

City Research Online

City, University of London Institutional Repository

Citation: Cottrell, S.J. (2017). The creative work of large ensembles. In: Rink, J., Gaunt, H. & Williamon, A. (Eds.), Musicians in the Making: Pathways to Creative Performance. (pp. 186-205). New York: Oxford University Press. ISBN 9780199346677

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/18763/

Link to published version:

Copyright: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

Reuse: Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

 City Research Online:
 http://openaccess.city.ac.uk/
 publications@city.ac.uk

Chapter 9 The creative work of large ensembles Stephen Cottrell

Abstract

Preparing large ensembles for performance involves musical, social, logistical and financial challenges of a kind that are seldom encountered in other forms of collective music-making. The conventional approach to meeting the challenges that arise within the rehearsal room itself is to appoint a single musical overseer, usually a conductor, whose ostensible role in musical preparation is to directly influence the musicians in a way that leads towards the creation of a musical product that can be delivered in a later performance. Rehearsal leadership, viewed from this perspective, moves predominantly in one direction, i.e. from the conductor to the ensemble. To see leadership in this way, however, oversimplifies the conductor's relationship with the ensemble, the relationships between the musicians themselves, and the different strategies that these musicians must employ when working in large ensembles. Conceptualizing the ensemble as a complex system of inter-related components, where leadership and creative agency are distributed among the group and developed through rehearsal to achieve what is taken by the audience to be a unified whole, allows for a new understanding of the work of large ensembles. This chapter examines these different components of the creative process in orchestral and choral rehearsal and performance, the internal and external forces that both shape and constrain that process, and the approaches that individual musicians and conductors might adopt in response to the changing contexts in which such creativity might be manifested.

<1>Keywords

Large ensembles, orchestras, choirs, conductors, rehearsal, collective creativity, leadership

<1>Introduction

Studies of creativity in musical performance have tended to focus on the work of individuals,¹ perhaps unconsciously mirroring the longstanding fascination in western culture with the idea of individual creative genius. Much less consideration has been given to 'group creativity'² – that is, to the types of creativity that are nurtured and manifested within large music ensembles. Such ensembles make particular demands on those involved in preparing music performance events. Assembling large numbers of instrumentalists and/or singers in one place, taking them through the series of rehearsals usually necessitated by the musical complexity of pieces written for such forces, and mounting a concert that generally involves an audience of a size commensurate with the enterprise all pose significant musical and logistical challenges that impact on the creative endeavours of the participants.

In many musical traditions around the world, these large ensembles are often seen as the pinnacles of collaborative musical performance, around which, to some degree, the traditions themselves become organized. Notwithstanding the importance attached to concerts by, say, solo pianists, singers or string quartets, the symphony orchestra remains the most high-profile ensemble in the western classical tradition, and a particularly important icon of that tradition. This iconicity has led to the orchestra ideal being deployed in a range of metaphorical constructs. As Ramnarine (2011: 329) points out, such metaphors often focus on power relationships within the ensemble and have ranged from 'a late seventeenth-century model of subordination and divine-right authority ... to an early nineteenth-century one of ordered voluntary association'. But as she further observes, the interaction between musicians and conductor has also been taken by some to exemplify particular models of workplace relationships and management strategies:

Faulkner describes the orchestra as an 'exemplary model of collective action' (1973: 156) that might instruct communications in work organisations because of

its internal systems of control and negotiations over authority between conductor and player... Atik similarly writes about the interactive dynamics of leadership and followership within the orchestra as a model for conceptualising styles of management and the organisation of labour in consumer markets (1994). Christopher Small (1994: 60–1) conceives the professional symphony orchestra as a model of the industrial enterprise ... in which a group of individuals (the orchestra) is welded into a 'productive unit' by accepting the 'superior authority' of the conductor. (Ramnarine 2011: 329)

Implicit in these different characterizations, however, are rather different relationships between the conductor and the musicians. Faulkner's view of the ensemble as a form of collective social action suggests a more egalitarian distribution of power, or at least one that acknowledges that the input of all contributors in some way shapes the final outcome; Atik sees the conductor as a leader whose charismatic influence over his or her followers is ultimately what leads to a successful and satisfying musical performance; and Small asserts a more causal relationship between the two parties, with the musicians simply obeying the instructions of an authoritarian figure who exerts total control over their labours.

But do any of these models adequately capture the manner in which orchestras and other large ensembles actually function? And if so, do such models represent the best way to stimulate creative behaviour from all participants in the orchestral performance event? These questions are at the heart of this chapter. It starts with a brief historical overview of the changing roles of musicians and conductors in large ensembles before reviewing in more detail the specific working relationships between the different parties, including those found in groups that choose to dispense with a conductor entirely. The chapter concludes with a summary of what appears to be best practice in relation to stimulating creative musical behaviour in these contexts.

<1>History and context

Both the orchestra and the sophisticated forms of sociomusical interaction that underpin it are relatively modern achievements. While the word 'orchestra' has its roots in ancient Greece, for many centuries it denoted a theatrical space from which the music might emanate within a dramatic performance. Not until the late seventeenth and early eighteenth centuries did the word come to be used for an instrumental ensemble of the type that we understand today (Carter and Levi 2003: 5). As these ensembles grew in size and sophistication, higher levels of musicianship skills were expected of those who performed in them. Whereas the smaller string bands or wind consorts of the Renaissance brought together groups of musicians with similar dispositions, the amalgamation of diverse instruments in the operatic, church and concert contexts of the Baroque and early Classical periods necessitated the accommodation of more disparate skills. This trend continued through the late eighteenth and particularly the nineteenth centuries. Ensembles expanded in line with the evolving musical aspirations of orchestral composers, with larger numbers of string players now matched by assorted wind and brass sections and accommodated within ever larger concert halls.

