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Seeing the Music in their Hands: How Conductors' Depictions Shape the Music

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ABSTRACT

Depiction is a way of 'showing' meaning through certain gestures or demonstrations. Conductors often use depiction, including multi-modal depiction, as well as descriptive talk, to convey meaning to their choirs. This paper considers four short extracts from choir rehearsals with different conductors, to show how they combine description and depiction, including vocal models, facial expressions, metaphoric and iconic gestures and body language to communicate about music, specifically here as part of the activity of modelling.

I. INTRODUCTION

Streeck (2008) described gestures as seeing "a bit of the world in the actions of someone's hand" (p.286). Streeck is one of many researchers who have explored how gestures are used when communicating, with a wide variety of descriptions, categorisations and explanations being suggested by different researchers in different interactional contexts. However, much less research has focused on the (non-beating) gestures used by music conductors. This is particularly strange given how important gesture is to a conductor and how much of their role, as leader, trainer and fellow musician, is played out through gesture. A large part of their job is communicating to the ensemble their ideas about the music they are performing, and guiding the musicians towards that ideal performance through the rehearsal process. While talk has a large part to play in this development, so too does gesture, either in isolation or in combination with talk. In the quote above, Streeck (2008) suggests that rather than seeing a speaker's hand moving left or right, up or down, the watchers see *meaning* in the gestures; here, we examine the role of gesture in conveying meaning within the modelling of music by conductors to choirs.

A. Conveying Meaning

There are considered to be three ways of conveying meaning in discourse (e.g., Clark, 2016): indicating, describing and depicting. *Indicating* locates things in time and space either verbally ('this', 'here') or gesturally (pointing), and *describing* refers to 'telling' – the use of arbitrary symbols such as words or nods. By contrast, *depicting*, which is far less studied, is 'showing' – "people create one physical scene to represent another" (Clark, 2016, p.1) using iconic gestures (such as lifting a curved hand to the mouth to show drinking), facial expressions, demonstrations and quotations. Depiction is used regularly throughout choir rehearsals, likely because of its independence from description; its ability to convey meaning without relying on words makes it a readily applicable form of communication for music, which can be difficult to discuss purely linguistically. In addition, the way that conductors *combine* description and depiction to get their point across can be particularly interesting.

It is also worth noting the overlap between depiction and metaphorical gestures. Although not all depictions are metaphorical by any means, the idea of creating one scene to represent another easily incorporates the idea of using gestures that map our physical experience onto an abstract concept (Cienki, 2008). For example, if a conductor increases the size of their gesture during a crescendo, this is both a depiction (showing the increase in sound) and a metaphor (Big is More). Research has shown that people use a wide range of metaphors when talking about music – everything from pitch being 'high' or 'low' (Eitan & Timmers, 2010) to being able to drown in a song (Peltola & Saresma, 2014), and imagery is fairly ubiquitous across and within different choirs and conductors (Black, 2015). Therefore, it is also useful to bear this in mind when considering how conductors are using methods of communication other than talk (such as depiction) to convey meaning to their choir.

B. Problem-Solution Structure

The main aim of choir rehearsals, typically, is for the choir to improve their music-making by (among other things) listening and responding to the conductor's instructions and feedback. While papers written by practitioners often acknowledge the importance of conductors' ability to diagnose and remedy difficulties (e.g. Brunner, 1996; Silvey, 2014), Cavitt (2003) observes that the body of research studying error-detection by conductors is not matched by analysis of how these errors can be corrected, or improvements made. This two-part structure of problem-identification and solution-giving is one that is found throughout rehearsal data.

C. Modelling

One way in which conductors can give feedback to their choirs and suggest changes is through the use of vocal and/or non-vocal modelling, which here we will examine as a method of depicting meaning. Modelling in rehearsals (such as singing to demonstrate a part) can be a valuable technique (e.g., Brunner, 1996) and an effective way of conveying meaning. Weeks (1996) and Tolins (2013) suggest that since music is itself experienced aurally and non-linguistically, interaction on the subject of music can be assisted and performed successfully using a similar method. Its effectiveness is implied by Goolsby (1996), who found that expert conductors used a significantly greater amount of vocal modelling and demonstrations than novice conductors (although it should be noted that this was with school bands, rather than adult choirs).

