ Understand the various functions of beating ▪ Mark the ictus ▪ Choose your baton carefully ▪ Reflect on the technical aspect of conducting and the use or not of a baton, and the reasons for it ▪ Do not over conduct not to offend musicians 	<ul style="list-style-type: none"> ▪ Develop a vast and personal vocabulary/gamut of gestures (3) ▪ Display a clear/coherent gestural discourse (2) ▪ Convey as much as possible through gestures ▪ Give less if the orchestra needs less ▪ Understand the proper use of gestures ▪ Beware of the physical challenge/demand of the conducting act ▪ Do not think to your gestures while conducting ▪ Pay attention to your physical gestures, postures, and appearance ▪ Use all possible ways to transmit signals 	<ul style="list-style-type: none"> ▪ Show/project the character of the music from the upbeat (3) ▪ Balance musical expression and gestural clarity ▪ Hold the baton in a way that reflects the music

Table 2.4
Personal Physicality: General

Specific A [D=84;ACR=1.4;W=119]		
Baton Technique [D=54;ACR=1.4;W=77]	Gestures [D=17;ACR=1.2;W=21]	Body [D=13;ACR=1.6;W=21]
<ul style="list-style-type: none"> Think of your movements as the trajectory of the tip of the baton (4) Practise/invent/master various asymmetric beating (4) Work in front of a mirror and check the independence and smoothness of your gestures (3) Mark clearly the beginning of a piece ("attention" + preparatory beat/breathing) (3) Hold firmly the baton (2) Diversify your beatings (2) Display clearly your beating field and change it only if musically necessary (2) Display your beating field on various levels to gain intelligibility from the far (2) Acquire an automated beating (2) Neutral-beating while just counting (rests, fermatas) (2) Avoid mirroring beating (2) Let gravity guide your movements (2) Always show your intentions in anticipation (2) Unclear/blurry beginnings do exist, so use them too (2) Work on/master/rehearse your gestures methodically and calmly (but not in front of a mirror) (2) Work with and without a baton (2) Master the independence between beating of the tempo and showing well-staged dynamic changes Master fractional values Approach the beat pattern creatively to best match the music and gain expressivity, without losing clarity React in your beat to the orchestral playing (corrective function) Practise your technique – segment by segment - to gain artistic freedom Master the uneven speed/distance between beats Master the starting of a piece on every count Understand the extent/limits of your beating role Combine flexibility and firmness in your beat Use a proper baton "Click" to emphasize the tonicity of the rhythm/music When subdividing beats in slow tempo, distinguish well between main/subordinate beats If you do not use a baton, build your own technique to achieve precision with your bear right hand Subdivide only if necessary Adjust your conducting technique to modern pieces Start playing with a single count preparation Contrast "neutral" conducting and specific intentions/preparations Self-warm up routine Perform your drill regularly to gain artistic freedom and train your neurons Develop a sense of the rebound Build your technique in your neuronal brain first Start the music with an impulse Give the preparatory beat in the opposite direction than the beat itself Prepare change of beat pattern Avoid circular baton movements to ensure visibility Practise your exercises in various tempos Walk while beating Build "inevitability" in your gestures Hold your baton centred in front of your body Start your preparatory beat from immobility Display convincingly a great variety of fermatas (attack, duration, termination, intensity) Cue with left hand, baton, or head Whatever you do, do not do it mechanically Induce tempo changes without preparation Prioritise your signals according to the most needing instruments When beating two preparatory beats, the last one ought to be the biggest Prepare cutoffs like entrances Cue musicians for reassurance reasons too 	<ul style="list-style-type: none"> Develop shades of gestural intensity (3) Avoid gestural "noise"/be parsimonious/economical and meaningful in your gestures (2) Perform preparatory beat with arm, breath, (chin, head nod and facial expression) (2) Keep the scale of your movements reasonable Be moderate in your gestures and attitude Balance creativity/intelligibility in your gestures Adjust the size of your gestures to the size of your ensemble Connect your gestures to the desired <i>relative</i> dynamics rather than the <i>absolute</i> musical emotional content Develop awareness of verticality/horizontality Practise holding/moving the baton with the help of inner images Find flexibility in your gestures to convey flexibility in the music Practise various amplitudes of gesture Show confidence by the way you walk Have your gestures be guided by your aural inner image Different gestures for one musician/several/all of them Integrate the cueing (complete and pivotal/incomplete) in your general gestural discourse Concentrate your gestures for the section/player(s) they are directed to 	<ul style="list-style-type: none"> Keep a stable/erected/confident posture for your physical and players' visual comfort (4) Conceive your gestures as a discourse/language logical/harmonious (e.g. with your whole body) (3) Place your music stand in a way that does not interfere with your field of beating/visibility (3) Maintain your body/muscles in good shape (2) Develop consciousness of every corporeal articulation and muscular activity Right arm → baton, left hand → support, eyes → communication Adjust your muscular intensity to the music intensity Adjust your style to your physique Have your gestures and your looks concur in expression Master your relaxation ability Develop physical awareness of your muscles, limbs, and movements Train/master your body (whole and parts - neck, arms, hands, fingers, shoulders) for their specific roles and engage all your corporeal parts into expression Lower part of the body stable, upper part mobile

Table 2.5a
Personal Physicality: Specific A

Specific B [D=88;ACR=1.5;W=130]		
Hand/Arm [D=23;ACR=1.5;W=35]	Head [D=3;ACR=3.0;W=9]	Music [D=62;ACR=1.4;W=86]
<ul style="list-style-type: none"> ▪ Distribute/complement appropriately the roles between both arms (e.g. right hand orchestra/left hand chorus line, right hand beat/left hand comments, spatialisation) (6) ▪ Support/soften/stop the sound with your left hand (3) ▪ Use left hand for interpretation (phrasing, accents, dynamics) and cuing/call for attention/urgent signals (3) ▪ Expressive left hand (2) ▪ Supple arm/wrist movements (2) ▪ Train both hands, according to their specificities (2) ▪ Use different bodily articulations/wrist angles in your beating pattern ▪ Keep a quiet elbow ▪ Indicate interruptions clearly (left hand if needed) ▪ Show accents/contrasts with right or left hand ▪ Work on/display hand/arm independence ▪ Do parallel movements in certain musical situations (e.g. climaxes) ▪ Use left hand with parsimony ▪ Keep the left hand musical flow when turning pages with the right one ▪ Work beat patterns by mirroring both arms ▪ Beat a different beat-pattern with each hand ▪ Use left hand to help signal the tempo in syncopations cases ▪ Cue right side of the ensemble with right hand/left side with left hand ▪ Comment your right hand, or the present sound, with your left hand ▪ Keep your left-hand ready for action ▪ Support fermatas with left hand ▪ Connect your arm to your inner pulse ▪ Beat subdivision with the wrist 	<ul style="list-style-type: none"> ▪ Use your eyes as much as possible (e.g. to cue) (and look to the score as little as possible) (6) ▪ Use your facial expression/body language to convey the (intensity of the) music (2) ▪ In fast going entrances, manage cueing by eye contact 	<ul style="list-style-type: none"> ▪ Relate/parallel your conducting gestures to instrumental/vocal gestures/technique (5) ▪ Connect your gestures to the music/sound/texture/idea/emotion (5) ▪ Show ≠ types of holds and cutoffs, depending on the type of music and the situation within the music (4) ▪ Anticipate/master tempo variations/changes (4) ▪ Careful indication of dynamics by the size of your beat and the corporeal parts involved (3) ▪ Utilise full volume/speed/size/density of your gestures for dynamic contrast and phrasing (3) ▪ Adjust your beating patterns and qualities to the musical flow and texture, and the specific atmosphere of the moment (2) ▪ Show basic information (tempo, start/stop of the music/sound) (2) ▪ Show phrasing, articulation and general expression (2) ▪ Display a great variety of cutoffs, according to the music (2) ▪ Indicate fermatas, cutoffs and restarts clearly (2) ▪ Reflect on the complexity of the musical gesture and on your own gestures (2) ▪ Change beating field and use up-ictus to lighten the sound or delay the downbeat (2) ▪ Keep/feel a steady tempo (2) ▪ Prepare the character of the piece during the opening rests ▪ Display a very clear preparation for pizz. ▪ Keep/provide steady/firm rhythmic support during syncopations ▪ Induce an accent on the start of syncopations ▪ Show phrases/structures (i.e. on a melodic and sectional level) ▪ Show (intensity of) the music with your general attitude ▪ Conduct pianos also with big gestures and fortes also with small gestures ▪ Master the showing of the dynamic changes ▪ Spread carefully dynamics ▪ Show very clearly last consonants of a phrases ▪ Stop the movement for staccatos ▪ Mark clearly the syncopation gesture ▪ Show accents, specially non-metrical, anticipatively ▪ Use a specific gesture for the passing of silences ▪ Imbue your time-beating with phrasing, style and expression between the beating points ▪ Show tempo, dynamic and articulation/texture in your preparatory beat ▪ When cueing show attack, dynamics, style, and expression ▪ Show the rise and fall of phrases (left-hand and right-hand collaborating) ▪ Show the beginning and the end of the notes ▪ Elaborate a conducting approach according to the piece at hand ▪ Pulse even during fermatas ▪ Do not beat visually what is already present aurally in the musical texture ▪ Achieve/show musical diversity/coherence through corporeal diversity/coherence ▪ Handle polyrhythmic music/sections ▪ Alternate between recitative conducting and musical segments ▪ Adapt your preparatory beat to the instruments concerned, their specific technique, and their geographic place in the orchestra (3) ▪ <i>Dictate</i> to promote less dependence towards the conductor's beat ▪ In your gestural discourse, prioritise the rhythmic element ▪ Secure ictus to ensure precision/ensemble ▪ Help setting the tempo by a proper rebound between count 1. and 2. ▪ For tempo alterations, vary speed, traveled distance, and air resistance ▪ Induce subito dynamic change with an additional preparatory beat at the end of the preceding dynamics ▪ Show fp of sf by pulling back your beat ▪ If two simultaneous time signatures occur, beat only the down beat, and final upbeat ▪ Energetic beat to insert a musical breath, or to resume action after a long hold ▪ <i>Dictating</i> only downbeats during long sustained notes ▪ For syncopations, show the beat or the syncopated note, depending on the tempo ▪ For tied note, show the beat or the note after, depending on the tempo ▪ For syncopation without players on the beat, or sudden silence, no rebound on the beat ▪ Cue musicians for musical reasons too ▪ When accompanying a soloist, support chords with neutral beating ▪ Display large upbeats and downbeats for the 1st counts in recitatives ▪ If needed, depart from written beat pattern to accommodate more easily difficult rhythms ▪ Mark very sharply the rests before a rhythmic formula ▪ Show the rests in your beat pattern ▪ Lead phrases through silences

Specific B [D=88;ACR=1.5;W=130]		
Hand/Arm [D=23;ACR=1.5;W=35]	Head [D=3;ACR=3.0;W=9]	Music [D=62;ACR=1.4;W=86]
		<ul style="list-style-type: none"> ▪ For the same piece/tempo subdivide or not according to the music at hand ▪ Beat recitatives in such a way to be able to absorb unexpected events

Table 2.5b
Personal Physicality: Specific B

Appendix 3

The conductors' ten Top Themes (the numbers between parentheses designate the number of occurrences of a given topic.)

3.1. Relation to the Wider World

Musical [D=16;ACR=3.4;W=54]		Other
Audience [D=9;ACR=2.2;W=20]	Other [D=7;ACR=4.9;W=34]	[D=11;ACR=3.5;W=38]
<ul style="list-style-type: none"> ▪ Build new audiences (6) ▪ Impose your repertoire to the audience (3) ▪ Offer to the audience new ways of listening to old pieces (3) ▪ Know the effect of your gestures on the audience and the orchestra/audience interaction (3) ▪ Use music as a civilising device for the audience ▪ Conceive the concert as an interaction between the orchestra and the audience ▪ Identify with composer and communicates this to the audience ▪ Respect the audience ▪ Display a public appeal 	<ul style="list-style-type: none"> ▪ Analyse and reflect on sociology and philosophy of music (15) ▪ Handle the commercial aspect of an orchestra (9) ▪ Use media to promote music (3) ▪ Total dedication to music, mankind and the musical life around you (2) ▪ Connect music to science and other fields (2) ▪ Gain visibility by your musical productions (2) ▪ Make yourself known by letters and contacts 	<ul style="list-style-type: none"> ▪ Eclectic and involved in other art forms and cultures (11) ▪ Know several languages (5) ▪ Cosmopolite with an international exposure (4) ▪ Develop a philosophy of life and beauty (3) ▪ Interact with people (3) ▪ Develop fine aesthetic judgments (3) ▪ Interested in literature (3) ▪ Deep observation of life (2) ▪ Socially forward thinking (2) ▪ Linguist ▪ Manifest intellectual curiosity

Table 3.1
Relation to the Wider World

3.2. Relation to Score

General [D=11;ACR=4.3;W=47]		Specific Methods
Attitude [D=5;ACR=5.4;W=27]	Methods [D=6;ACR=3.3;W=20]	[D=5;ACR=9.4;W=47]
<ul style="list-style-type: none"> ▪ Total respect of/fidelity to the score (10) ▪ Know the score really well (7) ▪ Open for revising the score (7) ▪ Flirt with/court the score (2) ▪ Realise the limits of the written score 	<ul style="list-style-type: none"> ▪ Choose good editions/see the manuscripts (7) ▪ Know how to analyse/study scores (5) ▪ Assess what happens in the score (4) ▪ Mark your ideas in the score (2) ▪ Find your own way to study scores ▪ Read through the piece first 	<ul style="list-style-type: none"> ▪ Analyse the score in depth (34) ▪ Play the piece on the piano (6) ▪ Read the score without a piano (5) ▪ Rewrite scores (lay-out) when necessary ▪ Analyse composer's indications

Table 3.2
Relations to Score

3.3. Spirit of the Music

Meaning [D=13;ACR=2.8;W=36]				
Sentiment/Feeling [D=2;ACR=10.5;W=21]	Life experience [D=1;ACR=1.0;W=1]	Metaphysics [D=1;ACR=2.0;W=2]	Movement/Story [D=4;ACR=1.3;W=5]	Attitude vis-à-vis meaning [D=5;ACR=1.4;W=7]
<ul style="list-style-type: none"> ▪ Understand deep emotional meaning of the piece (17) ▪ Harmonise extreme sentiments (4) 	<ul style="list-style-type: none"> ▪ Recognise/ convey the infinite variety of composers' states 	<ul style="list-style-type: none"> ▪ Perceive the metaphysical/ moral side of music (2) 	<ul style="list-style-type: none"> ▪ The dance within the music is primordial (2) ▪ Find the action/poetic potential of music ▪ Find the story behind a symphony ▪ Combine ideas/ words/music in operas 	<ul style="list-style-type: none"> ▪ Respect the spirit, not the letter (2) ▪ Go to the essence (2) ▪ Give a meaning to every note ▪ Read the note and behind the notes, and between the lines ▪ Give a spirit to an interpretation in a few rehearsals