Inevitably, the skill sets required of individual musicians in these larger ensembles changed as the groups evolved. Whereas the viol player of the Renaissance string band would normally be in close proximity to his perhaps four to eight fellow musicians, by the late nineteenth century a concertmaster might be overseeing as many as 50–70 string players, with the orchestra further comprising perhaps 16–25 wind players and several percussionists, keyboard players and/or harpists.³ The growing size of the orchestra required not only increasingly large stages, with concomitant increases in the distance between musicians, but also changes to the ways in which the ensemble was laid out, with particular hierarchies developing within given sections of the orchestra. Thus the *modi operandi* of orchestral

musicians also necessarily evolved. Whereas the physical proximity of musicians in smaller ensembles enables physical and cognitive empathies between players to be generated more easily, large ensembles function differently: they require good sightlines and understanding across the ensemble on a much greater scale, particularly between section principals, in order that the sections can cohere satisfactorily. As we shall see, this has obvious implications for the creative process in such ensembles.

The greater difficulties in relation to coordination, tuning and interpretation presented by increasingly complex orchestral scores eventually required the inclusion of a performer whose express role was to oversee the work of the other musicians. Thus began, from the early nineteenth century, the seemingly inexorable rise of the orchestral conductor. Again this led to some reshaping of musicians' skill sets in large ensembles, along with a considerable shift in the social dynamics underpinning orchestral performance. Musicians now had to learn to work in several dimensions simultaneously: in addition to focusing on their individual contribution, they had to relate their output to those in their immediate section, to the performance of the orchestra as a whole, and to the demands and expectations of the conductor. If musicians had previously relied upon the interactions between themselves to underpin ensemble creativity, now they had to learn to accommodate the gestures of a musician who made no immediate sonic contribution yet whose influence in rehearsals exceeded that of the other musicians. As Adorno (1976: 104-17) and others have observed, the introduction of this overseer can be read as 'industrializing' orchestral performance, since it established a hierarchical, quasi-corporate structure in which the conductor could be seen as analogous to the foreman on the factory floor, directing and constraining the actions of the other workers so that a finished product emerged to his (rarely her) satisfaction.

The increasing complexity of orchestral music also made it financially advantageous to employ a conductor to rehearse large ensembles. While in theory it is possible for such

groups to work on complex pieces unaided, this usually requires many more rehearsals, since individual musicians need a deeper understanding of both the score and the various contributions of those around them. As musicians moved from being eighteenth-century craftsmen to unionized twentieth-century professionals, with concomitant increases in pay and conditions, orchestral performance became an ever more expensive operation. Employing a conductor was a way of reducing rehearsal time and thus costs, at least until the very significant fees demanded by many conductors became more commonplace from the midtwentieth century, which once again challenged orchestral music-making as an economic practice.

The professionalization of musicians' work was in part underpinned in the nineteenth century by the creation of music conservatoires and other training establishments along with an attendant infrastructure of performance examinations and certification, all of which sought to legitimate performance standards. However, these establishments tended to focus on the performance and interpretative skills that underpin solo performance. Indeed, the development of ensemble skills – specifically, orchestral performance skills – has often been seen by educators as of subsidiary interest. In the past, this led to the somewhat paradoxical situation that, although many people rightly or wrongly regarded the symphony orchestra as the apotheosis of musical excellence, the music education infrastructure underpinning it was not focused on producing musicians properly equipped to sustain it. As many of the contributors to this volume argue, conservatoires today endeavour to develop more rounded musicians who have a broader skill base and are therefore better equipped for a wider range of employment opportunities.

The performance standards expected of musicians in large ensembles have risen over the past century or so, and this can be demonstrated empirically by comparing recordings from different periods. Much greater emphasis is now placed on ensemble precision, e.g. in relation to rhythmic coordination and tuning. The ubiquity of near-flawless performances heard on recordings today has brought additional pressures on musicians and conductors in both rehearsal and performance. Errors seem to take on additional significance precisely because of their rarity, yet fear of making mistakes can be a major inhibitor of both individual and collective creativity. If left unchecked, such inhibition can undermine the flexibility and suppleness in ensemble performance that are now usually taken as indicators of aesthetic quality. The same holds for the increased emphasis on ensemble precision.

It could be argued that the rise of conservatoires and examination systems represents, as Foucault might have it, the promotion of orthodoxy and a form of social control, which permits certain types of interpretation while constraining others. And several scholars, for example Philip (2003), have argued that the widespread dissemination of recordings and internationally itinerant conductors has over time led to considerable global homogeneity among orchestras, in relation to both the nature of their sound and their musical interpretations. How, then, might large ensembles mitigate these constraints upon creative practice?

<1>How large ensembles function

Previous research on orchestras has generally focused on either their historical development (Carse 1948, 1950; Spitzer and Zaslaw 2004; Carter and Levi 2003) or the social and cultural contexts in which they are embedded (Herndon 1988; Mueller 1951). In contrast, more recent studies have investigated the operational characteristics of large ensembles, while others have considered how their leadership and management strategies may be applied in different organizations. For example, Faulkner (1973) considered the nature of social interaction in orchestras, particularly that between musicians and conductor, noting that the prevailing authority structures arose not from a static pattern of roles and statuses but rather from 'a

network of interacting human beings, each transmitting information to the other, sifting their transactions through an evaluative screen of beliefs and standards, and appraising the meaning and credibility of conductor directives' (Faulkner 1973: 156). Atik (1994) also considered the interactive relationships between leaders and followers in orchestras (see above), while Allmendinger et al. (1996) undertook a cross-cultural study of orchestral working practices, which concluded that the most artistically successful were also those that achieved long-term financial stability. Other recent research has considered leadership strategies in orchestras, either from the perspective of management studies (Maitlis 1997; Koivunen 2003) or from that of practising musicians who have reflected on their own performing and conducting activities (Lewis 2012; Logie 2012). More recently, Gaunt and Dobson have noted that the interactions between orchestral musicians constitute a 'community of practice', which the musicians construe as a 'learning environment in which complex interactions between individual and collective development take place' (2014: 312; see also Chapters 2 and 4 in this volume).