Of course, the idea that choirs will mimic non-verbal conductor behaviours is a well-acknowledged one in practitioner and conducting-instruction writing (e.g., Bertalot, 2002; Gehrkens, 1919). Recently, a few studies have provided some empirical support for this, demonstrating that the conductor's head and shoulder movements (Manternach, 2009) and lip positions (Daugherty & Brunkan, 2013) affect the

choir's own, using the chameleon effect (Chartrand & Bargh, 1999; Garnett, 2009).

Although modelling is acknowledged as important, particularly by practitioners, there has however been less research thus far into how it is used to convey meaning to an ensemble as part of a conductor's repertoire. How and for what purposes do conductors use modelling?

In one study by Grimland (2005), high-school choral directors used models in a variety of contexts: to set up future tasks, improve aspects of performances, illustrate what not to do, and direct performances while the choir was singing.

An ethnomethodological study by Weeks (1996) notes a particular type of modelling used by orchestral conductors – what he calls "contrast pairs". Here, a conductor sings two vocal models immediately after each other. The first is a (sometimes exaggerated) version of what was wrong with the previous performance, followed by a correct or preferred model showing how the conductor wants them to perform it next time. This use of two models in close sequence can clarify the location and nature of the problem, and then give a solution. His examples show how the models are usually accompanied by talk that further points out the issue and/or how to fix it. Tolins (2013) also considers these two different types of models, although not within a sequence as in the contrast pair. He considers how the models, or "nonlexical vocalisations" (p.47), are used in one-to-one instrumental lessons, noting that there are two different types: quotations (the equivalent of the faulty, first part of the contrast pair), and demonstrations (the 'correct' model). Tolins argues that the purpose of the quotation is to provide an *assessment* of the previous performance, highlighting and locating the problem, and that of the demonstration is used as a *direction*, to show how it should be performed in the future.

Much of the empirical research on modelling tends to focus on one aspect of modelling, such as how one particular gesture or movement will affect the choir or their sound. However, research such as Grimland (2005) and Tolins (2013) notes that physical models or gestures can be used effectively alongside vocal models. This paper will examine four short extracts of different conductors' choir rehearsals to consider the multi-modality of depiction, and how all these modalities (vocalisation, gestures, facial expressions, body posture etc.) can combine with talk, and with other types of meaning-making, such as verbal description, to create and convey meaning to the choir.

II. METHOD

A. Video Observation

Video recordings were made of choir rehearsals taken by eight different conductors (6 male, 2 female) across seven choirs. The choirs were a mix of university, amateur, and professional-level choirs, and were all from the traditional Western choral culture. There were two student conductors, and six professional conductors, of varying levels of experience. Cameras were set up before the rehearsal and left to record without any interference from the researcher as far as possible. All choir members were given various levels of 'opt-out' options, including blurred faces or being out of shot.

B. Interviews

Following the recorded rehearsal for each choir, a semi-structured interview was completed with the conductor based on an interview schedule developed specifically for the current study. The interviews were also video-recorded.

C. Analysis

Conversation Analysis (CA) was used to transcribe and analyse the video data. CA focuses on the organisation of verbal and non-verbal communication in social interactions (Sidnell, 2010). One interest in using this approach was to examine the gestures and talk produced during rehearsals and interviews within the contexts in which they occurred. This allows for better understanding of their use at specific points and within certain activities (e.g., modelling) in natural interaction as well as how they were responded to in these contexts.

In the extracts below, the far right column gives details of the conductors' relevant gestures, body movements and other aspects of the scene (in italics). In some places, images are used to give the reader a clearer idea of a gesture. Both images and written descriptions link, timing-wise, to the verbal productions that are transcribed to their left. See appendix for transcription notation.

III. RESULTS

A. Extract 1 – *Ha ha ha*

Extract 1 below occurs during a choir rehearsal a few weeks before an upcoming concert. The conductor has asked the choir to run the piece they have been working on for the past half an hour or so (*Nachtwache I* by Johannes Brahms), but stops after just six bars to improve an entry in the alto part. Following the extract, the choir performs the whole song without stopping, and then the conductor moves onto a new piece of music.