Table 3.3a
Spirit of the Music: Meaning

Tempo/Rhythm [D=3;ACR=8.3;W=25]	Sound [D=6;ACR=2.7;W=16]	Other (style/structure/liveliness) [D=8;ACR=2.0;W=16]
<ul style="list-style-type: none"> Find and control the tempo (23) Enhance the soul of the music through rhythmical exactness To understand and handle slow tempi, technically AND musically 	<ul style="list-style-type: none"> To balance and pace a performance (8) To find and express the <i>melos</i> (4) Reveal the sound world of a score Give music its right colour and weight Make music sound natural Focus on the beauty of the sound to help the meaning of the music 	<ul style="list-style-type: none"> Balance stage production and music (5) Give music all its vitality (3) Tune to the specific style (2) Experience what a magical performance is (2) To convey the structure of the piece Join accuracy AND imagination Search for unity/inner logic in the piece Defend the inner logic through traditional staging in operas

Table 3.3b
Spirit of the Music: Tempo/Rhythm, Sound, Other

3.4. Personal Physicality

General topics [D=17;ACR=1.8;W=31]			
Baton technique [D=2;ACR=1.0;W=2]	Gestures [D=5;ACR=2.0;W=10]	Music [D=1;ACR=2.0;W=2]	Movement/energy [D=9;ACR=1.9;W=17]
<ul style="list-style-type: none"> Sharpen your technique Put things in perspective about conducting technique 	<ul style="list-style-type: none"> Express yourself through clear and natural gestures (5) Do not over-conduct (2) Build your own gestural vocabulary Reflect on the meaning of gestures Prepare your gestures 	<ul style="list-style-type: none"> Develop your physical skills according to your musical aims/ideas (2) 	<ul style="list-style-type: none"> Develop physical stamina (7) Inject all your energy while conducting (3) Move and listen at the same time Develop a supple attitude (mental and physical) towards music and body/gestures Take care of your physical appearance Find what is the most comfortable for you (e.g. seating of the orchestra, your baton type) Know how to manage your energy, in life and in concert Know to dance Display a relaxed and elegant conducting style

Table 3.4a
Personal Physicality: General

Specific topics [D=20;ACR=3.3;W=65]					
Baton technique [D=4;ACR=6.3; W=25]	Gestures [D=6;ACR=2.2; W=13]	Body [D=2;AC.R. =1.0;W=2]	Hands/arms [D=4;ACR=2.3;W =9]	Head/face/eyes [D=3;ACR= 3.3;W=10]	Music [D=1;ACR=6. 0;W=6]
<ul style="list-style-type: none"> Display a careful and clear baton technique (22) Use your baton appropriately but do not think about it Combine technical clarity and "uncertainty" when needed Master complex measure patterns 	<ul style="list-style-type: none"> Adapt your gestures to the instrumental and vocal techniques (7) Display economical gestures for greater efficiency (2) Display inspiring and inspired gestures Display discrete gestures not to disturb the musicians Lead gently Apply your instrumental knowledge to 	<ul style="list-style-type: none"> Globalise in your body all inner trends of music Know how the bodily energies work 	<ul style="list-style-type: none"> Give clear cues and tempo changes (6) Show the tempo with right hand, musicality and cues with left hand Seek to produce unity through your hand Develop arm-independence 	<ul style="list-style-type: none"> Ensure eye contact (8) Communicate through your facial expression Conduct with eyes closed 	<ul style="list-style-type: none"> Mould the sound and the texture through your body (6)

Table 3.4b
Personal Physicality: Specific

3.5. Relation to the Composer

Conductor vis-à-vis the composer or composition [D=8;ACR=7.8;W=62]	Composer as a person and artist [D=3;ACR=3.0;W=9]	The creative process [D=6;ACR=8.5;W=51]
<ul style="list-style-type: none"> Be the composer's advocate (23) Promote new music and local composers (22) Keep your critical sense towards composers (7) Identify with the composer (5) Meet the composer whenever possible (2) Set your priorities according to the composer's agenda Know and correct composers' mistakes or misspellings Open to a wide range of composers and styles 	<ul style="list-style-type: none"> Know composers' lives and psychology (6) In order to understand the music, understand the man (2) Know composers' reading of their own scores 	<ul style="list-style-type: none"> Enter composers' universe and creative process (22) Research about composers' style and idioms (12) Respect composers' intentions and indications (8) Assess the new worlds composers bring to life (6) Advocate for composers' ideas (2) Know current compositional trends

Table 3.5
Relation to the Composer

3.6. Other Musical Knowledge

Orchestras [D=3;ACR= 11.0;W=33]	Music [D=12;ACR=5.4;W=65]		Conductors and conducting [D=7;ACR=2.9; W=20]	Philosophy and psychology [D=4;ACR=2.0;W =8]	Other [D=2;ACR= 5.5;W=11]
	General [D=6;ACR= 8.8;W=53]	Specific [D=6;ACR=2.0;W =12]			
<ul style="list-style-type: none"> Know how and who to hire (15) Assess orchestras and their specificities (14) Know the possible orchestral settings (4) 	<ul style="list-style-type: none"> Assess the characteristics of a piece (14) Conduct operas AND symphonies (11) Balance the programming (10) Connect to a wide variety of styles (8) Master a vast 	<ul style="list-style-type: none"> Know the main repertoire (4) Know how to program and premiere a new piece (3) Open paths to new approaches to music (2) Build a vision of a whole opera house Solve practical musical 	<ul style="list-style-type: none"> Reflect on the mystery of the art of conducting (11) Read in the clefs (2) Assess the quality of a performance (2) Conduct many programmes in the same period (2) Achieve a consistent operatic performance from 	<ul style="list-style-type: none"> Reflect on the musical phenomenon (5) Recognise the limits the interpretative act Take the best of every musical genre Recognise the limits of musical conventions 	<ul style="list-style-type: none"> Know the acoustic realities (10) Display a wide knowledge and experience

Orchestras [D=3;ACR=11.0;W=33]	Music [D=12;ACR=5.4;W=65]		Conductors and conducting [D=7;ACR=2.9;W=20]	Philosophy and psychology [D=4;ACR=2.0;W=8]	Other [D=2;ACR=5.5;W=11]
	General [D=6;ACR=8.8;W=53]	Specific [D=6;ACR=2.0;W=12]			
	repertoire (8) ▪ Conduct choral AND symphonic repertoire (2)	problems ▪ Deal with complex artistic realities like opera (music, text, theatre)	all viewpoints ▪ Assess the quality of a conductor ▪ Strike a balance between all elements of the art of conducting		

Table 3.6
Other Musical Knowledge

3.7. Working methods with Oneself

Short-term strategies [D=36;ACR=2.2;W=79]		Long-term strategies [D=27;ACR=2.5;W=68]	
On the self [D=21;ACR=1.8;W=38]	On music [D=15;ACR=2.7;W=41]	On the self [D=24;ACR=2.3;W=55]	On music [D=3;ACR=4.3;W=13]
<ul style="list-style-type: none"> ▪ To balance and connect rigour and spontaneity/brain and sensuality/instinct and knowledge/technique and artistry (5) ▪ Beware and get rid of musical dogmas and bias (4) ▪ Define your concepts and clarify HOW you will transmit them (3) ▪ Observe, and learn from players' reactions (3) ▪ Plan rehearsals (3) ▪ Accept to change your mind (3) ▪ Learn in orderly way and know how to work (2) ▪ Record your first reading and analyse the recording (2) ▪ Know the impact of the physical upon the psychological ▪ Assess what the music/the score represents for you ▪ Combine modern and early music approach ▪ Know your own reactions towards musicians ▪ Unite both levels of listening (inner/outer) to your hand ▪ Judge your methods by your performance quality ▪ Envisage the piece at once from the very beginning ▪ Compare the actual sound to your inner concept ▪ Identify with the piece ▪ Long walks to review the piece in inner ear ▪ Get involved in music in such a way that you are freed from it and you start free associations ▪ Write the piece anew as an exercise ▪ Learn the libretto (even the language) of the opera 	<ul style="list-style-type: none"> ▪ Listen to great recordings (14) ▪ Annotate the parts/prepares the orchestral parts (entries, bowings, comments) (5) ▪ Learn fast (4) ▪ Concentrate of the big picture (3) ▪ Define clearly the directions of the piece (3) ▪ Analyse the work in depth (2) ▪ Examine the details of things (2) ▪ Do not listen to recordings (2) ▪ Find the long line ▪ Reverse the compositional process ▪ Examine the culture a piece encapsulates ▪ Compare recordings and real performances of the same piece by the same performer ▪ Prepare differently if you know other pieces by the composer ▪ Connect all themes of a same work ▪ Acknowledge diversity of interpretations 	<ul style="list-style-type: none"> ▪ Learn by conducting (8) ▪ Learn from other conductors (6) ▪ Get ready for whenever you would be needed (6) ▪ Handle and learn from criticism (5) ▪ Ask for advice and accept suggestions (4) ▪ Learn even from second rate or amateur orchestras (4) ▪ Develop personal ideas and methods (2) ▪ Thorough research about former and current performance practice (2) ▪ Learn the conductor's attitude from the inside and reflect on the specific sphere of the conductor (2) ▪ Read music like a thriller or a tale (2) ▪ Know the impact of the physical upon the psychological ▪ Interact with other artists ▪ Take artistic responsibilities ▪ Keep your critical sense ▪ Work continuously to keep in shape ▪ Capitalise on your assets ▪ Learn from mistakes (yours and others') ▪ Do not imitate other conductors ▪ Use your knowledge as an orchestral musician ▪ Know in what state of mind to prepare ▪ develop an awareness of the traps of the conducting profession ▪ Obey your instinct, sometimes against the composer's indications ▪ Prepare your ear to the style ▪ Keep alive the complexity of things 	<ul style="list-style-type: none"> ▪ Conduct only what's really for you (11) ▪ Informed options vs. arbitrary ones ▪ Cerebral approach to music

Table 3.7
Working Methods with Oneself

3.8. Working Methods with the Orchestra

General [D=2;ACR=11.0;W=22]		Semi-specific [D=34;ACR=2.1;W=73]		Specific [D=45;ACR=2.3;W=102]	
Practical [D=1;ACR=21.0;W=21]	Theoretical/ abstract [D=1;ACR=1.0;W=1]	Practical [D=16;ACR=2.8;W=45]	Theoretical/ abstract [D=18;ACR=1.6;W=28]	Practical [D=31;ACR=2.5;W=77]	Theoretical/ abstract [D=14;ACR=1.8;W=25]
<ul style="list-style-type: none"> Know how to rehearse efficiently (21) 	<ul style="list-style-type: none"> A performance is a preparation for the next one 	<ul style="list-style-type: none"> Manage carefully your rehearsal time (9) Inspire chamber music attitude (8) Expand the repertoire of the orchestra (6) Install a nice working atmosphere and artistic attitude (4) Achieve perfect precision (3) Work fast (3) Make the orchestra flexible (2) Inspire a natural singing and playing (2) Draw players' attention to the music more than to yourself Know how to manage the stage work Rehearse only what is necessary Keep players' excitement going Do not simplify music by explaining it with words but listen well to the orchestra instead Keep players under artistic tension Go beyond dry precision into sheer music Conduct/mould the music, not the difficulties 	<ul style="list-style-type: none"> Clarify your concepts to the orchestra (4) Give priority to musicianship/expressions versus technique (3) Explain your vision convincingly (3) Enjoy performing includes enjoying practicing play also for pleasure at rehearsals (2) Unveil to players the unity of a piece (2) When leading an orchestra on a long-term, change things gradually (2) Explain the power of dynamics Know how much to work and when to stop Cultivate high standards Anticipate problems and fix them Unify playing style of the orchestra Know how to best use musicians' competence Beware of too complicated pieces of music Discuss with the orchestra composers' indications Take time to polish things Join theory to practice (e.g. about breathing or bowing) Elicit spontaneity again, after heavy work Obtain unity through contrasts 	<ul style="list-style-type: none"> Balance between opposite approaches (11) Change the energetic register between rehearsals and concerts (8) Know when to stop the orchestra and when not to (4) Seek financial stability and good working conditions for players (4) Improvise in concert (4) Help musicians by your conducting (4) Know when to conduct and when to let go (4) Rehearse the musicality (4) Very demanding for details (3) Rehearse creatively (3) Know how to tune the orchestra or a chord (2) Lead and to listen at the same time (2) Improve orchestra's technical achievements (2) Know how to balance the orchestral team (2) Combine good taste and ugliness for expressiveness (2) Know when to stress on technique, when to stress on musical inspiration (2) Be able to conduct without rehearsal (2) Control rhythm and pitch Use original instruments and pitches Adopt historical staging for operas Manage study time for the orchestra while touring Ask players to apply corrections immediately Find tricks to help players Play the music as you feel it, not as the metronome markings or other performance practice dogmas tell you to Impose as many rehearsals as needed Free musicians from their scores by an intense work 	<ul style="list-style-type: none"> Propose new performing and working style (4) Advocate for a new orchestral mentality (4) Preserve players' artistic feeling (3) Capitalise on the qualities of the orchestra (3) Pace the general activity of the orchestra (2) Rehearse in calm Commit yourself to all stages of a production Combine old instruments with new approach to early music Place the pieces in an historical perspective Know the effect of a rehearsal technique on the final performance Build up a community of feeling through rehearsals Do not walk into rehearsals under-prepared, specially with new music Select carefully your repertoire Prioritise issues: notes, interpretation, balance

General [D=2;ACR=11.0;W=22]		Semi-specific [D=34;ACR=2.1;W=73]		Specific [D=45;ACR=2.3;W=102]	
Practical [D=1;ACR=21.0;W=21]	Theoretical/ abstract [D=1;ACR=1.0;W=1]	Practical [D=16;ACR=2.8;W=45]	Theoretical/ abstract [D=18;ACR=1.6;W=28]	Practical [D=31;ACR=2.5;W=77]	Theoretical/ abstract [D=14;ACR=1.8;W=25]
				<ul style="list-style-type: none"> ▪ Suggests/stimulate more than "say" the progress to be made to reach your ideal result ▪ Detect errors ▪ Make a difference between solo playing and tutti playing ▪ Ask for the same players from beginning to end ▪ Have someone check the translations of opera super-titles 	

Table 3.8
Working Methods with the Orchestra

3.9. Relations with the Orchestra

Awareness [D=9;ACR=4.1;W=37]	
Psychological [D=4;ACR=6.0;W=24]	Musical [D=5;ACR=2.6;W=13]
<ul style="list-style-type: none"> ▪ Know the orchestral inner life (10) ▪ Develop a great sense of responsibility towards your orchestra (5) ▪ Identify with players (5) ▪ Grateful (4) 	<ul style="list-style-type: none"> ▪ Acknowledge players' qualities (8) ▪ Observe your players (5) ▪ Feel the players and their playing ▪ Understand the orchestra before wanting to change it ▪ Keep your conducting problems for yourself