This developing body of literature demonstrates the growing interest in understanding how orchestral conductors and musicians come together for often brief periods of rehearsal, how they arrive at shared understandings of the unfolding of musical sound over time, and how they make evident those understandings in the course of performance. In short, it seeks answers to questions about how orchestras do what they do, and, potentially, how their working practices might be inflected to ensure maximum musical creativity on the parts of both the individuals taking part and the collective whole.

Such questions do not lend themselves to easy answers. Viewed from the concert hall auditorium, the manner in which these ensembles function may appear quite straightforward: the music indicates what notes the musicians should play and when, and the conductor directs the musicians in their playing, linking together the various sections of the ensemble and shaping the overall contributions of the musicians to form the 'productive unit' identified by Small. But this simplistic and rather inaccurate assessment of the conductor's role – described by Hackman as the 'leader attribution error' (2005: 117) – obscures some important points.

Although the conductor undoubtedly wields significant leadership influence, this is distributed in rehearsal and performance through other musicians in the ensemble - section leaders in particular – who have some input into the decision-making that leads to creative performance. String section leaders will usually arbitrate on bowing patterns, wind principals on breathing points and other aspects of phrasing, and all principals on almost indiscernible yet important aural characteristics such as the quality of tone to be employed at a particular point. And while the execution of a ritardando, for example, may well be asserted by the conductor's baton - an obvious gesture from which the whole ensemble endeavours or at least is expected to take its lead – its specific implementation is also dependent on those small but critically important gestures that accompany musical performance: for example, slight movements of an instrument or another musician's body, which musicians are attuned to and which in part inform their understanding of how and when to play.⁴ Thus, while some of the information that guides the actions of musicians may be expressed verbally or through direct instruction, much of it is inferred through non-verbal behaviour, careful listening or 'on the job' training, which is one reason why educating musicians for successful orchestra performance can be difficult, and why some musicians, notwithstanding their significant individual technical expertise, may be quite unsuccessful as orchestral players (see Cottrell 2004: 103-21).

The working relationships between conductor and musicians are particularly important. As already noted, one popular view of the conductor is that of an authoritarian figure who directs the orchestra to recreate his or (occasionally) her vision of the composer's score. Seen in this way, conductors are the supreme arbiters of musical interpretation, with little or no room for creative input from the musicians under their command. Only they appear truly capable of unlocking the score's secrets, and thus the score is given a central and almost fetishized significance in relation to orchestral performance. Such is the approach taken by perhaps the most well-known modern discussant of the art of conducting, Gunther Schuller, in *The Compleat Conductor* (1997). In Schuller's view, the score awaits 'realization' from the musicians, and he quotes Ravel's observation that 'one should not interpret my music; one should realize it' (cited in ibid., 7). Much of Schuller's book is given to exhaustive analyses of recorded performances in which, as he frequently asserts, conductors and musicians fall short of the high standards of fidelity to the musical text that he expects.

Yet not only does this image promote an idealized view of the score that is arguably falling out of fashion, but it also reduces the conductor's role to that of an individual slavishly reconstituting musical sound according to instructions given by a perhaps long-dead creator, while simultaneously obviating consideration of any creative contribution that the musicians themselves might make. As Leslie Lewis (2012: 58) points out, Schuller's approach implies that the conductor's role is essentially that of a translator: the conductor interacts with the composer through the score to determine what the composer meant to happen, and the conductor then instructs the musicians accordingly. There is no suggestion that the musicians might influence the conductor's views, nor of any direct connection between the musicians and the score. It could also be argued that such a model risks appearing to infantilize orchestral musicians by implying that they are directly controlled by a paternalistic conductor who makes all the decisions for them. Schuller's approach might be modelled as in Figure 9.1.

[FIGURE 9.1 NEAR HERE]

In reality, however, the relationships between the conductor, the musicians and any musical text are more nuanced. Instead of conceiving conductor and musicians as essentially being in a master/slave relationship, they are better construed as having a mutually dependent and reciprocal association; at the very least, this is more satisfying for the musicians, who are more likely to feel that the creative individual voice that they have worked hard to develop is being given some expression, however compromised this may be by the scale of the enterprise and the input of many other similar voices. And since both conductor and musicians are reliant on the score, or on a part arising from it, all parties may be seen to have views as to what that score represents and what musical behaviour might flow from it. As Cook (2003) would have it, the score becomes not so much a text to be realized but a script to underpin socio-musical interaction. Thus the performance itself is manifested not through the direct consequence of authoritarian diktat, but through a collaborative venture in which conflicting ideas may be negotiated and resolved, such that an effective musical performance arises. This might be modelled rather differently, as in Figure 9.2. The performance is shaped at the point where the three different components intersect. This is not to imply that the three elements are necessarily balanced or that the contribution each makes is always equally proportioned. But it does suggest that there are dynamic relationships at play which need to be understood by those taking part in orchestral performance and which, if harnessed appropriately, can lead to increased satisfaction on all sides as well as more successful musical and creative outcomes.

[FIGURE 9.2 NEAR HERE]

From this perspective, the leadership demands made of conductors are perhaps more complex than those conventionally allocated to the traditional authoritarian figure. Certainly conductors must fulfil the role of a strong leader, giving direction to the ensemble both in rehearsal and in performance. But they additionally need to be skilled negotiators, mediating between competing demands while ensuring that their own musical personality is communicated in terms which are both understood and acceptable. As Christopher Warren-Green, erstwhile leader of the Philharmonia Orchestra, observes, 'What [the conductor] should really be is an enabler. He should allow all those musicians to give of their best. There are very few who can do that.'⁵ The next section considers the different leadership strategies that conductors might employ to 'enable' the orchestra in the manner suggested by Warren-Green.