This first extract is a relatively straightforward sequence in that it shows the way that conductors often work during rehearsals: from a performed bit of music (line 1), the location of the issue is isolated (*the entry*, line 5; *hauchet zit-*, line 8), and gradually zoomed in on (the first syllable *ha*, line 9). Verbal description is used by the conductor to identify the problem (*a bit breathy*, line 6) and then give solutions (*more tone*, line 5; *project forward*, line 7). To further ensure the choir's understanding, the conductor continues the 'solution-giving' using depiction: she models the entry line in the manner she would like the choir to perform it (line 8), then narrows the model down to one note, which she asks the alto section to repeat immediately as a small exercise. After they do so, she responds positively before moving on.

This sequence of rehearsal – problem isolation, descriptive solution-giving, with a depicted (modelled) solution – will be familiar to most people who are accustomed to this style of choral environment. However, the summary in the paragraph above misses another important aspect of the conductor's communication – her gestures. Like many conductors, she uses her hands to increase, add to, or even subtly change the meaning conveyed by her words. During the word *breathy* (line 6), she holds up her right hand in a loose fist shape and wiggles the fingers loosely, and in the following line shows a

Extract 1. *Ha ha ha*

```
Ch    1   hauchet zitternd hinaus-            Con stops after 1st beat, RH up.
Con   2   Ok (.)                              Waits while Ch stop singing/talking
      3   Sorry I'm just going to-
      4   K I'm just going to stop there      Puts RH down after Ch stop
      5   er we just need more tone on that entry   LH points to music. Gaze to ChA
      6   um altos it's a bit breathy at the moment RH fingers wiggle in loose fist shape
      7   so um try and project forward um somehow  RH thumb and finger pincer at mouth
      8   hauchet zit-                        Conducts with own singing
      9   ha: ha:                             LH moves on each ha
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     10   ha ha ha:



     11   just do for me ha ha ha:       (Hands push into stomach on each ha)
                                         As previous. Both hands out palms up
                                         towards ChA after model
ChA  12   ha ha ha:
Con  13   Exactly that's the kind of tone we need on   Hands still out palm up, but curve
                                                        slightly ('holding' shapes)
     14   that note
```

pincer shape between finger and thumb, moving away from the mouth, to depict the *project forward* description she gives. These gestures can be interpreted as metaphorical depictions of the vocal sound mapped onto our physical understanding of the world. Something that is breathy, or full of air, is likely to be soft and malleable, whereas something which is being projected forward (such as a ball) moves in a much more focused manner, as depicted by the pincer shape. In the latter, the path and hand shape are physically drawing the sound that the conductor wants; in the former, the relaxed hand shape could either be holding the sound (showing its soft boundaries), or becoming the sound itself.

The next gestures come during the modelled *ha*s in lines 10 and 11, the second group of which also acts as an elicitation to the alto section to repeat them. While singing, the conductor places both hands on her stomach, finger tips towards her, and pushes inwards on each *ha*. Rather than a depiction, this gesture is indicating the movement that the diaphragm should be making on each *ha* sound, and therefore the movement it should be making on the entry itself. The interesting point here is that verbally, the conductor has made no mention of the diaphragm at all, but knows (or expects) that the choir will understand from her gesture that they need to be using their diaphragmatic muscles in order to achieve the projection and tone that she wants, and correct the current breathiness.

This short extract demonstrates how multi-modal modelling can be, using both vocal and gestural depiction. It also shows the different functions that modelling can have: at first, the metaphoric gestures are semantically-congruent with her description, but lines 10 and 11 show how gestural depiction can add *different* information to the verbal description and non-linguistic vocalisations to create a whole, coherent meaning.

B. Extract 2 – Not an *AH* but an *ah*

The choir in the next extract are rehearsing *Look in thy glass* by John Tavener in preparation for an upcoming concert. Prior to the extract, they have been working on the piece a few bars at a time, and the conductor is about to restart them on a phrase beginning with the word *Thou*. She gives them the starting notes from the piano and moves back towards the centre where she usually stands to conduct, reminding them of the pronunciation of the diphthong vowel in the first word. Earlier in the rehearsal she has mentioned this same vowel sound: *on 'but thou' for example, which is a complex vowel: diphthong, make sure that you sing- create a stable vowel and remember what vowel you're singing. Listen to whether it's the same vowel as everyone else and keep improving that each time.* In this extract she expands on this in terms of the tone.