Table 3.9a
Relations with the Orchestra: Awareness

Interaction [D=58;ACR=3.1;W=180]		
Positivity [D=7;ACR=2.4;W=17]	Teamwork [D=33;ACR=3.1;W=103]	Musical Matters [D=18;ACR=3.3;W=60]
<ul style="list-style-type: none"> ▪ Friendly, warm, humane (8) ▪ Show your pleasure and emotions (2) ▪ Charm (2) ▪ Humour (2) ▪ Make your joy visible, and make sure the orchestra does the same ▪ Bring success to the orchestra ▪ Be a moral example 	<ul style="list-style-type: none"> ▪ Display reciprocity and teamwork spirit (20) ▪ Demanding but patient (16) ▪ Inspire players' confidence towards you (8) ▪ Display a trusting attitude (8) ▪ Look for symbiosis with orchestra (6) ▪ Understanding and respectful, namely towards differences (5) ▪ Advocate for young musicians (4) ▪ Look for deep and sincere human relationships (4) ▪ Acknowledge your mistakes (3) ▪ Love your musicians (3) ▪ Share the space and the glory with the orchestra (3) ▪ Enable players (2) ▪ Focus players' attention (2) ▪ Strive for lasting work relationships (2) ▪ Oppose the conductor-prima-donna system (2) ▪ Display flexibility ▪ Do not control too much ▪ Always give people a chance ▪ Learn to say no ▪ Light-handed with musicians ▪ Be natural with the orchestra ▪ Combine discipline of the orchestra and players' vitality ▪ Initiate underground communication between players and conductor ▪ Delegate authority 	<ul style="list-style-type: none"> ▪ Build and improve an orchestra (14) ▪ Advocate for artistic freedom and diversity of opinions (10) ▪ Promote excellence (5) ▪ Guide musicians (4) ▪ Inspire the orchestra (4) ▪ Abandon yourself during performances (3) ▪ Motivate your orchestra (3) ▪ To ignite yourself/players and connect with your/their true initial feelings of the piece (3) ▪ Communicate artistically with the orchestra (3) ▪ Help singers and players (2) ▪ Help soloists realise THEIR ideas (2) ▪ Enrol your orchestras into new paths ▪ Trust players' instinct about the acoustics ▪ Display a personal touch ▪ Transform an orchestra in 3 or 4 rehearsals ▪ Be a man of the field ▪ Enrol your musicians in building the sound of the orchestra ▪ Convince and electrify

Interaction [D=58;ACR=3.1;W=180]		
Positivity [D=7;ACR=2.4; W=17]	Teamwork [D=33;ACR=3.1;W=103]	Musical Matters [D=18;ACR=3.3;W=60]
	<ul style="list-style-type: none"> ▪ Do not carry the orchestra, let them carry you ▪ Instil energy ▪ Explain the conducting process ▪ Be a reliable person ▪ Compromise when needed ▪ Be tactful ▪ Use simple and effective vocabulary ▪ Know how to reshape an orchestra ▪ Protect your space 	

Table 3.9b
Relations with the Orchestra: Interaction

3.10. Inner State

Moral/Ethic [D=14;ACR=2.7;W=38]	Musical/Aesthetic [D=11;ACR=2.3;W=25]	Relational [D=31;ACR=2.8;W=88]
<ul style="list-style-type: none"> ▪ Sincere/genuine (8) ▪ Decent human being/gentleman/know how to behave/polite and well mannered (6) ▪ Committed in life as a human being with ethical values/humanist (5) ▪ Idealistic (3) ▪ Generous (3) ▪ Spiritual and religious aspect (3) ▪ Honest (2) ▪ Profound (2) ▪ Humble towards the task ▪ Pure ▪ Courageous ▪ Conscious ▪ Pacifist ▪ Of integrity 	<ul style="list-style-type: none"> ▪ To hear well (7) ▪ Visionary/pioneer (4) ▪ Very professional (4) ▪ Elegant (2) ▪ For imagination, emotion and suggestion (2) ▪ Deeply involved in concerts ▪ Impressed by the magic of music ▪ Respect for conductor's role ▪ Music is the main focus in life ▪ Love your profession ▪ Balance ecstasy and inspiration with reality 	<ul style="list-style-type: none"> ▪ Simple and accessible (12) ▪ Very demanding and perfectionist (9) ▪ Committed and dedicated (9) ▪ Warm and friendly (7) ▪ Restrained and calm (6) ▪ Loyal and faithful (6) ▪ Magnetic, charismatic (6) ▪ Gentleman (6) ▪ Shy (3) ▪ Talk little, prefer to act (2) ▪ Want to help (2) ▪ Spontaneous ▪ Respectful ▪ Convincing ▪ Patient ▪ Beware of success, failure and public's taste ▪ Do not arouse antagonism ▪ Organised ▪ Punctual ▪ Courteous ▪ Strict ▪ Tolerant ▪ Loving ▪ Kind ▪ Encouraging ▪ Charm ▪ Easy going ▪ Natural ▪ Franc ▪ Severe ▪ Bossy

Table 3.10a
Inner State: Moral/Ethic, Musical/Aesthetic/Relational

Temperamental/Emotional [D=16;ACR=3.6;W=57]	Intellectual [D=11;ACR=3.1;W=34]	Perceptive [D=3;ACR=1.0;W=3]	Physical [D=3;ACR=1.0;W=3]
<ul style="list-style-type: none"> ▪ Enthusiastic (10) ▪ Passionate (10) ▪ Restrained and calm (6) ▪ Take risks (6) ▪ Driven personality (5) ▪ Humour (4) ▪ Radiating personality (3) ▪ Emotionally well balanced (2) ▪ Sensitive (2) ▪ Uncompromising (2) ▪ Emotional (2) ▪ Fast reacting ▪ Colourful ▪ Proud 	<ul style="list-style-type: none"> ▪ Pragmatic (9) ▪ Intense concentration (7) ▪ Deep intelligence (4) ▪ Open-minded (4) ▪ Cultured (2) ▪ Keep your critical spirit (2) ▪ Intellectual and artistic curiosity (2) ▪ Analytical ▪ Lucid ▪ Alert ▪ Interesting person 	<ul style="list-style-type: none"> ▪ Wide perceptive angle ▪ Connect to a wide range of emotions ▪ Very sensitive to a humane working atmosphere 	<ul style="list-style-type: none"> ▪ Relaxed ▪ Able to manage a heavy schedule ▪ Ease

Temperamental/Emotional [D=16;ACR=3.6;W=57]	Intellectual [D=11;ACR=3.1;W=34]	Perceptive [D=3;ACR=1.0;W=3]	Physical [D=3;ACR=1.0;W=3]
<ul style="list-style-type: none"> ▪ Extrovert ▪ Audacious 			

Table 3.10b
Inner State: Temperamental/Emotional, Intellectual, Perceptive, Physical

Appendix 4

The players' four Top Themes (the numbers between parentheses designate the number of occurrences of a given topic.)

4.1. Inner State

Moral/Ethics [D=6;ACR=1.7;W=10]	Musical/Aesthetic [D=3;ACR=2.7;W=8]	Relational [D=8;ACR=2.3;W=18]
<ul style="list-style-type: none"> ▪ Genuine/sincere (3) ▪ Courageous (2) ▪ A true human being (2) ▪ Honest ▪ A good person ▪ Unassuming 	<ul style="list-style-type: none"> ▪ Keep constant ear contact (5) ▪ High developed rhythmical sense (2) ▪ Look for excellence 	<ul style="list-style-type: none"> ▪ Charismatic/magnetic (4) ▪ Friendly/affectionate (4) ▪ Humour (3) ▪ Soft-spoken (2) ▪ Professional/business like (2) ▪ Reliable ▪ Exciting ▪ Punctual

Table 4.1a
Inner State : Moral, Musical and Relational

Temperamental/Emotional [D=2;ACR=1.5;W=3]	Intellectual [D=1;ACR=1.0;W=1]	Physical [D=1;ACR=1.0;W=1]
<ul style="list-style-type: none"> ▪ Energetic/dynamic (2) ▪ Colourful 	<ul style="list-style-type: none"> ▪ Focused 	<ul style="list-style-type: none"> ▪ Relaxed

Table 4.1b
Inner State : Temperamental, Intellectual, Perceptive and Physical

4.2. Personal Physicality

General [D=6;ACR=4.8;W=29]			
Baton technique [D=1;ACR=17.0;W=17]	Gestures [D=2;ACR=1.0;W=2]	Music [D=2;ACR=4.5;W=9]	Movement/energy [D=1;ACR=1.0;W=1]
<ul style="list-style-type: none"> ▪ Clear conducting technique (17) 	<ul style="list-style-type: none"> ▪ Anticipate the events ▪ Conduct with your stick, eyes, and facial expression 	<ul style="list-style-type: none"> ▪ Show musical ideas in your gestures (8) ▪ Be clear in your intentions 	<ul style="list-style-type: none"> ▪ Do not move too much

Table 4.2a
Personal Physicality : General

Specific [D=21;ACR=;W=37]					
Baton technique [D=7;ACR=1.4;W=10]	Gestures [D=6;ACR=2.0;W=12]	Body [D=3;ACR=1.3;W=4]	Hands/arms	Head/face/eyes [D=2;ACR=1.5;W=3]	Music [D=3;ACR=2.7;W=8]
<ul style="list-style-type: none"> ▪ Clear beat-pattern (3) ▪ Do not beat ahead of time (2) ▪ Beat ahead of time, but not too much ahead ▪ Anticipate your beat for far away players ▪ Avoid mirroring ▪ Use proper baton ▪ Study in front of a mirror 	<ul style="list-style-type: none"> ▪ Give cues, specially after long rests (4) ▪ Display natural gestures (3) ▪ Avoid over-conducting and do not get in the way (2) ▪ Use your motions as a reminder of your explanations ▪ Develop your own gestural vocabulary ▪ Make your gestures perceivable to all 	<ul style="list-style-type: none"> ▪ Ensure your visibility (2) ▪ Maintain a proper posture ▪ Breathe with the winds 		<ul style="list-style-type: none"> ▪ Look at your players (2) ▪ Make eye contact/communicate with the entire orchestra 	<ul style="list-style-type: none"> ▪ Internal consistent ictus (5) ▪ Show phrasing, dynamics, texture (2) ▪ Show poetry behind your baton technique

Specific [D=21;ACR=;W=37]					
Baton technique [D=7;ACR=1.4;W=10]	Gestures [D=6;ACR=2.0;W=12]	Body [D=3;ACR=1.3;W=4]	Hands/arms	Head/face/eyes [D=2;ACR=1.5;W=3]	Music [D=3;ACR=2.7;W=8]
	the orchestra				

Table 4.2b
Personal Physicality : Specific

4.3. Working Methods with the Orchestra

General [D5=;ACR=2.6;W=13]		Semi-specific [D=23;ACR=1.9;W=43]		Specific [D=23;ACR=2.2;W=51]	
Practical [D=1;ACR=7.0;W=7]	Theoretical/abstract [D=4;ACR=1.5;W=6]	Practical [D=6;ACR=4.2;W=25]	Theoretical/abstract [D=17;ACR=1.1;W=18]	Practical [D=16;ACR=2.7;W=44]	Theoretical/abstract [D=7;ACR=1.0;W=7]
<ul style="list-style-type: none"> Run auditions (7) 	<ul style="list-style-type: none"> Experiment ideas with musicians (3) Guide the musicians in their task Know what the orchestra needs Discuss your options with the orchestra 	<ul style="list-style-type: none"> Maximise your rehearsal time (9) Allow players space to express themselves (7) Rehearse efficiently (5) To balance metaphors with technical indications (2) Do not ask for what players already do Give feedback 	<ul style="list-style-type: none"> Make work be pleasurable (2) Strike the balance between control of and freedom to players Take time to gauge the orchestra's response to you Let the orchestra know about your rehearsal plan To take out the orchestra from the auto-pilot mode Conduct the music not the orchestra Choose carefully your repertoire Rehearse the way you are Do not waste players' time with your own needs Conduct the entire symphonic fabric Display creative attitude Identify difficulties Establish working habits with your orchestra Be specific about musical issues Ensure good working conditions Leave the peak for the concert Prioritise issues 	<ul style="list-style-type: none"> Intonation work (11) Refrain from talking (8) Run through the piece (5) Make players listen to each other (4) Speak loudly at rehearsals (3) Strike a balance between reading through and stopping every few bars (3) Work on the end of pieces Tell players when you know and when you are experimenting Work on ensemble Do not start the rehearsal with the most delicate parts of the piece Let the music sound by itself Give advice to players in a way that helps us achieve your vision Talk succinctly and to the point Know when you stop the orchestra, tell them why Adopt the good seating arrangement Correct concert-master's mistakes 	<ul style="list-style-type: none"> Work on the big picture, leave details for musicians Rehearse evenly all pieces Strike a balance between players' technical parameters and your ideal conception Preserve the orchestra on the long run Propose variety in rehearsals Strike the balance between proper playing and inspiration Encourage the good players to stay

Table 4.3
Working Methods with the Orchestra

4.4. Relations with the Orchestra

Awareness [D=5;ACR=2.6;W=13]	
Psychological [D=2;ACR= 2.0;W=4]	Musical [D=3;ACR=3.0;W=9]
<ul style="list-style-type: none"> ▪ Respect players as human beings (3) ▪ Learn about your players 	<ul style="list-style-type: none"> ▪ Acknowledge qualities (7) ▪ Construct your interpretation having in mind the composer, the players and the audience ▪ Know the orchestral reality

Table 4.4a
Relations with the Orchestra: Awareness

Interaction [D=49;ACR=2.1;W=104]			
Positivity [D=8;ACR=;W=15]	Flexibility [D1.=;ACR=1;W=1]	Teamwork [D=34;ACR=2.4;W=81]	Musical Materials [D=6;ACR=1.2;W=7]
<ul style="list-style-type: none"> ▪ Convince and inspire excellence (5) ▪ Amicable work atmosphere (2) ▪ Display a pleasant mood (2) ▪ Encourage rather than criticise (2) ▪ Contribute to players' self-esteem ▪ Be an enabler ▪ Humane ▪ Develop a lively attitude 	<ul style="list-style-type: none"> ▪ Respect the sensitivity of the orchestra 	<ul style="list-style-type: none"> ▪ Respect the players (12) ▪ Trust the players (9) ▪ Promote teamwork (6) ▪ Do not make musicians feel guilty (6) ▪ Pull the best out of the orchestra (4) ▪ Reassure players (4) ▪ Display a gentlemanly attitude (4) ▪ Inspire musicians through the force of your personality (4) ▪ Dialogue with every player (3) ▪ Admit your errors (2) ▪ Accept criticism and act accordingly (2) ▪ Advocate for your players (2) ▪ Save players' strengths for the concert (2) ▪ Be part of the orchestra ▪ Let your personality be known ▪ Strike a balance between work and spontaneity ▪ Willingness to learn from the orchestra ▪ Do not terrorise the orchestra ▪ Share the glory with players ▪ Keep spontaneity ▪ Allow solo bows after the concert ▪ Do not look for compliments or try to be liked ▪ Breed honesty from people ▪ Do not favour instruments or groups ▪ Do not ask rhetorical questions ▪ Do not be sarcastic ▪ Do not get personal ▪ To be soft-acting ▪ Show gratefulness ▪ Respect continuity with previous conductors ▪ Get your players' attentiveness ▪ Avoid monotony ▪ Understand the players ▪ Treat all players equally 	<ul style="list-style-type: none"> ▪ Build up an orchestra (2) ▪ Be artistically present ▪ Fire up in concerts ▪ Listen to the orchestra ▪ Leave room for the players to express themselves ▪ Show your emotions

Table 4.4b
Relations with the Orchestra: Interaction

Appendix 5

Chicago Symphony Orchestra: interviews about Georg Solti (sound files). Please see accompanying CD.