<1>Leadership in orchestras

Leadership research has increased significantly over the past few decades. This has resulted in the identification of a number of different leadership styles, of which four appear to be most relevant in considering the conductor/musician relationship:

- *Autocratic* leaders make decisions alone, with little reference to or input from the rest of the team; they exhibit total authority and to a considerable degree act unilaterally.
- *Participatory* or *democratic* leaders seek the views of the rest of team but ultimately make the final decisions themselves; however, they do endeavour to make team members feel included in the decision-making process.
- *Transactional* leaders focus on the performance of specific tasks; people may be rewarded directly for performing certain tasks well or achieving specified targets, but team members may also be penalized in some way for failing to meet those targets.
- *Transformational* leadership relies less on obvious direct rewards and more on motivation and communication, focusing on the overall 'big picture' and inspiring the team to achieve it.⁶

These diverse styles of leadership might all be employed in large musical ensembles. Indeed, different types of leadership may be evidenced by a conductor at successive points in the rehearsal/performance process, and the style adopted is also likely to change according to the nature of the ensemble: a large symphony orchestra and an attendant choir will not be handled the same as, say, a small chamber orchestra with a few solo singers; equally, a highly skilled and experienced professional orchestra will be handled differently from an amateur ensemble. These multiple styles might yield quite varied results, however, and each can have a distinct impact on the musicians involved and the levels of satisfaction they derive from their work. Unsurprisingly, autocratic conductors tend to be unpopular with orchestral musicians, although this has not stopped some achieving very fine results: Arturo Toscanini and Georg Solti are examples of two conductors with such reputations. But this style of musical leadership has become rarer in recent years, in part because of the greater influence that musicians now have over the choice of conductors with whom they work, especially in self-governing orchestras, and perhaps also because of the increasingly peripatetic lives that professional conductors now lead.

Participatory leadership is popular with musicians but can be difficult to discharge effectively when working with large ensembles. It is often impractical during rehearsals to discuss every musical decision that needs to be made. Nevertheless, good conductors do endeavour to incorporate musicians' views within their overall understanding of how a piece should unfold, and individual musicians are certainly more satisfied when they feel that their own creative personality has an outlet. In chamber ensembles such as string quartets, the absence of a conductor inevitably requires the distribution of leadership among the four players, notwithstanding the heightened leadership role normally undertaken by the first violin; the participatory leadership that arises from this is one reason why many musicians find this kind of smaller-scale music-making to be highly satisfying.

The most frequently employed styles are those of transactional and transformational leadership. Transactional leadership is in some ways the more utilitarian of the two. Burns

(1979: 4) notes that this is the most common form of interaction: a mutually acceptable set of expectations is established in order to reach a commonly agreed goal. Specific transactions might include clear and direct indications and gestures from the conductor, leading to agreed responses from the musicians, a shared understanding of the effective use of rehearsal time, etc. Transactional leadership appears to be less common and less efficacious in professional orchestras (Bertsch 2009) but is more enthusiastically received in amateur ensembles (Rowald and Rohmann 2009). This is perhaps understandable, but there are circumstances in all cases where the relationship between conductor and musicians is always likely to be more transactional, that is, where the musicians will be more directly reliant on the conductor for directions and cues; two examples include the performance of complex modern music or of obscure and unfamiliar repertoire performed with limited rehearsal time.

Transformational leadership is the least easily defined of these categories, both in relation to orchestras and elsewhere, but it is often the most highly valued. Here conductors are assumed to demonstrate a capacity to lead the orchestra beyond conventional expectations, to engender musical outcomes that transcend quotidian concert experience. Quite how, as Simon Rattle puts it, this 'weird thing ... that happens between conductors and orchestras'⁷ actually arises is a matter for debate. Most conductors believe that they achieve transformational leadership, although research suggests that, at least in professional orchestras, the musicians they oversee are less persuaded that this is the case (Bertsch 2009). One of Atik's respondents observed that 'the very best conductors that I've worked with become part of the orchestra. I don't mean that they lose their identity but in fact the whole orchestra plays with him rather than follows him'. Another noted that the musicians developed 'an energetic field, a psychological energy field which is very strong and has an existence of its own. And the conductor has to be forming that field and be part of it' (Atik 1994: 26). That both of these respondents felt the need to resort to such metaphorical

statements is indicative of the fact that, while all parties may believe that something special is happening on the concert stage, it is difficult to verbalize what this is. Nevertheless, it is clear that the idea of transformational leadership, in which a highly visible and charismatic conductor motivates and inspires musicians for the purpose of producing the best possible performance, is powerfully attractive. The extent to which this ideal actually informs orchestral practices is moot, however, and as Bass observes, 'leaders will exhibit a variety of patterns of transformational and transactional leadership. *Most leaders do both in different amounts*' (1985: 22; italics in original).

<1>Problems and challenges: ensemble performance and creative practice

Just as research into orchestras has provided insights for leadership practices in other contexts, it is similarly useful to consider how research on other creative individuals can inform our understanding of collective musical creativity. For example, in his well-known work on the 'creative class', Florida (2002) argues that creative personalities dislike rigid hierarchies and instead prefer flat and informal organizational structures. Undoubtedly this explains in part why many musicians prefer the egalitarian contexts of the chamber music ensemble, which allows them greater control over their creative output than the more hierarchical symphony orchestra. The business psychologist Chamorro-Premuzic (2013) has summarized what he describes as '7 rules for managing creative people'. These include: allowing failure without undue penalty; not pressurizing individuals or creating an overly rule-bound environment; and providing regular variety and stimulation in the workplace. (He also argues that creative individuals should not be paid too highly in case it undermines the intrinsic value that they find in the creative activity itself; this is seldom a problem for orchestral musicians.) Given the nature of their work, large ensembles may find it difficult to accommodate some of these needs. Condoning failure in rehearsals is one thing, but the same