This extract shows the particular type of modelling described by Weeks (1996) as a contrast pair, where the conductor depicts both a 'faulty' model and a 'correct' model. The conductor starts by locating the issue in lines 2-3 (although in less detail than on some occasions since this vowel has already been discussed previously). The spoken *ah* in line 3 could be both isolating the vowel she wishes to discuss, and a reminder that the first part of the diphthong in the word *thou* is an 'ah' sound (before moving onto an 'oo'). She then gives them the first model (line 4) – a relatively loud *ah*, with long open mouth, low eyebrows and serious face. Since she is in the process of placing her music back on the stand (having been at the piano), there are no manual gestures, but there is a clear difference in expression between line 4 and line 5, where she begins the second model – the face and body relax, the mouth broadens to a smile and her eyebrows rise. At this point she also adds a manual gesture designed to improve the choir's technical understanding of the difference – curved

Extract 2. Not an *AH* but an *ah*

```
Con   1   ((Notes))                          Plays starting notes on piano
      2   And again this vowel
      3   treacherous vowel diphthong ah     Walking back to centre
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      4   but not an AH
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```
      5   but an ah
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      6   Nice lifted
      7   and always bending the pitch up    Hands palms down move towards each other, moving
                                             slightly up
```

hands move up to beside her cheek bones, and push up a couple of times to indicate lifting (line 5), which is supported by her spoken instruction in the subsequent line. Her hands here appear to be depicting the movement made by the soft palate, increasing the resonant space in the mouth and changing the sound. She moves onto one final reminder regarding tuning in line 7 before restarting the choir.

Although there is a clear aural difference between the two parts of the contrast pair in this extract, there is also a distinct visual difference – with use of the whole body – which allows more information to be conveyed to the choir than would be by sound, gesture or speech alone.

C. Extract 3 – Not *cca* but *cca*

The third extract to be considered here contains another contrast pair. The conductor is talking to the alto section about a melodic phrase from Antonín Dvořák's Mass in D (Figure 1). Prior to the extract, he has singled out the voice part and asked them to sing from two bars before Figure 1, stopping them before the end of bar 20 after a difference of opinion on the first note of the syllable 'cca'. The first line of the extract refers to this error, before he moves on to a separate point.

The aim of the conductor in this extract is to work on the shaping of the melody being sung by the alto section, particularly in bar 20. He starts by focusing on the problem – the large melodic leap between the F sharp and D on 'cca' – first through verbal description, by asking the choir to consider where the upper note comes from tonally (lines 2-3). Although this is phrased as a future-oriented instruction, the use of the word *look* (as well as a familiarity with the style of rehearsal) indicates that the conductor is correcting an issue that was not right previously. The focus on the tonal

Figure 1. Agnus Dei from Mass in D by Antonín Dvořák. Bars 18-20, alto line

importance of the two notes is shown gesturally as well as verbally. The conductor's left hand first depicts the high D (line 2), using the metaphorical mapping of verticality (High Pitch is Up), but rather than simply continuing the metaphor for *bottom note* by lowering his hand, he introduces the right hand (palm up) to pat the palm of his left hand (line 3). As well as being lower vertically than the first left hand position, the conductor is now demonstrating the metaphorical mapping from physical support (one hand supporting the other) to vocal support (i.e. use of the diaphragmatic muscles). This support is necessary to make the smooth vocal leap up to the top note, and without it, the jump will sound disjointed and unrelated (physically and tonally) from the lower F sharp.

The conductor then performs three models for the choir. The first is a 'good' depiction (line 4) of the two relevant notes – evident from the vocal tone – which also locates the problem that he wants to correct. This is then immediately followed by an exaggerated 'faulty' version, set up by his verbal *Not* (line 5). The model is not just meaningful aurally but as in the previous extract, a whole-body, gestalt model: the voice tone (harsh and rough), the straining evident both from his vocal sound and his posture (indicating a lack of diaphragm support), the casual, 'can't be bothered' rhythm

Extract 3. Not *cca* but *cca*

```
Con   1   Ok yeah see what happens there      Interrupts alto section singing
      2   And look can you make the top D      Turns to ChA. LH up at side, palm open




      3   come tonally from the bottom note




      4   So the- you're singing cca-a         Hands open palm facing body, finger tips
                                                touching




      5   Not cca-a-a-a




      6   But cca-a-a-a-a:




                                                (Arms circle up and sideways)
      7   So it's got a sense of it going      LH circles up and forward
      8   somewhere tonally as well
```


and pace, and also his lack of manual gesture – unusual compared to his other models throughout the rehearsal.