Appendix 6

Polyphonic survey: Baton Down the Hatches (October, 2007) (transcript)
<http://www.polyphonic.org/panels.php?id=12&day=1>

[For an easier reading, this text presents the testimonies in the alphabetical order of their authors rather than the chronological order of the survey].

1. William Buchman, Assistant Principal Bassoon, Chicago Symphony

Day 1

I can recall many times when I've thought I could tell a conductor to stop doing one or two things in order to get an improved response from my colleagues (and myself), but I never got up the nerve. I thought it would be too presumptuous, or I just didn't care enough to stick my neck out. But some problems are quite widespread, and can be summed up in a few principles. (For conciseness I'll refer to conductors with the male gender, but no bias is intended.)

I'll start with a generalization: the less a conductor talks, the more I like him. Some conductors seem incapable of showing their ideas with their hands. There is certainly a technique to conducting, just like there is for a musical instrument. A conductor's hands are his most important tools, and I can only assume that he has resorted to words because those tools have failed him. Imagine if an instrumentalist had to explain with words every idea she had about what she was playing. You'd say, "Don't tell me what you're trying to do, just do it!" The same goes for the conductor: show me what you want with your hands, not with words. I'd even extend this to the habit some conductors have of telling the orchestra where they'll be conducting in two or in four. If you find yourself needing to explain all the time what you want or what you're doing, perhaps you should put a critical eye to your stick technique.

Other issues emerge from an apparent lack of trust on the part of the conductor. When, in the first rehearsal, a conductor stops the piece in the second bar to make corrections, he has already lost my goodwill. A good musician usually can hear the same errors the conductor hears, and will be happy to be given the chance to fix them without having them pointed out. Given a bit of time and momentum, a lot of problems will go away on their own, and the conductors I prefer to work with will let us read a whole movement or piece before picking it apart. Obsessing over every detail, or spending an hour on thirty bars of music, will only get one labelled as a micro-manager. Better to focus on the big picture and trust the musicians to work out the details.

Time management seems to be another issue for many conductors. I think it should be expected that the conductor will have a clear plan of how his rehearsal time will be used and will hold to that plan as closely as possible, especially when there are personnel changes from one piece on a rehearsal to another. I've played too many rehearsals where musicians sat waiting for their piece to get called, only to go home without playing a note, and too many concerts where some pieces were severely over-rehearsed and others barely even touched upon. One incident comes to mind: A German-speaking conductor had only one rehearsal for a program, and arrived at the end of it with the final section of one piece not having been played. Frantically paging through the score, he cried out, "Zese last few bars will be in vier," to which a wag in the back of the orchestra responded, "Yes, in constant fear!"

In summary, the conductors I like working for are the ones I respect, and who I feel treat me respectfully in return. I am most satisfied as an orchestra musician when I'm given a clear picture of what's expected of me, along with the freedom and trust to produce it as I see fit. It's in that environment that I've experienced the highest level of music-making, and that, after all, is what we're all looking for.

Day 2

The system I'm aware of for training conductors is not so dissimilar from that for training serious orchestra musicians. It involves study at a conservatory (including individual instruction and work with a lab orchestra), at summer music festivals and at the head of volunteer and semi-professional groups. The rungs on this ladder can eventually lead to conducting positions at schools and at smaller orchestras, with some of the luckiest and most talented conductors landing in apprenticeships with larger groups, and eventually in leadership positions.

Obviously, a conductor can't "practise" as freely or as regularly as an instrumentalist, since his "instrument" is a group of musicians with lives of their own. This implies that established orchestras of all sizes and artistic levels should have an obligation to devote some of their services to the training of young conductors. Certainly one way to do this is the system of apprentice (or assistant) conductorships that exist at orchestras of all levels. In such positions they can learn by observing the week-after-week reality of professional life and can see what works well and what doesn't. Regrettably, my orchestra hasn't had such a position on its staff for a number of years. I suppose it's an economic issue: the orchestra will only finance an apprenticeship if it gets a direct benefit from the investment, and since the number of services an apprentice can be used for is often rather limited, it's probably a money-losing proposition.

This may signal the need for an organization like the League of American Orchestras to establish a conductor apprenticeship program similar to its existing program for orchestra managers. It could finance apprentice conducting positions around the country through which young conductors would rotate, gaining experience with many different kinds of groups. Orchestras could designate a limited number of services for them, either lab orchestra sessions or actual concerts. I'm thinking that, in these situations, musicians might even lower some of their typical hostility towards conductors, since they would have the freedom to offer constructive criticism. This might eventually help to reverse the growing dearth of conducting talent we complain about more and more.

Day 3

Here are some of my pet peeves, in no particular order:

- 1) Saying you want to just "start the piece again" in a rehearsal, then running practically the whole thing. It makes me think you don't have an idea what you really want to accomplish.
- 2) Playing through something, then playing through the same thing without any comment. Did we do what you wanted the first time or not? If so, is there something you want to reinforce by repeating it? If not, what do you want to change? Tell us!
- 3) Stopping every few bars to correct details. We get no sense of the flow of the music, and have no chance to adjust to your technique and your approach. Give us the big picture of what you want and let us work out the details as we play.
- 4) Balancing the orchestra by altering printed dynamic levels. Instead of saying, "Mark that down to mp," I'd rather you said "We need to hear the flute here, so be sure your f doesn't cover that up." That kind of comment gets us listening to each other better.

On the other hand, things I like:

- 5) A dress rehearsal being used as a practice performance. It's our chance to see how the concert will feel. It's too late to still be rehearsing details and making major changes.
- 6) Positive comments that make us want to work harder, in contrast to criticisms, which don't.
- 7) Taking the time to learn the musicians' names. I'm always impressed when a conductor refers to "Mr. Combs" instead of "first clarinet." It's a huge sign of respect, and it's probably less difficult than it looks. I'm OK with cheat sheets.

Day 4

The conductor's primary purpose is to help the musicians in the orchestra play together. The size of the orchestra and its distribution across a large stage make it difficult for a musician to rely on sound alone to know when to play, especially in a hall that provides poor contact between different parts of the stage. Obviously, then, a musician needs to be able to make some connection between what she sees from the stick and what she hears happening around her. The closer this connection is, the more confident the musician can be that she is playing with the group.

Many conductors have developed a habit of beating ahead of the orchestra, some to the extent that the connection between stick and sound is quite tenuous. Simple math will tell you that a conductor can't beat a tempo that's different from what the orchestra is playing and not have that connection break entirely before long. In my experience, the ensemble at those times deteriorates immediately, and I have to conclude that the conductor simply isn't paying attention. Both instrumentalists and conductors have to keep the connection between their hands and their ears going at all times. Enough said.

In other cases, the conductor or the orchestra develops a habit of keeping a noticeable gap between the apparent impulse from the stick and the corresponding reaction of the players. The size of the gap will vary with the tempo of the music in a predictable way. This can work fine if it's something the players are accustomed to. Orchestras that see a lot of different conductors, though (and conductors that visit many different orchestras), are sure to find that it's hard to adjust to a delay that falls well outside an industry average -- in the tails of the bell curve, as it were. In the era of jet travel and peripatetic maestros, I would predict that the remarkably large delay becomes less common.

As prevalent a problem is the failure of a conductor to maintain a beat pattern that is clear. The first thing any of us learns about conducting is the various patterns for 4/4, 3/4, 6/8, etc. It doesn't make sense to me that such a fundamental element of the technique can be entirely discarded. Especially in difficult, unfamiliar or multiple-meter music, the musicians need every clue they can get about where they are in the measure. If you're looking intently at your music and make a momentary counting error, you want to be able to look up and find your place immediately. If all you see is a pattern of 1-1-1-1-..., you're out of luck. More attention to the beat pattern would prevent a lot of erroneous entrances.

Day 5

More than anything else, I am most upset by conductors who inject too much of themselves into their interpretations. The best conductors I have worked for allow the music to speak for itself, rather than loading it with distortions and exaggerations for the sake of individualism. Certainly I'm not asking for generic performances, but I'd prefer to be aware of the composer first and the interpreter second. Conductors will always do well to put themselves at the service of the music and to approach it humbly.

We've spent a lot of time critiquing (and criticizing) conductors, but we, as musicians, should be willing to apply the same critical eye to ourselves. In our case, worrying about the mote in our own eye means coming to all services well prepared and attentive, and maintaining high standards of professionalism always. Studies have shown that orchestra musicians as a group have very low job satisfaction, and it's easy to let that translate into careless work habits. I would imagine that at least some of our complaints about the way we are treated by conductors stem from our own shortcomings. Inattentiveness, talking during rehearsals and lack of preparation, to name a few, are things that would drive any conductor to distraction. Simply put: to get respect, we need to give respect.

2. Don Ehrlich, Retired Asst. Principal Violist, San Francisco Symphony

Day 1

Baton Technique

I think that baton technique is overrated. A conductor can have the most elegant stick technique, and yet if there is no poetry behind the technique, there will be no music made.

And yet there are times that a good baton is essential. And then, for example, if all the beats go up-and-down with no differentiation between the different beats, that can only confuse us musicians.

Most conductors I've worked with conduct in front of the beat. I feel that what the conductor does is tell us how we are supposed to play when we get to the beat. It is of no use, however, if the baton is so far in front of the beat that it is disconnected from the music. That's when we have to ignore the conductor, if only for self-defence.

Conductors like it when we look at them; but for us, if what we see isn't of any use, looking can only be confusing. And if the conductor isn't present, if he/she is phoning in his/her part, what are we supposed to be looking at?

Relations to the orchestra members

Just as on parenting, there is no way to make rules of behavior. I would be appreciative, though, if conductors would remember the fact that we have to have a partnership in delivering the music to the audience. Power trips will trip up the performance.

In my experience, the best performances were those when the conductor was able to both stay away and let us play, and also to lead us to what he/she wants. Too much control can turn us into a CD player; but too little control means no point of view to give to the audience.

Too many conductors, in my view, are so involved in trying to bend musicians that they forget that we are people, too. Tying with us is a sure-fired way to breed resentment, and that can only hurt the final product.

And in this vein, what with the intensity of the schedule that most orchestras need to maintain, we musicians get injured. It's called Repetitive Stress Injuries. Is what the conductor does contributing to this problem? Could it be that a little less intensity demanded from us could prolong our careers and help the conductor make music with us over years? (I would also like to address this to the composers, too, who seem to revel in trying to expand our techniques so much that we get injured.)

Day 2

Rehearsal Techniques.

William Buchman hit one nail right on the head when he decried the kind of rehearsal technique where the conductor stops to make a correction right away. I was in a rehearsal when the conductor managed to stop the orchestra over 100 times in just the first 90 minutes of the rehearsal. I guess he was trying to impress us with his ear, or his ability to hear mistakes. But what happened was we got bored, we made further mistakes, he stopped more, it was ugly! The only reason I wasn't bored was that I was busy counting the number of times he stopped.

In the same vein, I had a conductor who managed frequently to stop the orchestra two or three bars before the end of the movement, to correct something. Couldn't he have gone to the end and picked up the problem afterward?

I like conductors who will read to the end, and then rehearse the ending first. That way we know we'll be great when we get to the end of the movement. Rehearsing from the end of the piece is often better, I think, than from the front -- at least you don't over-rehearse the beginning to the detriment of the ending.

The rehearsals are the time that the conductor has to impart his/her view of what we are to accomplish. It's OK to spend time on the details. It's not OK to learn the piece in front of us. Sure, minds can change and details evolve; but it's not a good idea to stand in front of a group of pros and use that time to figure out what the piece is about.

An effective conductor also has to be able to manage time, to look into the future (when planning rehearsals) and figure out how much time to devote to any given piece. It doesn't do any good to spend 45 minutes on a simple overture when there's a difficult symphony coming up.

I have been in rehearsals when the conductor spent so much time on other pieces s/he managed not to give the soloist enough time to get through the solo. It's our job, the conductor's and the orchestra's, to help the soloist feel comfortable. How can that happen if we can't even finish that piece?

Day 3

Today's question is about hiring assistant conductors.

I worry about the role of the assistant conductor. My experience here is this:

Early in my career in San Francisco we had to hire a couple of assistant conductors. Auditions were held, where the candidates got to conduct us; the best one was hired. In each case I felt that the candidate hired did in fact have some obvious talent. One in particular I remember having a wonderful sense of tempo/meter.

Then, after they were hired, they got to sit around a lot and listen and wait for an opportunity to actually conduct. They got to hear and observe us and the conductors, they learned a lot of music (because they have to be prepared to step in at a moment's notice).

I think that this waiting is a terrible thing. When they actually got up on the podium, it was my sense that several of them deteriorated. They got nervous. The one with great tempo, for example, managed not to be able to maintain the tempo, after a couple of years of waiting.

This changed when the Symphony established the Youth Orchestra, and the Assistant Conductor was put in charge of it. With the YO he was at least able to get up onto a podium and conduct a real orchestra weekly. At this point, I was able to see the conductors show improvement.

A conductor has to conduct.

More recently, in our orchestra, because the job grew to where one person couldn't really do both jobs (Assistant and Youth Orchestra), they hired two conductors. Unfortunately, I retired before I could assess how this would play out.

So far, though, I haven't said anything about how to hire an assistant conductor.

What we have done is, a search was made somehow (I was not aware how), and several candidates were given the chance to conduct the San Francisco Symphony. (I liked the candidate who said that conducting us was like driving a Ferrari.)

Then, those in the know and with power (meaning the Music Director and whomever he chose, but certainly not me) would pow-wow and decide whom to hire.

Frankly, I don't know any other way of dealing with this. I hope my colleagues on this Forum have better ideas, since I don't.

Day 4

The Beat, and Where It Is.

First of all, we talk about stick technique. I've had a lot of conductors who don't use a baton, or who put the baton down for a period of time up to a couple of years. How can you have a stick technique if you don't use a stick?