shortcomings on the concert stage are unlikely to be viewed favourably if they happen more than very occasionally or if they undermine the precision now expected of the larger ensemble or a section within it (as discussed above). On the other hand, both conductors and fellow musicians might bear in mind the desirability of demonstrating empathy towards players who 'fail' because they have been endeavouring to take a new approach to a wellworn piece or phrase. Variety and stimulation may be difficult to provide in professional orchestras because their concert diet generally revolves around a limited repertoire, and orchestral musicians often take an antipathetical view of the contemporary music styles that might in part provide such variety; these styles are also often difficult to sell at the box office. However, particularly in the UK and USA, the increasing expectations in recent years that orchestral musicians should play a greater role in outreach and education projects has provided variety to the routine of rehearsal and performance, and many players have learned to value and enjoy this expansion of their role. While such activities may not inform their performances *per se*, they contribute to a more varied and satisfactory work environment overall.

Successful ensembles are replete with rules, whether inscribed socially (e.g. starting rehearsals on time, or maintaining appropriate relationships and behaviour within the ensemble) or musically (e.g. in relation to tuning, timing or tone). But musicians are likely both to *feel* and to *be* at their creative best when they are given as much latitude as is reasonable to express themselves within this rule-bound framework. Atik draws attention to a 'testing phase' in the relationship between musicians and conductor. This is a short period at the beginning of a rehearsal which occurs when an orchestra is working with a conductor for the first time (and it is perhaps more characteristic of professional ensembles than amateur ones). Atik notes that in this period of perhaps 10–15 minutes, 'players explore the boundaries of the superior–subordinate relationship and the professional competence of the

conductor, while, simultaneously, the conductor tests out how much he can demand of his players and the musical capabilities of the "band" (1994: 25). It might be argued that this testing phase reflects the conductor and the orchestra establishing a shared understanding of the prevailing rules and their boundaries, as a necessary pre-requisite for musical creativity to flourish in the orchestral context.

In addition to these sociomusical issues, there are fundamental logistical requirements that (ideally) are required in rehearsals and performance if large ensembles are to function effectively. Many of these are relatively obvious. Musicians need stable seating and music stands, with enough light to read the score and parts but not so much direct light shining onto the stage that they are blinded. As noted earlier, sightlines between conductor and performers, and between key musicians such as principal players, are especially important so that they may recognize, however peripherally, those bodily gestures that underpin orchestral synchrony. Thought must therefore be given to the stage layout, particularly in contexts such as theatre pits or halls not specifically designed for orchestral performance, where space may be cramped and/or inconveniently distributed. Acoustics are especially important. Halls which are too dry can leave an ensemble sounding flat and lifeless, and individuals can become uncomfortable with their own sound. Spaces with very resonant acoustics – e.g. cathedrals – pose a different problem, since the long decay times of the musical sound may make it difficult for performers to hear important aural cues. Hall temperature is also important; spaces that are too warm or too cold make tuning more difficult in addition to the personal discomfort experienced by musicians. Studio work can feel very different for all performers, with screens sometimes placed between musicians to help the recording engineers balance the ensemble sound, or the conductor closely watching a screen and accompanying time code if recording a film score. Outdoor performances too can be challenging since the acoustic will be entirely different, and gusts of wind may blow scores or clothing in a disconcerting fashion. Notwithstanding the apparent triviality of some of these logistical details, they are important in providing a secure platform for conductors and musicians so that they may focus on their creative endeavours.

<1>Creative performance in choirs⁸

Some of the qualities of, and constraints upon, musical performance in large choral groups are similar to those found in instrumental ensembles, even though the relationship between choirs and conductors, and indeed between the singers themselves, is rather different from those characteristic of instrumental ensembles. The physical proximity of singers in smaller groups again often obviates the need for a separate conductor since, as with instrumentalists, one of the singers can adequately fulfil this role. But larger vocal ensembles clearly require a director of some kind, for many of the same reasons outlined previously: to compensate for the distances between performers, to reduce the time-consuming nature of a fully democratic approach to decision-making, to economize on rehearsal time, etc.

Nevertheless, there are important operational differences between these two types of ensemble, particularly in relation to the creative aspirations and expectations of the participants. Perhaps the most obvious difference is that in major orchestras the musicians are usually professionals, and they will have obtained their position in the orchestra only after an extensive period of training which hones not only their technical skills but also their musical personality. In contrast, members of choirs are typically amateurs, in the sense that they are likely to earn their living away from the choir. Some may have received a musical education (the capacity to read staff notation is usually a prerequisite, for example), and a few may be trained singers. But many will view the choir as an enjoyable addition to their working lives, notwithstanding the considerable commitment they may make to it, and thus the basis of their participation is qualitatively different from that of orchestral musicians (see Louhivuori et al. 2005). Choral singers may rehearse only once or perhaps twice a week, whereas a professional orchestra will often work together every day.

All of this impacts on the nature of their creative contributions and their perceptions of the role of individual creativity in their work. The tensions already noted between instrumentalists' highly developed sense of musical self and the constraints inevitably imposed by the needs of the orchestra or the demands of the conductor do not apply in the same way to choral singers. Indeed, these amateur singers are operationally much more dependent on the conductor figure than are orchestral musicians. Research evidences the significant reliance on and impact of conducting gestures on choral singers, whether in relation to tone quality or intonation (Brunkan 2013; Mann 2014), or the mirroring of conductor's facial gestures by singers (Garnett 2009; Manternach 2012). Transactional leadership thus plays a greater role in choirs than it does in instrumental ensembles.