The second half of the contrast pair (line 6) is, as expected, a 'correct' depiction, but a fuller and more complete one than the 'problem locating' model in line 4. Here, the conductor continues the melody on down to the first A sharp of bar 20 (see Figure 1), which is the last (different) note of the phrase. He does not add in the correct words however, but continues on the 'ah' sound from the middle of *peccata*, indicating that the words are irrelevant to (or at least not the focus of) his current model. In order to present his solution to the problem, this final model depicts a good, well-supported tone, and the conductor's arms circle up and outwards, adding meaning to the vocal model. This meaning, and the following verbal description *So it's got a sense of it going somewhere tonally as well*, both use the metaphorical schema that a musical passage or melody is like a physical path (Spitzer, 2004). The circular gesture is also tied in with the Pitch is Vertical metaphor mentioned earlier – the highest note of the phrase corresponds with the highest point of the circle.

Once again, this extract illustrates how depiction through modelling can be used to convey more meaning than by the

conductor's talk alone, and demonstrates how body movement and gesture can add meaning to his verbal description.

D. Extract 4 – Breath Flow

The final extract to be considered here is an example of the way gestures can be used to convey meaning that is either different or congruent to what the conductor is saying. In this clip, the choir has just sung a short section (18 bars) since the previous time the conductor stopped them. They are rehearsing Gustav Mahler's 8th Symphony for a performance in a few weeks' time. The conductor stops them with general positive feedback (*Well done, well done*), before launching into his criticism of the section they sang.

Location of the problem occurs descriptively in this clip in line 1, accompanied by an indicating (pointing) gesture – a metaphorical link between 'locating' in the physical world and in the temporal world of the music. The conductor continues with an instruction (phrased as a request) to write in *breath flow*, to remind the singers that they need to have a good supply of air at this particular point to ensure smooth singing with a good tone. The gesture he makes on the word *breath* in line 2 is a right-handed movement from the middle

Extract 4. Breath flow

```
Con   1   When you start at fourteen          LH finger points down on four
      2   will you all write <breath flow> please   RH thumb and finger together, sweeps
                                                back and forth from centre to right
                                                side
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      3   You don't give enough flow at the start   (RH open palm, swings back and forth
                                                from right side to left side)
      4   Especially er the first basses      Looks down at music
      5   Needs to be a bit warmer            RH still swinging
      6   e:t spiri                           RH palm open sweeps right to left
                                                again, but more controlled
      7   Need to have the warmth in the breath   Round, deep voice (as if still
                                                singing). RH circles in front of
                                                mouth
      8   behind it (.) ok?                   moves back to normal speaking voice
      9   BREATH (.) FLOW
```

of the space out to the right. The hand is held mostly in a fist, but with the first finger slightly opened, and the thumb held out beneath of it. This handshape could be an iconic gesture, depicting writing, supported by the direction of the movement (left to right – direction of writing). However the smoothness and side to side motion of the gesture is also reminiscent of the *breath flow* gesture itself, which is demonstrated just after. This suggests that this gesture could be a multifaceted depiction both of the action that he wants the choir to do (supporting the verbal instruction), and an imagistic portrayal of the breath itself.

The conductor continues his feedback in line 3 by expanding on what the problem was (and hence why they should write in *breath flow*): *you don't give enough flow at the start*. The gesture that accompanies this starts on the word *flow*, which is also emphasised vocally. It is a depiction that this conductor regularly uses when verbally discussing breath flow: a right-handed, open palm sweep from right to left (line 3). In this instance, the conductor starts with his hand back, almost behind him, and sweeps round until his hand almost touches his left shoulder, then continues to swing back and forth a few times (until *warmer*, line 5), gradually relaxing the hand shape. The hand and arm are held quite loosely, and the whole torso twists a little with the arm movement. The continuous sweeping movement spatially represents the physical flow of air out of the lungs and through the line of the music. In the interview following the rehearsal, the conductor explains that *for a conductor, the breath is in the upper arm*, and that the large arm movements in this gesture are illustrating the amount of breath that he wants the choir to be using at this point.