We were fortunate to play a concert set with Sir Georg Solti conducting us. Talk about a stick technique! All he did was wave the baton in the air. No beat visible. Yet somehow we knew exactly what he wanted; and in the end we ended up sounding just like the Chicago Symphony.

In a like vein, the first time we had Eugene Ormandy conduct us, he started the rehearsal with the last movement of Beethoven's *Seventh Symphony*. He set the tempo, and then just sat there not moving, not conducting at all. Eventually, he gave us the cupped-hands thing (as in *Your In Good Hands With Allstate*). So we sawed away a little harder. We ended up sounding like the Philadelphia Orchestra. Again, no baton technique at all, just a motion.

So somehow, I find that the baton technique is less important than the talent/charisma of the conductor.

It has been my experience that the best conductors do intend the bottom of the beat to come before the moment of the beat that we play. It seems as though they want to indicate to us by the quality of their beat that we will need to be playing in a certain manner when we get there. If the beat is strong, we'll play with an articulation; if smooth, then legato, etc.

Also, every conductor has a different take on where the beat should be. One conductor said that the beat should be when he gets to the top button of his vest on the way up. Another one that I know wants the beat to be at the top of his stroke; that is, he goes down, hits bottom, comes up, and at the top, that's where the beat is. It sounds complicated, trying to adjust to all this, but frankly, they adjust to our playing as much as we adjust to their beat; it all works out somehow.

There is one other thing here, as well. Often the brass (for example) delay their beat; they play behind where the rest of us are. If the conductor gives the brass a beat that's really quite early, they know where to put their notes. It seems to me that this is an important part of conducting technique especially when the instrumental group is far away.

Not too long ago Rostropovich conducted us. He's a great musician but not a very good conductor. He evidently consulted a real conductor when he couldn't get the brass (for example) to play with his beat, and the real conductor must have told him what I outlined in the previous paragraph. So when our brass section was late, his first response was to blame the brass. "You're late!" (This is something else that bugs me, when the conductor blames us for his deficiency.) Then when he would repeat that passage, he'd flip his beat a little early and the brass would be correct.

So for the most part, I agree that the conductor's beat should be in front of the beat. I have said, and so have others, that when the beat gets so far in front that it is disconnected from the music, that is a recipe for disaster, unless we can just ignore the conductor.

Day 5

I think I'd like to address the question of what can we musicians do to improve the relations between conductors and orchestras.

What I have to say, though, deals with talented conductors. There are those who really are jerks on the podium. Fortunately, in my orchestra, we have had pretty much only conductors with at least some talent. Also, what I say may be contrary to what my colleagues feel. I may be in a minority here, but I feel forgiveness begins at home.

Some years ago a colleague told me about how she felt being a violist in her orchestra. Her seat was right in front of the wind section, in the center of the orchestra. She had the string section to her sides and in front; the winds right behind her; the brass and percussion always present. She said that she felt that she was in the center of creation.

But someone is directing this creation, and that someone is the conductor. We feel, I think, that the conductors think of themselves as gods; but we just see their feet of clay.

We recorded one of the Mendelssohn symphonies, the Italian, I think. The conductor managed to find a tempo that he liked that made the spiccato very difficult. It was too slow for one kind of spiccato, and too fast for the other; it was right in the middle, meaning we had to struggle to play it well. But, we're pros, and we did it. Back stage, though, my colleagues all complained about how bad it sounded. My take, especially after listening to it, was that it sounded wonderful, sparkling, but that it felt bad.

This same conductor really liked to play Beethoven's *Eroica*. For many years, he did it in a very slow tempo, trying, I guess, to drag out of it all the emotion he could get. Then one year he returned to the *Eroica*. My colleagues again knew that they would be bored by the slow tempos, so in fact they were bored. But I heard that he had begun to pick up the tempos.

One way to improve conductor/musician relations is to make a real attempt to know what is actually happening on stage, and not what we think is happening or what we want to be happening. That *Eroica* wasn't boring, I thought; but the pre-set of my colleagues was that it would be, so to them it was. Likewise, the Italian Symphony sounded great no matter how it felt. We need to pay attention, even if what we find contradicts what we want to think.

Likewise, it would be helpful if we realized that conductors are people, too. I feel we need to treat them as we would like to be treated. When we make a mistake, well, it's one mistake, no one is perfect. When a conductor makes a mistake it's the end of the world. How bad a conductor he is. To me this doesn't wash.

It would also be helpful if the conductor would treat us as he would like to be treated. This includes, please, not blaming us for his errors.

3. Robert McCosh, Principal Horn, Calgary Philharmonic

Day 1

I remember once having to respond to a reporter, because I was on the search committee for a new conductor, to answer the question, "what are the musicians looking for in a conductor." I said, "God." And then we both laughed because we both knew there was an element of truth in the response.

Everyone so far has already mentioned many of the things that bring out our best or our worst when it comes to leadership from the podium. I would add a sense of humour (yes, we Canadians like our "u's"!). I've seen an atmosphere of fear and "reign of terror" with a new conductor turn completely around when the conductor said or did something that cracked up the whole orchestra. We then became one cohesive unit that was willing to go through fire (or at least Firebird) for her/him.

Another trait I admire is admittance of guilt. We've all experienced the conductors who administer the death ray when we mess up; but then when they make a mistake in rehearsal, they'll stop and try to deflect that with a criticism of some section or individual's playing, even

though everyone knew the impending train wreck was of their doing. So a conductor who admits they too are human gets a lot of points in my book.

Here's the one that keeps me from joining the dark side: sense of rhythm in the stick. Many are simply time-beaters; others look like they're gesturing for Conductors Idol; but the good ones communicate internal rhythm. How they do that seems to be as closely guarded as the Caramilk secret. And probably more valuable.

Intonation, intonation, intonation. This gets glossed over a lot. Or they address it but don't know how. The best conductors evolve an orchestra to a higher level. But this won't happen if the conductor simply dictates up or down in pitch like air traffic ground crew. The best thing I've seen is the conductor having the basses/cellos play the tonic and then asking the musicians to tune to the strings. That way listening and playing in tune improves both individually and collectively.

And even though everyone agrees it drives us nuts when conductors stop and start ad nauseum, to take what is said and how it is said is important. If it is something that can't be communicated with the stick, or if the conductor is communicating it with the stick but the musician(s) is not addressing it, then communicating that is appreciated.

And because I know my brass playing colleagues will buy me a beer for mentioning it, I will close with the brass player pet peeve - getting the hand. There is nothing that loses more points with the brass section nor does more damage in the response from the player/section than giving the brass player the hand. This is particularly true when playing a solo, even if it is soft. The hand pointed palm out translates, as every traffic cop knows, into "STOP." That means stop using your air, suck it back in. This often results in a kak. So whoever out there is teaching this in conducting school, stop it! If you want something soft or softer, go with palms down and you'll get a thumbs up from the brass (and maybe a beer, though that might be pushing it). Cheers.

Day 2

My experience is that most conductors do not create pieces of large musical architecture. Even competent ones work a lot on details but forget about developing an overall shape to a movement or work. A lot of conductors have trouble letting go; trust the musician(s) to be able to interpret their parts/solos without being spoon fed. Many do not know how to deal with intonation problems; they either ignore them or simply point up and down, which takes away an opportunity to help the musicians' ears evolve by having them tune to a bass tonic. As has been said many times, few conductors let their stick, eyes and facial expressions do the talking as opposed to constantly stopping and talking.

Musicians could make their conductors (and fellow musicians!) happier if they:

- 1) Came with their parts prepared so the focus could be on making music;
- 2) Came on time;
- 3) Did less talking in rehearsal;
- 4) Concentrated for the whole rehearsal/performance;
- 5) Were more flexible/adaptable - sometimes music doesn't arrive on time or soloists get sick so repertoire gets changed at the last minute;
- 6) Also had a sense of humour and realized that conductors too make mistakes;
- 7) Treat conductors how they themselves would want to be treated.

It's been fun and interesting to see how the experiences showed a lot of commonality, despite working in different size orchestras in different countries, over the past few decades. Cheers.

4. Craig McNutt, Timpanist with Rhode Island Philharmonic & Boston Modern Orchestra Project

Day 1

When I was deciding on a theme for my contribution to this discussion, I kept returning to the notion that we have to balance many different facets of our musical careers (and no I am not talking about issues of volume, although I am sure that will come up later). Whether it's working with a stand partner or negotiating a contract, we have to interact with others while maintaining our own sense of self. So with that in mind, here are some (I hope) balanceable facets of the conductor/orchestra realm: (Note I have avoided specific percussion-type stuff for future posts - I encourage drummers everywhere to chime in with their own concerns):

1. Give us a balanced diet of who you are and what your personality is. If we don't see the real you conducting, you won't get much of a return on your performance. If you are a meticulous type, by all means go over those details during rehearsal. The review likely will note your performance as "skillfully crafted." If you're funny, go ahead and give us a joke or two, or the occasional yarn. Don't beat it into the ground - then it becomes a shtick, and you probably would prefer not to be known on the circuit as "the comedian." And most of all, please don't try to be, or conduct like, someone else. Bad things can happen...
2. Find the balance between spontaneity and practiced. If you conduct with a complete lack of control, when you're simply trying to be spontaneous, you're going to get one messy show. Spontaneity works best when happening as a reaction to the moment. Don't plan to be spontaneous on Saturday from 8 to 10 PM. On the opposite end, please don't conduct the Beethoven's *Fifth Symphony* you listened to on your iPod the morning before rehearsal. If you're conducting the Northwest Southeastern Podunk Philharmonic, conduct them, not the original Szell recording. Otherwise, bad things can happen...
3. During rehearsals, balance the parts that are rehearsal, and those parts that are "practice performance." Go ahead and let the musicians try new ideas, especially in familiar repertoire. Some of them may work; some may fail miserably, but let them try. The last thing you as a conductor want is an orchestra that is solely concerned with playing absolutely correctly every single time. Then, at some point, come to the consensus about the performance with the orchestra. If you don't, I'm not sure bad things will happen, but they might...
4. Know what your orchestra's manpower is for staffing at the rehearsal. If you wish to move the brass onto risers, the percussion to the other side, and the harp to the front, be sure that this particular orchestra has the man (woman) power to do that efficiently, without epic disruptions to the rehearsal. If the orchestra has two very nice but volunteer stage crew folks, your favorite setup may not happen for that rehearsal. No bad things, just minor nuisances...
5. Time management - no balance reference necessary. Please rehearse at a natural pace. While we all might enjoy the extra leisurely paced rehearsal, in most cases (depending on the repertoire and the orchestra) that simply can't occur, and still end up with a top notch performance. On the other hand, can we avoid the cramming, like a high school student at the SATs? It gives you some of the worst rehearsals you could ever hope for...or not hope for. And, for those of us who count many bars rest (OK I lied about percussion stuff), please give us time to find where you're starting when you give us a bar number. It takes a bit of math to get to where you are when the starting point is in the middle of 159 bars of rest. And yes, bad things can happen...at least in terms of how the rehearsal sounds.

Disclaimer - The hardest part of this discussion is that the answers will vary widely based on both the orchestra and conductor. If it doesn't apply to you or your orchestra, consider it a success...good things might happen...

Day 2

Before I list any particular rehearsal techniques, I would like to acknowledge the fact that there are almost 100 members of the orchestra facing one conductor, so everyone should be sensitive to this imbalance. I am sure if I was the one up there I would feel some degree of anxiety, especially if I was working with in orchestra in a guest capacity. With that in mind...

- 1) While you're up there doing your thing, take a second to gauge how the orchestra is responding. Do they look nervous? Bored? Annoyed? Despite popular lore, musicians do want to make music, but if they don't perceive themselves as a welcome addition to the process, it can really be a detriment.
- 2) Give us a moment to process your requests, both musically and otherwise. Just as a sports car handles better than a SUV, a large orchestra requires a little bit of time for everyone to get on the same page. Remember (see my previous post), rehearsal is a process, not an end unto itself.
- 3) Beat patterns - certainly one of the most interesting thing about watching conductors is realizing how something as descriptively simple as a beat pattern can be interpreted with seemingly infinite variation. And that's good for making music. However, if you think I am not with your beat pattern, it's due to the fact that I misinterpreted it, not that I was "not watching." Musicians already working in the symphonic world are trained well enough to watch your conducting - we just can't keep our eyes glued to the stick/hand due to all the little black spots on the page. Sometimes, the complexity of a musical passage requires us to focus on the technical aspect of our instrument. We'll get it the next time if we missed it the first.
- 4) If you like metaphors, that's fine, but know that they might mean different things to different people. If, after telling me you can't hear my chime part, that is should sound like "bells in the distance," does that mean I should play it louder or softer? More attack or less? No, we don't want music making to be all clinical, but sometimes nuts and bolts saves a lot of time and hassle.
- 5) (Specific Percussion Problem Alert!): Percussionists went to school for many years to learn about hitting stuff. One thing (hopefully) learned is touch, where you can color the sound without changing mallets. So before asking simply for harder or softer, I think it would be nice if the question/request was framed in a more typically musical way. Do you want more length? A longer attack? More depth of sound? Yes percussionists have all of those mallets to choose from - but we like to think we can do more than simply hit the instrument one way.

Day 3

The key components for a healthy relationship between conductor and orchestra vis-à-vis stick technique are consensus and consistency. The orchestra must come to a consensus as to where they play in relation to the ictus, and the conductor must be consistent in the placement of that ictus and where s/he feels the beat relates to that ictus.

The first part of that equation, consensus, swings heavily in favor towards full-time orchestras. The more a group plays together, the more they have a feel for where they are placing (or at least feel they are placing) the beat. Orchestras that are part-time are not so fortunate in this regard, not only due to their lack of communal working time, but also the fewer number of conductors they see, and thus learn.

I personally have never had a major problem with the actual basic technique of a conductor, at least those who have attained a fair degree of success in the field. I have had more problems with the attempts of conductors to use all approaches of conducting at the same time within a given piece or concert. Things usually don't go well when the first movement of *Eroica* is styled with Boulezian precision, but the conducting of the subsequent movement looks like Karajan circa 1985, with the conductor expecting the sound to speak 3-5 seconds after the beat. This is an offshoot of the "real personality" discussion from my Day 1 post.

As for why this whole thing happens, I prefer to sidestep the question, given historical and cultural issues that the history of conducting carries. Furthermore, I don't know if I see an actual problem that can be fixed without changing something that is a core component of the art. And, like many things in our field, the best cure might be more practice...

Day 4

I'll branch off on my own today and throw out two brief thoughts regarding one of the many elephants in the room - contemporary music. My guess is that a number of our orchestra's

mission statements address Music of our Time (a nice term for contemporary music that sounds less scary). The attempts to complete this mission have been scattered and erratically successful at best. While there is no cure-all for this, there are a couple of things conductors could do to help.

1. Give some thought to the programming of new(er) music. Much of the new music I see on orchestral programs seems to have been decided upon via lottery or tarot cards. Give the audience a reason to listen, regardless of the complexity of the music. Connections between different composers of different generations or music of similar geography can go a long way towards providing a framework for the program. Even if the unifying element is a thin one, that small connection is better than nothing, where random sprinkles of new music appear throughout the season. Art museums (at least the good ones) don't hang paintings by young artists randomly. Music shouldn't be like that either.