This implies that musical creativity is construed rather differently in these large vocal ensembles, particularly since the compositional nature of most choral works also reduces opportunities for individual musical expression. Choral scores are often divided into just four parts (soprano, alto, tenor, bass), although further sub-divisions may occasionally occur. Normally many singers share a given part, and thus the capacity of the individual to influence the delivery of that part may be limited. Just as a rank-and-file violinist needs to align his or her performance with the rest of the section – unlike, perhaps, the first clarinet or the harpist – so too is musical individuality moderated in the choir by the collective requirements of a particular subgroup. Nevertheless, a sense of musical individuality remains. For example, Ternström (2003: 7) draws attention to what he describes as the 'self to other ratio' (see also Keller 2014). This is a measure of the relationship between the perceived strength of a singer's own voice (which arises from a combination of airborne and bone-conducted sounds) to that of the choir in which he or she is immersed (the sound of which is heard both directly

and via reverberations in the hall). While the preferred ratio varies widely between individuals – that is, different singers prefer to hear different balances between their own sound and that of the ensemble – these ratios appear to be accurately and consistently reproduced.

Notwithstanding this psychoacoustic expression of the musical self, the collective practice of choral performance means that choir singers are often unused to having their individual voice highlighted. To counteract this, Freer has argued for the introduction of improvisation exercises in choir rehearsals, noting that these would dilute singers' reliance on musical notation, enable musical material to reflect individual vocal capability more closely, and, most importantly in the present context, 'influence musical self-esteem' (Freer 2010: 19). Brewer and Garnett (2012: 264) have suggested that singers might adopt a cognitive strategy of putting themselves 'in the position of actors, putting on a character for the purpose. It is helpful to think of that character ... communicating to the audience as if one to one. So an individual in a choir contributes something very specific and important to the whole.'

Finally, choirs in the western classical tradition usually work from a full vocal score, allowing each individual to see how the contribution of their section (soprano, tenor, etc.) is meant to fit into the larger whole; moreover, the vocal score used by each singer may well be identical to that used by the conductor. In contrast, orchestral players normally work from an isolated part, albeit one which may have occasional cues that indicate the contributions of others; only the conductor works from a full score which shows all the musical interactions. These varying relationships with both the conductor and the musical script that guides individual contributions inevitably inflect the working practices of performers and their perceptions of themselves as creative individuals.

In her study of choral conducting, Garnett (2009: 172–3) draws attention to the different vocal blends achieved by two choirs, which might be taken as proxies for the different approaches to collective creativity that they represent. She notes that a lesbian/gay/bisexual amateur choir with a strong commitment to social and political solidarity not only demonstrated a strongly shared body language between its members, but the singers were also encouraged to sound 'like one voice, like one choir without any individuals'. Conversely, a chamber choir of trained singers showed significant variances between individual postures and less overall concern with the ultimate blend of the ensemble; as with instrumentalists, their professional training had encouraged a more developed sense of musical self-identity, which was retained in the ensemble context.

In general, however, the individualistic creativity that underpins instrumental training in the western classical tradition is subsumed in large vocal ensembles by the overarching sense of communal enterprise. Ultimately, the singer's use of a complete vocal score rather than the instrumentalist's single part, while arising as a matter of practical expediency – because singers can turn pages more easily– can be read as indexical of the choir's collective and often homogeneous creative musical endeavour, as opposed to the aggregation of musical individuals represented by the more differentiated, and frequently heterogeneous, orchestral score.

<1>Alternative models

To enhance their sense of collective musical creativity and assert more musical control in rehearsal and performance, some large ensembles have developed alternative organizational models. Certain chamber orchestras have begun to dispense with the conductor and to work instead on an unconducted basis or, occasionally, with a guest conductor of their choosing. The Prague Chamber Orchestra, founded in 1951, may be the longest-running ensemble of

this kind, while the Orpheus Chamber Orchestra, established in New York in 1972, is perhaps the most widely recognized. The UK's Britten Sinfonia provides another example. The fact that the trend has increased over the past two decades means that such ensembles are now widespread. They offer a middle path between the musical egalitarianism of the small chamber ensemble and the more obvious hierarchies found in larger symphony orchestras. They also demonstrate particularly advanced forms of distributed leadership, to the extent that the Orpheus Chamber Orchestra, for example, has been used as the basis of a textbook on management leadership.⁹

These conductor-less ensembles may be distinguished from their symphonic counterparts in a number of ways: they tend to demonstrate more flexibility in their size and will modify their instrumentation according to the particular project at hand, sometimes appearing as a small chamber group while at other times nearing the size of symphony orchestras; they can be economically more efficient, in part because of this flexibility but also because of the obvious financial savings that arise through not paying costly conductor fees; they tend to be popular with their audience base, with whom they generate close ties; and their musicians derive greater levels of satisfaction because of the greater musical control afforded in rehearsal and performance by the absence of a conductor.

On the other hand, one of the risks of these highly participatory, democratic ensemble structures is that the rehearsal process is significantly lengthened because everybody can contribute their views about how the music should be performed. Indeed, for their first major performance the Orpheus Orchestra required 'between seventeen and twenty rehearsals' before they arrived at a shared understanding of the approach they would take (Khodyakov 2007: 10). Professional orchestras would usually find such a lengthy rehearsal schedule uneconomic, and the Orpheus Orchestra was no exception. Although the musicians were not paid for their first set of rehearsals, they did need remuneration for later rehearsals in order to

survive; this caused the orchestra to develop a system of rehearsing with a smaller number of ten to thirteen core group members, who would agree on the approach to be taken before adopting it in rehearsals involving the full ensemble. Participatory leadership has been further ensured through the rotation of principal players, such that the leader of each string section rotates, with different individuals having oversight at different times. In the case of the Orpheus Orchestra, the lack of a conductor has both required and facilitated much greater trust between the musicians, even though they have also had to implement a number of control mechanisms – such as the degree to which an individual musician might object to the decisions made by the core group for a given performance – in order to ensure the smooth running of the ensemble.¹⁰

Notwithstanding these challenges, the success and longevity of these conductor-less orchestras has demonstrated that creative performance can be manifested in large ensembles without the need for a supervisory figure, however unlikely that may appear to those who believe such a figure to be essential for orchestral performance.

<1>Conclusions

Orchestras remain popular as subjects for metaphor construction and as paradigms of collaborative social organization, in addition to their obvious importance as iconic music-making ensembles. The skill sets of the musicians who play in them and the conductors who appear to lead them have evolved significantly over the past few centuries, and the commonly held view of the conductor as an overseer who directs the activities of the musicians whom he or she controls on a master/slave basis masks a more complex series of relationships between the participants. Successful orchestral performance depends not only on the conductor's gestures but also on the distribution of leadership among the ensemble, such that individual musicians undertake intermittent leadership roles according to the ebb and flow of the music.

Creative orchestral performance most commonly arises through a shared understanding of these distributed leadership roles, and the effective working of the ensemble is facilitated not only through collective responses to the conductor's gestures but also through the employment and recognition of a range of micro-gestures through which the musicians' efforts are synchronized.

Conductors must understand the difference between transactional and transformational leadership while also recognizing that skills in both are necessary for creative orchestral performance. Although transactional leadership may be more in evidence in rehearsals, especially with less proficient musicians or for pieces that are musically complex, transformational leadership is an important part of the creative process, particularly in performance, when musical heights may be scaled that go beyond the routine or utilitarian, and when that 'mutual tuning-in relationship' (Schutz 1977: 108) is created for performers and listeners alike.

Choral singers may have attitudes to creativity which are different from those of instrumentalists, and their immersion in their communal musical enterprise may lead them to be less concerned with expressions of musical individuality. In general, however, they remain highly dependent on the conductor's gestures, which significantly impact on their creative output.

Playing in conductor-less chamber orchestras can be very satisfying for musicians, who relish the additional leadership responsibilities that arise from the more participatory approaches that they entail. But, although they may offer considerable flexibility in relation to musical programming, they often require more rehearsal time, as the players devise performance strategies to circumvent the lack of a central coordinating figure. The larger the ensemble or the more complex the musical score, the more likely it is that a conductor will be needed, either to overcome the musicians' inability to see each other in very large ensembles or because of the financial costs of the many rehearsals that might otherwise be necessary.

Finally, it should be borne in mind that creativity is socially inscribed wherever it is identified. Whether construed as a form of 'musical talent' (Kingsbury 1988) or as being 'creative in performance' (Clarke 2012), musical creativity is a social fact (Frith 2012), the attribution of which requires social negotiation and validation. In many different ways, therefore, putting the creative into large ensemble performance inevitably means putting the social there also.

References

Adorno, T. W., 1976: Introduction to the Sociology of Music (New York: Seabury Press).

- Allmendinger, J., J. R. Hackman and E. V. Lehman, 1996: 'Life and work in symphony orchestras', *The Musical Quarterly* 80: 194–219.
- Atik, Y., 1994: 'The conductor and the orchestra', *Leadership & Organization Development Journal* 15: 22–8.
- Bass, B. M., 1985: *Leadership and Performance Beyond Expectations* (New York: Free Press; London: Collier Macmillan).
- Brewer, M. and L. Garnett, 2012: 'The making of a choir: individuality and consensus in choral singing', in A. D. Quados, ed., *The Cambridge Companion to Choral Music*. (Cambridge: Cambridge University Press), pp. 267–71.
- Brunkan, M. C., 2013: 'The effects of watching three types of conductor gestures and performing varied gestures along with the conductor on measures of singers' intonation and tone quality: a pilot study', *International Journal of Research in Choral Singing* 4: 37–51.
- Burns, J. M., 1979: Leadership (New York: Harper & Row).
- Carse, A. V. A., 1948: The Orchestra from Beethoven to Berlioz: A History of the Orchestra in the First Half of the 19th Century, and of the Development of Orchestral Baton– Conducting (Cambridge: W. Heffer & Sons Ltd).
- Carse, A. V. A., 1950: *The Orchestra in the 18th Century* (Cambridge: W. Heffer & Sons Ltd).
- Carter, T. and E. Levi, 2003: 'The history of the orchestra', in C. Lawson, ed., *The Cambridge Companion to the Orchestra* (Cambridge: Cambridge University Press), pp. 1–21.

- Chamorro-Premuzic, T., 2013: '7 rules for managing creative people', *Finweek*, 25 April 2013, pp. 40–1.
- Clarke, E., 2012: 'Creativity in performance', in D. J. Hargreaves, D. Miell and R.
 Macdonald, eds., *Musical Imaginations: Multidisciplinary Perspectives on Creativity, Performance and Perception* (Oxford: Oxford University Press), pp. 17–30.
- Cook, N., 2003: 'Music as performance', in M. Clayton, T. Herbert and R. Middleton, eds., *The Cultural Study of Music* (London: Routledge), pp. 204–14.
- Cook, N., 2007: 'Performance analysis and Chopin's Mazurkas', *Musicae Scientiae* 11: 183–207.
- Cottrell, S., 2004: *Professional Music-Making in London: Ethnography and Experience* (Aldershot: Ashgate).
- Faulkner, R., 1973: 'Orchestra interaction', Sociological Quarterly 14: 147-57.
- Florida, R. L., 2002: *The Rise of the Creative Class: and how it's Transforming Work, Leisure, Community and Everyday Life* (New York: Basic Books).
- Freer, P. K., 2010: 'Choral improvisation: tensions and resolutions', *Choral Journal* 51: 18–31.
- Frith, S., 2012: 'Music as a social fact', in D. J. Hargreaves, D. Miell and R. Macdonald, eds., Musical Imaginations: Multidisciplinary Perspectives on Creativity, Performance, and Perception (Oxford: Oxford University Press), pp. 62–71.
- Garnett, L., 2009: Choral Conducting and the Construction of Meaning: Gesture, Voice, Identity (Aldershot: Ashgate).
- Gaunt, H. and M. C. Dobson, 2014: 'Orchestras as "ensembles of possibility": understanding the experience of orchestral musicians through the lens of communities of practice', *Mind, Culture, and Activity* 21: 298–317.