1(a). However, if you as a conductor are not comfortable conducting the knotty complexities of, for example, Milton Babbitt, (or you just don't like it), by all means don't program it! Play to your strengths. This seems to happen surprisingly often, which leads to -

2. Apologizing to the audience for playing new music! No No No! Again, there aren't any signs in your local art museum - "Sorry that you have to look at this sculpture." The deal was done when the orchestra brochure was printed and the tickets were sold. If the audience doesn't like it (to which they certainly have a right), hopefully they will let you know. Besides, it's usually something moderate in duration, like *Short Ride in a Fast Machine*, not a comprehensive survey of the works of Ralph Shapey, with an encore of Charlemagne Palestine performing his minimalist work *Schlongo!!!* daLUVdrone for solo pipe organ...

5. Gaylon Patterson, Violinist, Memphis Symphony Orchestra

Day 1

The Reign of Terror in the orchestra world is over. The autocratic maestro who rules with an iron hand and ends careers with a flick of a baton is no more. As orchestras continue to evolve and develop, musicians have to learn more and more skills that have nothing to do with playing an instrument. We have to be conversant in labor law, skilled at negotiating, judicious about using our increasing power in governance, competent at reading a financial statement — the list goes on and on.

The same is true of the conductor. Stellar musicianship, great stick technique, and dazzling on-stage charisma are all great, but a successful conductor must also know how to "work" a party, pull off a convincing board presentation, make a case in a development call, and stage an engaging radio or TV interview, often all in the same day. I sometimes wonder how any of us have time to get together and make music.

A few conservatories are trying to prepare players for the new realities of orchestral work. I wonder whether conductors have access to similar training.

I guess I'm pretty lucky. I can count the conductors I've worked with that I truly detested on one hand. But there is always room for improvement. In response to Robert Levine's initial question, I'll throw out, in no particular order, five areas that conductors might do well to think about, in the context of their relationship with the musicians in an orchestra.

- 1) Respect. Aretha Franklin was spot on. We all have the same years of training and dedicated work. Few things are more off-putting than arrogance on the podium.
- 2) Willingness to learn. Conservatively assuming that an average orchestra musician has twenty years of experience on his/her instrument, a conductor is facing 1,500 to 2,000 years of collective knowledge. Musical ideas need to flow two ways.
- 3) Collegiality. Yes, the conductor is the boss, especially if he/she is also the music director, but collaboration as artistic equals is much more rewarding than just doing what you're told.
- 4) Concision. Say what you need to, but show me most of what you want. In performance, I get pretty right-brained, and am not thinking in verbal terms. It's better for me to keep it visual. It's also usually a lot more efficient.

5) Advocacy. The most influential spokesman on behalf of an orchestra's musicians is its conductor. It's really disappointing to see how many conductors won't go to bat for their players.

Day 2

A good rehearsal is...

...well-planned. A rehearsal outline, with reasonably accurate time allotments, is step one. As a violinist, I pretty much play everything all the time, but it saves time and helps with pacing when I know what's coming at me in the next two and a half hours. We also have a lot of music to learn, and it's sometimes good to know that we won't play the concerto until Thursday, so practice time on Tuesday can be better spent on the symphony. A plan that has logical instrumentation progression, usually biggest to smallest, is appreciated by those who don't play every piece. At least that's what they tell me. I'm a violinist, so I almost never get to knock off early anyway.

...varied. Two and a half hours of Bruckner tremolo is both mind-numbing and a tendon disaster. Good rehearsals vary the technical demands.

...efficient. If something isn't working, it's the conductor's job to figure out why, and to figure it out soon. If a problem in a passage doesn't solve itself on the first repetition, then belaboring it without analyzing the challenge doesn't help. Frustration sets in quickly (and should be apparent to an observant conductor) and is antithetical to good music-making. Minor technical errors generally don't need to be pointed out, since they are usually self-resolving. Intonation is one area that often does need the conductor's ears, and again, just playing the chord over and over is unhelpful, while carefully tuning it helps a great deal.

...geared toward performance. At some point, we need to get a feel for continuity and architecture, especially in a piece that's new to us. Just running through repertoire without solving problems is a waste of time, but by the final rehearsal, we do need a chance to work through the pacing, and to figure out how to plan our stamina.

...respectful. We musicians are good at self-validation, since we don't get much positive feedback. That doesn't mean that acknowledgment of good work isn't welcome. Constant praise is fatuous, of course, but positive reinforcement is a good thing. Even "thank you, that's better" after correcting a passage helps our collective confidence. If a musician asks to repeat a passage, or if, say, (ahem) the principal second asks for a few seconds to adjust a bowing or suggest a technique, that's a good time to trust the musician's judgment and defer. In the long run, we really are saving time.

...clear. I always enjoy it when a musician says, after a conductor's extended evocation of what s/he envisions, "So you want it louder?" It's possible, and maybe even useful, to say you want it louder AND to explain why. Actually, I do enjoy the justification of an interpretation. I may not agree, but it's so much more satisfying for me to help create a conductor's concept when I know what the concept is. Absent any explanation, the interpretation becomes paternalistic, and condescension is one thing I just can't stand. And metaphor and abstraction are fine, just not at the expense of clarity.

Day 3

I've had the pleasure of playing in the "guinea pig" orchestras for a couple of conducting competitions in recent years. I've been very impressed by the level of artistry in the upper strata of these groups of aspiring conductors, but simultaneously a bit surprised and disappointed by the inexperience and/or mediocrity I've seen in the same competitions. I've wondered for a long time what the musical education system could do better to locate and develop conducting talent.

Most music schools currently offer no undergraduate conducting major at all. Many of the schools that do teach conducting courses at the undergraduate level do it as a part of a music education degree, which has a very different focus from the performance-directed training that most orchestral musicians have. If we don't start training conductors until graduate school, that's not a lot of time to learn a pretty complicated set of skills before a budding conductor is pitched into the marketplace. With the exception of the League's Conducting Fellowship program, there aren't a lot of opportunities for early professional development in the field (at least, as far as I know). So essentially, if you want to be a conductor, you get about two years of master's-level training, and then you have to go look for a job, with little real knowledge of how to do the job, aside from basic baton technique and score-reading.

A conductor with no experience as an instrumental performer has a whole other set of challenges, though. The sheer amount of practice time needed to build the level of virtuosity that's required to win an orchestral audition these days is daunting. If instrumental expertise is as valuable as I think it is, how would an undergraduate have time to effectively pursue conducting skills in addition? I don't know the solution to the problem, but I do believe that most new conductors in the job market don't have enough experience and enough podium time under their belts to be very effective, and an earlier start in the academic progression might help.

My own orchestra recently recast its assistant conductor position as a kind of short-term post-graduate training position (with a close mentoring relationship with the music director), as opposed to a long-term staff conducting position where the full range of job skills is (perhaps unrealistically) expected to be already in place. We're still very much in the experimental phase of this model, but I'm optimistic about the potential of such an employment step to develop already formidable talent with a year or two of practical experience, not just on the podium, but in the bewildering array of off-stage duties that a 21st-century music director faces.

Day 4

In my **thirty-odd years of orchestral experience**, I've encountered all flavors on the podium. I've seen micromanagers, and the ones who just want to go home early. I've seen great technicians who have nothing to say, and artists with a lot to say who don't know how to say it. The "ahead-of-the-beat" phenomenon isn't necessarily my first complaint, but I do recognize that it's an issue worth exploring.

I would estimate that 80-90% of the conductors I see (as in, right in front of me, on the podium) are "ahead-of-the-beat" conductors. I don't know where this tradition started, but I'm happy to join any chorus of players who would prefer to see an ictus in real time. On the rare occasions when I meet a conductor who wants to be on top of the beat, s/he always has to tell the orchestra, "No, you're behind me — the beat is here, and I want the sound to coincide." The first iteration is useless, of course, but the second generally produces an orchestra that responds very quickly and precisely.

I have never understood the "behind-the-beat" phenomenon, and would submit that if more conductors would insist on accurate rhythmic precision, then we'd all be playing better performances.

Day 5

One word stood out in this entire discussion: Trust. All the musicians in an orchestra, even the one who doesn't make a sound (well, ideally not, at any rate) must have a pretty high level of mutual trust, or they'll get in each other's way when it comes time to actually create art, live, in the moment, with an audience.

We don't have to love each other. We don't even have to like each other. But if personal disdain or animosity cross into our professional lives as artists, we do ourselves and our art a great disservice.

The relationships in an orchestra are a lot like an arranged (and weirdly polygamous) marriage. We don't get to choose our multiple "spouses," and often never meet them until the contracts are already signed. We may end up falling in musical love, and we may not, but our lives together can still work in an atmosphere of trust, respect, and occasionally forgiveness.

Many thanks to Ann and Robert for inviting me to participate. It's been a great pleasure to exchange ideas with such insightful and articulate colleagues.

6. Francine Schutzman, Oboist with National Arts Centre Orchestra

Day 1

In answer to our question for the first day: Hmmm... I can think of one thing: it would be great if all conductors could actually trust the musicians to play the music to the best of their abilities. I've often wondered what it is that makes an orchestra respond positively to one conductor and not another, and why some conductors have great results with one orchestra but not another. There's that elusive factor of chemistry, usual apparent from the first five minutes of the first rehearsal. I like conductors who don't waste time, but the single most important factor that draws me to a conductor is his/her trust in me (I will use the masculine from here on because of the statistical prevalence of males in the field, but please take my remarks to be inclusive of all conductors). If someone can indicate what he wants, look in my direction (it's amazing how many conductors don't acknowledge that a solo is coming up!) and nod or smile or do something that says "Okay, I've led you to this point; now it's your turn to shine," I will do anything in my power to make any suggested changes willingly. If someone tries to control every nuance, I will of course make the changes, but ... um... not so willingly. I will probably not enjoy the experience.

Perhaps I can break this down into five smaller elements:

Dear Conductors:

- 1) Please have your parts marked before the first rehearsal. If there are cuts, they should be either on your own set of parts or given to our librarian well in advance of your visit. Don't make us waste time marking our parts.
- 2) Please don't talk too much. Use your hands. If you paid attention in your conducting classes, that should be sufficient.
- 3) Please look at me when I'm about to play a solo. Please don't look at me if I make a mistake. That is, it's okay to smile in such a way that I know that you trust me to get it right the next time, but it's not okay to glare at me or to follow me around all week asking anxiously if I'm going to get the high note in the concert (this actually happened to me).
- 4) Please don't be overcontrolling. We're musicians, too, and we earned our positions in the orchestra. TRUST US.
- 5) Please be inclusive. If you have a remark to make to a section, make it to the whole section, not just the principal player by name (especially if the section has only two people in it). If you give solo bows (always nice), please include everyone who had a solo of some magnitude.

Day 2

Pet peeves about conductors' rehearsal techniques:

- 1) Not letting us get a sense of the movement as a whole before the picking starts.
- 2) Picking too much. TRUST US (have we heard this before?)..
- 3) Talking too much in general, but then, when there's a funny story to break the tension, telling it in a soft-enough voice that only the first few stands of string players can hear it.

- 4) Addressing remarks that are meant for the whole orchestra to the first violins alone.
- 5) Addressing remarks that are meant for the whole section to the principal player alone.
- 6) Making all the beats look the same.
- 7) Starting the first rehearsal with the most delicate slow movement.
- 8) Not acknowledging that someone has taken a conductor's suggestion and actually done something to said conductor's liking.
- 9) Dwelling on a player's mistakes. Give us a couple of tries.
- 10) Not helping the players fix intonation. Sometimes you need an outside ear as a referee.
- 11) Not fixing things that are obviously not working (ensemble, for example).
- 12) Not wondering if a wrong note that gets played a third time might actually be a misprint.
- 13) Keeping the rehearsal order a deep, dark secret.
- 14) Wasting rehearsal time having us mark our parts.
- 15) Doing pretty much anything that causes anxiety in the players, such as glaring.

Day 3

I admit that this is a subject that has always irked me somewhat -- not that orchestras play "behind the beat" but that some conductors (usually not regular orchestral ones, but people who are used to working with rock bands) ask us to play "on the beat." My question is, "Where is the Beat?" For me, it's when the motion stops -- when the hopefully downward motion of the first beat completes its natural arc and changes direction to move towards the second beat. The conductors who want us to play "on the beat" seem to be asking us to play somewhere in the middle of that arc, and of course we all interpret that differently. It seems to me that it makes much more sense if the conductor realizes that the orchestra can play together (at least, that is always the goal) if we wait for the end of the motion. So I firmly deny that there is a problem unless someone comes in and proclaims that there is one!

That much being said, I have certainly noticed that certain conductors get so excited about what's going on stage (either that, or they're busy listening to some other -- imaginary -- orchestra) that they do beat considerably ahead of where the orchestra happens to be at the time. It's not just a matter of keeping the tempo going; I'm talking about a beat or two -- or three-- ahead. When this happens, I try to think charitable thoughts about how enthusiastic the conductor is, and then I do my best to ignore him and listen hard to my colleagues, hoping that they're doing exactly the same thing.

Since we're on the topic of stick technique, I'd like to mention a couple of things that drive me batty. I've already said, earlier in this discussion, that I don't appreciate conductors who make every beat look exactly the same, so that if you happen to miscount, you have no chance whatsoever of figuring out where you are. Another thing is conductors who hold the baton in such a way that it dings against their music stand from time to time. This is rare, but I've seen it and heard it. It's quite disconcerting. On the other hand, there seem to be some people who are meant to operate a baton. I am fascinated by the fluidity and beauty of some people's beats. It's like watching a ballerina with very expressive arms.

Day 4

I'm sitting now on a tour bus with a colleague, so I asked him what he thinks conductors can do to make our musical experience better. For him, it's a matter of keeping things fresh, of not over-planning, of not making it obvious that you're going to stop the rehearsal at a certain spot because you always do, and because you just might have a little story that you always tell at that very spot. For me, I am happiest when a conductor works things out rhythmically at tricky spots in rehearsal so that you really know all the pieces of the puzzle and how you need to fit in with the trumpets or the percussion. Once everybody understands what's going on and who they need to listen to, the conductor is free to do things a bit differently in each performance if he wishes -- to make it fun, as my colleague says, and to live in the moment.

As for how we can improve the relationship between orchestras and conductors, I've said it before and I'll say it again: they need to trust us. If a conductor shows the musicians that we're

making music together and that he respects what we're adding to the mix, we will do our utmost to help him carry out his vision for the piece. I truly think that most orchestras do this already: they're quite willing to keep an open mind for about 5 minutes or so, which seems to be all it takes to get the measure of the man with the stick. Perhaps we can help improve the relationship by stretching that time to half an hour or so.

7. Robert Levine, Senior Editor, violist, Milwaukee Symphony

Day 1

I'm supposed to be helping to moderate this discussion, not participate in it. But I found my own questions too tempting not to answer. So here are my five ways to have your orchestra not hate working for you:

Don't talk so much. No one became a musician because they wanted to hear conductors talk. I have sometimes fantasized about rationing conductors to so many words per rehearsal. Isn't conducting supposed to be a non-verbal thing? All that moving your hands around and such?

Talk to the point. OK, sometimes you'll have to say something. Tell us what you want in words that will actually help us achieve it. I know how not to drag, or how to play louder. I don't know how to make something "sound like the trees." Rehearsal is not a place for metaphysical explanations. It's OK to tell us (very occasionally) what the piece meant to the composer (if it's a fact and not your own fantasy). We recently did Mahler *Fifth Symphony* and the conductor read us the words Mahler wrote to the Adagietto. While it didn't increase my respect for Mahler, it did help me to "get" the movement. But we don't need to know what the piece means to you. It means something to most of us too - but we're not wasting rehearsal time telling you about it, are we?

Feedback comes in two forms. If you tell us to fix something, let us know when we've actually fixed it. It's fine to tell the horns that they were behind at letter "B" and to run the passage again. If they get it right this time, let them know. A simple smile in their direction will do, although a verbal acknowledgement at the next stop is better. Presumably they wouldn't have been behind in the first place if they could tell whether or not they were. That means they also need to know when they got it right.

This does not mean continuing obsequious remarks about how wonderful we're playing. That falls under the category of "talking too much," and we won't believe it anyway.

If you screw up, admit it. It's better not to screw up at all, of course, but most musicians know that conductors are human (although they might not want to have to say so publicly). You know and we know when you miss a beat pattern. When we screw up, you call us on it. When you screw up, the only person that can call you on it is you. Not only is it basic good manners to admit to your own mistakes, it will greatly increase your moral standing to call us on ours.

Lose the attitude. Musicians are primed to condescension and even contempt from conductors. We're pleasantly surprised when we don't get it. Surprise us.

Day 2

I'd like to change direction a bit for Day 3. Here in Milwaukee we've seen lots of assistant-type conductors over the past couple of years (as we've been through a search process twice in three years). I've found myself very discouraged by the general level amongst young conductors, even those with positions with major orchestras. If, as I believe, this field suffers from a serious conductor deficit, how do we solve it?

Conducting is a unique kind of performance art in several ways. But often overlooked is how hard it is to even begin the learning process. If someone wants to learn how to play viola (and

yes, some people actually do), they find an instrument, find a teacher, and go at it. If one wants to learn to conduct, things are much, much harder. It's as if the only aircraft for training pilots were 747s. Not many pilots would get trained that way. And the handful that would get 747 time would be those with chutzpah, money, sharp elbows, good political connections, or some combination therein - not necessarily those with any talent for flying.

So how do we, as an industry, identify conducting talent, train such talent, and then develop it in the field?

Day 3

Who comes up with these wonderful questions anyway? (That's known as "sock-puppeting" when it's done by bloggers, by the way - at least when it's done anonymously.)

My pet peeves:

Moving too much. When conducting an orchestra, less is more. Then, when the conductor actually does more, it means something. The orchestra might even notice. (We did a kiddie concert the other day on music describing various means of locomotion. Like all kiddie concerts, it opened with "William Tell." Afterwards I heard some colleagues complain that the conductor was pantomiming riding a horse for the audience. I honestly hadn't noticed.)

Baton as fashion accessory. A conductor without a baton should look as helpless as an oboist without a reed. If it's not fulfilling a function, then its value is solely as a phallic symbol. And, if it is fulfilling a function, don't put it down when the tempo marking is Adagio. If you think that Allegro is crisp and Adagio is mushy, you're in the wrong business.

Bilateral symmetry. If both arms are always doing the same thing, then one of them should be left at home. Gestures should mean something.

On playing behind (or beating ahead)

Orchestras always play behind the beat compared to, say, choruses. My own theory is that it's an attempt to play with one's colleagues; or, to put it another way, to play with what one hears rather than with what sees. I find it gets worse in halls in which it's hard to hear side-to-side and when conductors don't seem to have a strong conviction about when the orchestra is going to come in after they beat. For me, it's less bothersome than conductors who follow the orchestra (although obviously conductors should react to what the orchestra is doing), especially when accompanying.

Day 4

Ann Drinan and I would like to thank all the panelists for their thoughtful and direct observations. We can only hope that some conductors will wander through this corner of cyberspace, read this discussion, take some of it to heart, and make the world a marginally better place - at least for orchestra musicians.

For our last day of discussion, I'd like to post two questions. Panelists can choose to answer one, both, or questions of their own, if they don't like either.

The first is about what we see in conductors that drives us nuts about how they actually deal with the music. What do most conductors not do well musically? What words of wisdom about the music, if heeded by those with sticks, would lead to consistently better interpretations?

The second question is about us. What can orchestra musicians do to improve the relationship between conductors and orchestras? Is it possible to have a frank discussion with a conductor (through a formal committee process or otherwise) about issues that impact the musicians?

Day 5

What most conductors don't seem to know about music:

What the composer wrote should be taken seriously. Obviously there are mistakes, inconsistencies, miscalculations and sketchy dynamics and articulations in a lot of pieces. But there's lots of notation in many standard works that are substantive and are consistently ignored.

I'll give two examples from Mozart. In the last 10 bars or so of the "Marriage of Figaro" overture, the first violins have dotted half notes. Why is it always played like half notes with quarter rests? And in the second and third bars before the end, the firsts have half notes while the rest of the orchestra have quarter notes? Why do conductors always decide that Mozart didn't know what he was doing here?

Crescendi always happen too early. I'll give two more examples, this time from Beethoven. At the end of that very thorny fugue in the last movement of the Ninth, the *An die Freude* motif appears with full chorus and orchestra. Two bars before that, there are two bars of orchestra marked "crescendo." Those two bars are invariably started *mf*. How about the *pp* that's marked with the crescendo happening mostly in the second bar rather than the first? It would have lots more impact. And there's a similar spot right before the finale of the 5th. Why does every conductor allow every orchestra, as soon as they see "crescendo," to immediately kick the dynamic up two notches? Imagine that passage with most of the crescendo happening in the bars right before the finale (rather than the *ff* arriving at least four bars early) and you'll see what I mean.

Orchestra musicians are able to fix a range of problems without help from the conductors. Balance isn't one of them. But few conductors seem to understand that what the audience hears might be different from what they can hear from where they stand. I recently heard a great American orchestra play the Bruckner *Ninth Symphony* with a great German conductor. Whenever the trombones came in, the strings might as well have gone out for coffee. Would it have hurt the conductor to go out into the hall and see if the paying customers could hear an orchestra rather than just three first-rate trombonists? Admittedly balancing Bruckner is hard. But so is playing it, and the musicians were doing just fine. How can they know what the balances are in the hall if no one tells them?

An aircraft designer once said that the most useful thing he could add to an airplane was more lightness. The most useful thing that can be added to most interpretations is more simplicity. There's an awful lot of performing going on that is, as a wise old colleague of mine once said, "a career on every note." Most music doesn't need that much interpretive help to sound good.

As far as getting along with conductors goes, it helps a lot to remember that the conductor is human and is probably doing as best they can. Of course it's easier to remember that when the conductor is a decent human being, a good musician, and a competent technician. But far too many musicians regard even those paragons as the enemy. There is much about the orchestral workplace - conductors probably more than anything else - that can provoke chronic anger within musicians. But that anger is often (not always) a choice made by those musicians, and not a healthy one either. How about choosing open-mindedness and a basic level of charity instead? It's a lot more pleasant way to live.

Appendix 7

Symphony Orchestra Institute: Musician Evaluations of Symphony Orchestra Conductors
(original PDF file)

Musician Evaluations of Symphony Orchestra Conductors



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Symphony Orchestra Institute: Musician Evaluations of Symphony Orchestra Conductors

Musician Evaluations of Symphony Orchestra Conductors

In 1967-1968, the leadership of the International Conference of Symphony and Opera Musicians (ICSOM) initiated a conductor evaluation system for use by musicians in its member orchestras. This system was created as a way for the musicians to express an objective, group evaluative opinion of the performance of the conductors leading them. It was expected that the system could provide thoughtful, confidential feedback to orchestra managements about the performance, presence, and skill of those conductors, as perceived by orchestra members, particularly in relation to future-season engagements.

A central component of the system was a standardized reporting form, completed voluntarily and anonymously by musicians shortly after a series of performances with a conductor. These forms were collected and the data tabulated by the orchestra's ICSOM delegate. The overall results were available to each orchestra's management, if and when requested, and to the delegates of other ICSOM orchestras, if they inquired.

The form was redesigned in 1970, based on initial use and experience. In late 1982, the form was again redesigned and updated by a representative, interested group of ICSOM musicians. The second redesign incorporated this group's and their colleagues' many years of experience with the form and the various evaluative criteria it incorporated, and was undertaken in preparation for establishing a master database at Wayne State University in Detroit. This new approach led to much more efficient and comprehensive assembly of the data, improving the ability to broadly and relatively easily share findings among the many authorized musicians (ICSOM delegates) at widely dispersed locations, and, through them, with their orchestra managers, if requested.

The mission of the Symphony Orchestra Institute is to foster positive change in how symphony orchestra organizations function in order to improve their effectiveness, to enhance their value in their communities, and to help ensure their preservation as unique and valuable cultural institutions.

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The ICSOM evaluation criteria, which musicians are asked to rate on a five-step scale from “strongly agree” to “strongly disagree” for each conductor are:

- ◆ has a thorough knowledge of the scores conducted;
- ◆ is able to communicate the emotional content of the music;
- ◆ demonstrates excellent baton technique;
- ◆ chooses excellent tempi;
- ◆ corrects faulty intonation;
- ◆ corrects faulty balance among instrumental groups;
- ◆ is a sensitive accompanist;
- ◆ makes efficient use of rehearsal time;
- ◆ makes remarks that are understandable and effective;
- ◆ leads rehearsals in a tactful, respectful way;
- ◆ achieves excellent performances; and
- ◆ based on the above criteria, should be considered for reengagement.

In 1996, the Institute became familiar with the ICSOM conductor evaluation system and the database of evaluative information that had accumulated since the early 1980s. The database appeared to contain more than 50,000 evaluations of more than 200 conductors from the more than 40 orchestras. Upon inquiry, the Institute received permission from ICSOM to analyze this data on the condition that any data provided would be made available only in aggregated form, and would not allow identification of evaluations by individual orchestras or orchestra members, or of individual conductors. As it got underway, the project became known as the Conductor Evaluation Data Analysis Project or CEDAP.

The Institute retained the services of Dr. Patrick Kulesa to work with the staff of Wayne State to organize the data to be included in CEDAP. Data were organized by the seasonal year of orchestras—September 1 to August 31—and data for the 10 seasonal years ending August 31, 1997 were included in the analyses. After review, it was decided to exclude the data from orchestras solely or primarily part of opera organizations, and that from orchestras that had not been in continuous operation over the selected 10-year period. Also, a total minimum number of evaluations for any one conductor was established. These filters resulted in a data universe of some 40,000 evaluations of 67 conductors submitted by members of 35 orchestras over a 10-year period.

In 1998, Dr. Kulesa completed his basic overview of this data and summarized his findings in *Harmony #7* (October, 1998). A recap of those initial findings is as follows.

The overall ratings for conductors were quite high and this general approval varied little by instrument group in the orchestra (woodwind, string, etc.). Different criteria for evaluating the conducting role—for example, knowledge of score, baton technique, and rehearsal-time usage—were highly intercorrelated. That is, a high rating on one of these dimensions was associated with high ratings on the other factors as well. This was true across all musicians and by instrument group. There was also little variability on these ratings over the 10-year period of data; ratings across time were uniformly positive.

Phase Two

In addition to being published in *Harmony*, the phase one results were reviewed with an advisory group of musicians. During this review, a number of potential variables were identified which, if quantitative data relating to them could be collected, might provide more insight into and differentiation of the conductor evaluations in the data universe.

A data collection effort was then initiated. For each conductor in the phase one analysis, the Institute undertook to obtain the following information: age group, gender, nation of birth, current national citizenship(s), primary language, place of early upbringing, place of postsecondary musical training, primary instrument of musical training/performance, years of professional orchestral conducting, country in which principal conducting experience took place, extent of opera conducting experience, orchestra music directorships and/or conducting staff experience (years and institutions).

Unfortunately, after an extensive effort, only data as to age group, gender, nation of birth, and primary instrument of training/performance were collectible for 53 of the 67 conductors in the phase one study. Even then, the primary instrument of training/performance was sometimes debatable and data as to orchestra affiliations were somewhat incomplete. Data as to age group, gender, and nation of birth were deemed to be accurate, but it was determined that only 4 of the 53 conductors were female and that this variable would not permit useful statistical comparison.

Since the phase one analysis had shown high consistency across the 10-year span, it was decided that data from the most recent seasonal year in the 10-year study would be representative of the larger sample, as well as reflect any recent influences on conductor evaluations. Thus, data for the following orchestral characteristics of 27 orchestras were collected for the seasonal year ending in 1997: the orchestra's metropolitan area population, annual operating expense level, number of contracted player positions, percentage of female players, and minimum contracted annual player compensation. For 16 of the 27 orchestras, with the assistance of various orchestra personnel managers, data were collected as to the average age of players and their average years of service.

These underlying and supplemental data for the season year 1997 were analyzed, resulting in a final sample of approximately 6,800 musicians' evaluations. Conductor-related analyses were completed on a subsample of 2,255 evaluations. Evaluations in the orchestral sample were grouped for comparison into two or three roughly even groups (such as smaller or larger metropolitan community; lower, medium, or higher compensation, etc.). This was done using the distribution of the variables themselves, and not through comparison with an external standard. Evaluations in the conductor sample were categorized by birthplace (U.S. or non-U.S.), by instrument of training/performance (string, piano, other), and by music director or non-music director.

Analysis and Results

A series of analyses (analysis of variance and t-test procedures) revealed significant differences for several conductor and orchestra variables in our sample. As the sample sizes are very large for these comparisons, there is a tendency for small differences between groups to be significant. Therefore, a smaller than usual probability level of $P < .001$ was selected for all comparisons.

Variables showing significances were as follows:

- ◆ birthplace of conductor (U.S., non-U.S.);
- ◆ conductor's primary instrument of training/performance (string, piano, other);
- ◆ orchestra metropolitan-area population (smaller, larger)
- ◆ orchestra annual operating-expense level (lower medium, higher);
- ◆ size of orchestra (smaller, medium, larger);
- ◆ percentage of women (lower, medium, higher) ; and
- ◆ average years of service (shorter, longer).

In the first phase of CEDAP, as noted earlier, conductors were evaluated quite positively. This finding held in the subsequent examinations of data. However, for the variables for which we were able to collect data, there were interesting distinctions in the ways players in orchestras rated different aspects of the conductors' techniques.