Hackman, J. R., 2005: 'Rethinking team leadership or Team leaders are not music directors',
in D. M. Messick and R. M. Kramer, eds., *The Psychology of Leadership: New Perspectives and Research* (Mahway, NJ: Lawrence Elbaum Associates), pp. 115–42.

- Herndon, M., 1988: 'Cultural engagement: the case of the Oakland Symphony Orchestra', *Yearbook for Traditional Music* 20: 134–45.
- Keller, P. E., 2014. 'Ensemble performance: interpersonal alignment of musical expression', in D. Fabian, R. Timmers and E. Schubert, eds., *Expressiveness in Music Performance: Empirical Approaches across Styles and Cultures* (Oxford: Oxford University Press), pp. 260–82.
- Khodyakov, D. M., 2007: 'The complexity of trust–control relationships in creative organizations: insights from a qualitative analysis of a conductorless orchestra', *Social Forces* 86: 1–22.
- Kingsbury, H., 1988: *Music, Talent, and Performance: A Conservatory Cultural System* (Philadelphia: Temple University Press).
- Koivunen, N., 2003: 'Leadership in symphony orchestras: discursive and aesthetic practices' (PhD dissertation, University of Tampere).
- Leech-Wilkinson, D., 2006: 'Portamento and musical meaning', *Journal of Musicological Research* 25: 233–61.
- Lewis, L. A., 2012: 'The incomplete conductor: theorizing the conductor's role in orchestral interpretation in the light of shared leadership practices' (PhD dissertation, University of London).
- Logie, N., 2012: 'The role of leadership in conducting orchestras' (PhD dissertation, The Open University).Louhivuori, J., V.-M. Salminen and E. Lebaka, 2005: "Singing together" a cross-cultural approach to the meaning of choirs as a community', in P.

S. Campbell, ed., *Cultural Diversity in Music Education* (Bowen Hills, Queensland: Australian Academic Press), pp, 81–92.

- Maitlis, S., 1997: 'Decision making in British symphony orchestras: formal structures, informal systems, and the role of players', *Harmony* 4: 45–55.
- Mann, L. M., 2014: 'Effects of solo and choral singing modes on vibrato rate, extent, and duration exhibited by undergraduate female singers', *International Journal of Research in Choral Singing* 5: 26–38.
- Manternach, J. N., 2012: 'The effect of nonverbal conductor lip rounding and eyebrow lifting on singers' lip and eyebrow postures: a motion capture study', *International Journal of Research in Choral Singing* 4: 36–46.
- Mueller, J. H., 1951: *The American Symphony Orchestra: A Social History of Musical Taste* (Bloomington: Indiana University Press).
- Pace, I., 2012: 'Instrumental performance in the nineteenth century', in C. Lawson and R.
 Stowell, eds., *The Cambridge History of Musical Performance* (Cambridge: Cambridge University Press), pp. 643–95.
- Philip, R., 2003: 'Historical recordings of orchestras', in C. Lawson, ed., *The Cambridge Companion to the Orchestra* (Cambridge: Cambridge University Press), pp. 203–17.
- Ramnarine, T. K., 2011: 'The orchestration of civil society: community and conscience in symphony orchestras', *Ethnomusicology Forum* 20: 327–51.
- Repp, B. H., 2000: 'Pattern typicality and dimensional interactions in pianists' imitation of expressive timing and dynamics', *Music Perception* 18: 173–211.
- Sawyer, R. K., 2003: *Group Creativity: Music, Theater, Collaboration* (Mahwah, NJ: Lawrence Erlbaum Associates).
- Sawyer, R. K., 2006: 'Group creativity: musical performance and collaboration', *Psychology of Music* 34: 148–65.

- Schuller, G., 1997: *The Compleat Conductor* (New York and Oxford: Oxford University Press).
- Schutz, A., 1977: 'Making music together: a study in social relationships', in J. L. Dolgin, D.
 S. Kemnitzer and D. M. Schneider, eds., *Symbolic Anthropology: A Reader in the Study of Symbols and Meanings*. (New York: Columbia University Press), pp. 106– 19.
- Seifter, H. and P. Economy, 2001: Leadership Ensemble: Lessons in Collaborative Management from the World's Only Conductorless Orchestra (New York: Times Books).
- Small, C., 1994: Music of the Common Tongue: Survival and Celebration in Afro-American Music (London and New York: Calder Publications and Riverrun Press).
- Spitzer, J. and N. Zaslaw, 2004: *The Birth of the Orchestra: History of an Institution, 1650– 1815* (Oxford: Oxford University Press).
- Ternström, S., 2003: 'Choir acoustics: an overview of scientific research published to date', International Journal of Research in Choral Singing 1: 3–11.

¹ For example, see Cook (2007), Leech-Wilkinson (2006), Repp (2000), among many others.

 $^{^{2}}$ The work of Keith Sawyer (2003, 2006) is one exception to this general rule.

³ See Pace (2012) for a list of the developing sizes of nineteenth-century European orchestras.

⁴ For more discussion of the importance of gestures and glances in ensemble performance see Chapters 8 and 11 in this volume, as well as Margaret Faultless' 'Insight'.

⁵ Broadcast as part of a Channel 4 documentary titled *The Phil* in 1999, cited in Cottrell (2004: 108).

⁶ For more on styles of leadership in relation to orchestras see Lewis (2012: 18–34) and Logie (2012: 7–33).

⁷ Simon Rattle, *The South Bank Show*, London Weekend Television, 25 June 2000.

⁸ I am grateful to Tim Hooper for discussions which helped inform this section.

⁹ Seifter and Economy (2001).

¹⁰ For more on the trust relationships that exist within the Orpheus Chamber Orchestra see Khodyakov (2007).