Where possible (when there were enough ratings to make a comparison), ratings by orchestra players of conductors who were their music directors were compared with those of conductors who were not their music directors. Very similar results were shown for the two groups, suggesting that, with respect to our sample, players do not evaluate their own music directors preferentially.

In the sample we developed, non-U.S.-born conductors were rated more highly than U.S.-born conductors on many of the evaluative criteria contained in the ICSOM form. These criteria included knowledge of score, emotional content (on which there were the strongest differences in ratings), baton technique, tempi, correct intonation, correct balance, sensitive accompanist, efficient time use, achieving excellent performances, and reengagement. U.S.-born conductors were rated more highly than non-U.S.-born conductors as to clear and effective remarks and tact.

The conductors' primary instrument of training/performance, as determined in our data collection effort, also showed differential ratings for certain evaluative criteria. The strongest variation was in the area of correct intonation: conductors whose primary instrument of training/performance was identified as a string instrument were more highly rated on the criterion of intonation. It is interesting to note that all instrument-group players in our sample rated "string background" conductors more favorably as to intonation, dismissing the possibility that this finding was due to string players—as the largest block of players in an orchestra—preferentially rating conductors with similar instrumental backgrounds.

Players in “smaller” orchestras within our data universe—those—ranked as representing smaller metropolitan areas, having relatively lower operating expense levels, and with smaller orchestra size—tended to rate conductors more highly than did players from the “larger” orchestras in the sample. Additionally, orchestras with relatively larger percentages of female players rated conductors more highly than did orchestras with relatively smaller percentages of female players. Also tending to rate conductors more highly were those orchestras whose players’ length of service was relatively shorter.

Discussion and Critique

The results of this second stage analysis did confirm that ICSOM orchestral musicians, overall, evaluate their conductors quite positively. Further, for our sample, and on the basis of the available data, there are statistically significant differences within those positive ratings, as summarized above, which appear to depend on characteristics of conductors and of the orchestras.

However, upon ultimate review, we believe that sound insights or useful generalizations to be drawn from the above statistical results are limited. After our musician advisory review of phase one results, we had hoped to develop broadly based insights on how non-U.S.-born versus U.S.-born conductors were evaluated by orchestra players—a long-standing topic of interest in the symphony orchestra world. To do this, as noted earlier, we set out to obtain data on a range of variables such as birthplace, place of early musical upbringing, institutions of early and graduate musical training, early conducting assignments, opera-conducting experience, primary language, etc. Unfortunately, we were unable to collect accurate, reliable, and verifiable data on any of these variables except place of birth. Also, our analysis would have been much strengthened by opinion polling of a random sample of orchestra players, and perhaps even of managers, critics, and audiences as to how each conductor in our study was perceived. Such a task was clearly beyond the scope of our inquiry. In sum, we have decided that place of birth is an insufficient proxy for all the other variables which would be needed to develop reliable insights into this interesting and controversial topic.

As to the variable relating to instrument of primary training/performance, we did determine a discrete choice for each conductor. However, these data were, in too many cases, deemed unreliable. For some conductors, the primary instrument of performance in the conductor’s working career apparently superseded another instrument of primary early and intensive training. In some cases, the instrument of primary training was not carried forward into a professional career, or only for a short time, whereas in other cases, the conductor has continued to practice and perform the instrument. Also, many conductors perform to some degree on the piano as an integral part of their conducting work. So, in many cases, the conductor’s “primary” instrument of training/performance was not clear and unambiguous. Thus, although the data we used generated interesting implications, they have limited reliability.

Finally, with respect to the apparent differences in degree of positive evaluations of conductors by “smaller” versus “larger” orchestras, we are troubled by the fact, upon review, that the 25 orchestras in the second-stage analysis did not include a number of the larger ICSOM orchestras. This may be because those orchestras have not participated in the ICSOM evaluation system, did not have a sufficient number of evaluations to be included in these analyses, or that we were unable to collect reliable data for them. In a sense, therefore, the orchestras in the sample are in fact closer in size to each other than would be assumed and the sample may be insufficiently representative. It is also true that, overall, the smaller the ICSOM orchestra, the greater the percentage of female players. This may just be the same results reported twice. Finally, we did not take into account in our analysis whether each conductor had led a representative group of the sample’s orchestras, or whether there was one set of conductors who tended primarily to conduct the “larger” orchestras, and another set who tended primarily to conduct the “smaller” orchestras, in which case the evaluation comparison is more complex than indicated.

In retrospect, we are disappointed that we were unable to develop, in the second phase of CEDAP, the broad and reliable base of supplemental data about conductors and orchestras which might have permitted more comprehensive, detailed, useful, and interesting insights into ICSOM symphony orchestra players’ evaluations of their conductors. This may be a task which others will pursue; we wish them good luck!

We invite your comments and reactions to this report.

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Appendix 8

Mahler's Second Symphony: orchestral scores (10 excerpts)

Excerpt No. 1: 1st Movement, bars 1–5

Symphony No. 2

1

Allegro maestoso. Mit durchaus ernstem und feierlichem Ausdruck.

1. 2. Flöte.

3. Flöte (Piccolo) *(im ff doppelt besetzt.)*

1. 2. Oboe.

3. Oboe (engl. Horn.)

1. 2. 3. Clarinette in B.
(3. nimmt zuweilen Bassclar. in B.)

1. 2. Clarinette in Es.

1. 2. Fagott.

3. Fagott (Contrafagott.)

6 Hörner in F.
(Die Bezeichnung „gestopft“ gilt, bis sie durch eine neue „offen“ wieder aufgehoben ist.)

4 Trompeten in F.
(1. Tromp. im ff doppelt besetzt.)

4 Posaunen.
(mit Sordinen versehen)

Contrabassstuba.

Triangel. Tam-tam (tief)

Becken *(abwechselnd mit einem Tam-tam, welches höher klingt als das 1. und mit Tam-tam (hoch) bezeichnet ist.)*

Grosse Trommel.

1. 2. Pauke.

1. 2. Harfe.

1. Violine.

2. Violine

Viola.

Violoncell.

Contrabass.
(zuerst eins einige davon mit Contra-C-Saite)

Allegro maestoso. Mit durchaus ernstem und feierlichem Ausdruck.

trem. (nicht theilen.)

ff *p*

trem. (nicht theilen.)

ff *p*

trem. (nicht theilen.)

ff *p*

wild *fff* *ff* *accel.*

wild *fff* *ff* *accel.*

Allegro maestoso. Mit durchaus ernstem und feierlichem Ausdruck.

Anmerkung für den Dirigenten. In den ersten Takt des Thema's sind die Bassfiguren schnell in heftigem Ansturm ungefähr $\text{♩} = 144$, die Pausen jedoch im Hauptzeitmass auszuführen. Der Halt im 4. Takte ist kurz — gleichsam ein Ausholen zu neuer Kraft.

Excerpt No. 1: 1st Movement, bars 1-5

Excerpt No. 2: 1st Movement, bars 27–38

1. 2. Fl.

1. 2. Ob.

engl. Horn

1. 2. Clar. in B.

Bassclar. in B.

1. Fag. Contrafag.

1. 2. Horn in F.

3. 4. Horn in F.

1. Trmp. in F.

1. Viol.

2. Viol.

Viola

Cello u. Bass

dim.

p

fp

f

molto espress.

p

molto espress.

keth.

f

3

Excerpt No. 2: 1st Movement, bars 27–30

1. 2. Fl. *zu 2*

1. 2. Ob. *zu 2*

1. 2. Clar. in B. *nimmt Oboe*

Bassoon in B. *zu 2*

1. 2. Fag. *zu 2*

Contrabass *zu 2*

1. 2. Horn in F. *offen zu 2*

3. 4. Horn in F. *gestopft*

5. 6. Horn in F. *offen*

1. 2. Tramp. in F. *zu 2*

3. 4. Tramp. in F. *zu 2*

1. 2. Pos. *zu 2*

3. 4. Pos. *zu 2*

Tuba *zu 2*

1. Viol. *zu 2*

2. Viol. *zu 2*

Viola *zu 2*

Cello u. Bass *zu 2*

1. 2. Fl. *zu 2*

1. 2. Ob. *zu 2*

1. 2. Clar. in B. *zu 2*

Bassoon in B. *zu 2*

1. 2. Fag. *zu 2*

Contrabass *zu 2*

1. 2. Horn in F. *zu 2*

3. 4. Horn in F. *zu 2*

5. 6. Horn in F. *zu 2*

1. 2. Tramp. in F. *zu 2*

3. 4. Tramp. in F. *zu 2*

1. 2. Pos. *zu 2*

3. 4. Pos. *zu 2*

Tuba *zu 2*

Becken

Gr. Tr.

1. Pauke

2. Pauke

1. Viol. *zu 2*

2. Viol. *zu 2*

Viola *zu 2*

Cello *zu 2*

Bass *zu 2*

fp *mf* *sempre crescen* *do* *ff*

Excerpt No. 2: 1st Movement, bars 31–38

Excerpt No. 3: 1st Movement, bars 244–254

[illegible]

Excerpt No. 3: 1st Movement, bars 244–254

23 Immer noch mehr zurückhaltend.

1.
Fl.
2. 3.

engl. Horn

1. 2. Fag.

1. 5.
Horn
in F
3. 2.
Horn
in F
4. 6.

portamento
p
ppp

1. Harfe

2. Harfe

Triangel

1.
Pauke
2.

1. Viol.
2. Viol.
Viola

pp molto sopra.
ohne Dämpfer
p molto espress.
gliss.
gliss.
gliss.
gliss.
gliss.
ohne Dämpfer
pp
geth.
pp
geth.
pp

23 Immer noch mehr zurückhaltend.

[illegible]

4. Horn in F. *pp*
2. Horn in E. *pp*
3. Horn in F.
4. Horn in F. *pp*
5. Horn in F. *pp*
6. *pp*
1. Viol. *pp*
2. Viol. *pp*
Viola *pp*
Tello *pp*
Bass *pp*

Excerpt No. 5: 1st Movement, bars 404–428

25

Piccolo

1. Fl.

2.

1. 2. Ob.

engl. Horn

1. 2. Clar. in B.

3.

1. 2. Fag.

1. 3. 5. Horn in F.

2. 4. 6.

1. Trmp. in F.

2. 3.

1. Pos.

2.

3. 4.

Becken

mit Schwammschlägel.

sempre p

1. Pauke

2.

1. u. 2. Harfe

1. Viol.

2. Viol.

Viola

Cello u. Bass

sempre pp

zu 2.

zu 2.

zu 2.

zu 3.

ohne Dämpfer.

zu 3.

ohne Dämpfer.

mit Schlägel.

sempre p

sempre p

sempre p

sempre p

sempre pp

sempre pp

sempre pp

sempre pp

Excerpt No. 5: 1st Movement, bars 404–409

Excerpt No. 5: 1st Movement, bars 410–414

zu 2.

1. 2. Fl. *ff*

1. 2. Ob. *ff*

Engl. Horn *ff*

1. 2. Clar. in B. *ff*

3. *ff*

1. 2. Fag. *ff*

1. 2. Horn in F. *gest.*

3. 4. Horn in E. *gest.*

5. 6. *gest.*

1. Trmp. in F. (immer offen) *f*

2. 3. Trmp. in F. (immer mit Dämpfer) *f*

4. *f*

1. 2. Pos. (immer mit Dämpfer) *f*

3. 4. *f*

Tam-tam (tief.) *ppp*

Gr. Tr. *ppp*

1. Pauke *ppp*

2. *ppp*

1. 2. Harfe. nicht brechen *ff*

4. Viol. *molto cresc.*

2. Viol. *molto cresc.*

Viola. *molto cresc.*

Cello. *molto cresc.*

Bass. *molto cresc.*

ff *f* *mf* *p* *pp*

Excerpt No. 5: 1st Movement, bars 415–419

2

Andante moderato. Sehr gemächlich. Nie eilen.

1. Violine.

2. Violine.

Viola.

Violoncelli
getheilt.

Bass.

sempre

stacc.

sempre

stacc.

sempre

pizz.

p

1. Viol.

2. Viol.

Viola.

Celli.

Bass.

pp

pp

pp

pp

pp

Excerpt No. 7: 2nd Movement, bars 30–37

The first system of the musical score includes parts for 1. Fl., 1. Viol., 2. Viol., Viola, Cello & Contrabasso (Celi geth.), and Bass. The key signature is B-flat major (two flats) and the time signature is 4/4. The first measure of the Flute part is marked *pp*. The Violin parts also begin with *pp*. The Viola and Cello/Contrabasso parts are marked *pp*. The Bass part is marked *pp*. The Cello/Contrabasso part has a *ppp* marking in the third measure. The system concludes with a double bar line.

1. Fl.

1. Horn in F.

1. Harfe.

1. Viol.

2. Viol.

Viola.

Celli geth.

Bass.

dim.

dim.

Excerpt No. 7: 2nd Movement, bars 30–37

Excerpt No. 8: 2nd Movement, bars 121–132

Rehearsal Mark

1. Viol.
geth.

2. Viol.
geth.

Violen
geth.

Celli
geth.

Bass.

cresc.

pp subito

pp

pp subito

pp subito

pp

pp subito

pp

p

cresc.

pp subito

mit Dämpfer

pp

p

pp

p

pp

Im Tempo nachlassen.

1. 2. 3. Fag.

1. Viol.
geth.

2. Viol.
geth.

Violon
geth.

Celli
geth.

Bass.

pp *gliss.* *morendo* *pizz.* *gliss.* *morendo* *ohn* *gliss.* *morendo* *ff.* *ol* *pizz.* *ff.* *oh*

pp *gliss.* *ppp* *gliss.* *ppp* *gliss.* *ppp* *ppp* *morendo* *ppp* *morendo* *ppp* *morendo* *arco* *ppp* *morendo* *gänzlich ersterbend*

Excerpt No. 8: 2nd Movement, bars 121–132

Excerpt No. 9: 2nd Movement, bars 265–276

Nicht eilen. Gehalten!

1. Fl. *p* *ff* *p*

2. Fl. *p* *ff* *p*

3. Fl. *p* *f* *p*

4. Ob. *p* *f* *p*

2. Ob. *p*

3. Clar. in B. *p* *pp* *f* *p*

4. Clar. in B. *p* *pp*

1. Fag. *pp* *pp* *p*

2. Fag. *pp*

1. Horn in F. *p* *p*

2. Horn in F. *p*

3. A. *p*

1. Viol. *p subito* *grossen Ton und Wärme* *gliss.* *gliss.* *ff* *p*

2. Viol. *p subito* *grossen Ton und Wärme* *gliss.* *gliss.* *f* *p*

Viola *gliss.* *f* *p*

Celli *gliss.* *f* *p*

Bass *pp*

Nicht eilen. Gehalten!

Excerpt No. 9: 2nd Movement, bars 265–276

Excerpt No. 10: 5th movement, bars 708–719

[illegible]

Excerpt No. 10: bars 708–719

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