Interestingly however, the actions (i.e. what they are trying to achieve) that the depictions (gesture) and description (talk) are conveying at this point are different. Verbally, the conductor is giving an assessment of the previous performance, pointing out what, where and then who in particular was incorrect (i.e. the problem, or what he does not want the choir to do). Gesturally, however, he is simultaneously modelling what it is he *does* want (i.e. the solution): spatial information about the manner of the breath flow to help the choir understand how to improve next time.

This descriptive-assessment/depictive-instruction sets up the vocal model that the conductor gives in line 6, framing it as a depiction of how the conductor wants the sound to be. The conductor accompanies his singing with one right-hand, open-palm, right-to-left sweep, very alike to that shown in lines 3-5, but slower and more controlled, with the hand held steadier than previously. It is interesting to compare these two very similar but fundamentally different gestures. One reason for the distinction between them could be that in the former, the conductor is using the depiction to highlight an important characteristic at the expense of other, more irrelevant (to the current point) aspects. A vocal example of this was illustrated in Extract 3, where the conductor ignored the exact lyrics in order to focus on the shape of the music. Here, the right-hand sweep spatially models the continuous movement of air flow from their lungs that he is looking for, but without the control that is needed while actually singing – this is then shown as part of the full (singing+gesture) model in line 6. In contrast to the differing actions of gesture and talk at line 3, at this point in the interaction, the gesture (spatial representation) and vocalisation (sung demonstration) are working together coherently to depict a combined aural and visual model. Together, his hands and voice are telling the choir both how the music should sound, but also how it should feel, or how to understand it.

In the final part of the transcribed section, the conductor elaborates slightly on his verbal solution to the problem, explaining that they *need to have the warmth in the breath behind it* (lines 7-8). The difference is that most of this *descriptive* phrase is *depicted* by speaking in the warm tone of voice he is describing. It is deeper, resonant and slightly more melodic, moving back to his normal speaking voice on *behind*. The accompanying gesture – a circling of the right wrist loosely in front of the mouth (line 7) – is more ambiguous than some of the other gestures in this extract. It could be depicting the air flowing round the back of the mouth and throat, creating the resonant space needed to achieve a warm tone, or it could be indicating the throat area as the place of focus for this demonstration. This illustrates yet another multi-modal communication of meaning – the conductor is *verbally* giving an instruction, but his *tone* is modelling that which he is saying, and his *gesture* is illustrating and/or giving further information on how they can achieve the demonstrated tone and described instruction.

This extract therefore illustrates several points about how the conductor can use depiction to convey meaning to the choir. Depictive gestures can be multi-faceted, suggesting two different meanings at once, and used to either highlight relevant characteristics or model solutions. They can be multi-modal, working with vocalised models to create one depiction, or be showing a different action to the one concurrently being described in speech. Finally, this extract demonstrates how description can itself combine with vocal and gestural depiction simultaneously.

IV. CONCLUSION

By analysing four short examples of depiction by conductors during rehearsals, we can start to see how conductors can use this method to create and convey meaning to their choirs. Firstly, depictive models (both 'good' and 'faulty' ones) are very often multi-modal, combining vocal tone, gesture, facial expression and body language in order to show one coherent meaning. The whole meaning is greater than the sum of its different depictive parts. They can also combine with talk in order to both 'show' and 'tell' at the same time.

Secondly, what the depictions are being used to do in the rehearsal can also be examined. They can be used to highlight a particular characteristic, or combine to perform a full model, without specifying verbally which it is. They can be semantically-congruent with the verbal description, often using metaphorical gestures to increase physical understanding of the abstract concept the conductor is trying to convey. Alternatively, depictions can give additional information to that contained in the talk, either through vocal modelling or through gesture. Finally, they can also present to the choir a separate meaning to the simultaneous talk, such as a gestural solution depicted at the same time as a problem is being described.

Overall, it is clear that conductors can effectively use multi-modal depiction – including gesture, vocal modelling and body language – both alone and in combination with their talk in order to create and convey a coherent and expressive meaning to their choirs. Building on the work of Streeck (2008) and others showing how gestures can allow viewers to see a little bit of the world in their hands, here we have analysed some systematic ways in which conductors combine and utilise these resources for meaning-making to allow the choir to see (as well as hear) aspects of the music. Future work on how conductors create meaning, particularly using talk and gesture (and their combination), will continue as part of the first author's PhD.

ACKNOWLEDGMENT

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APPENDIX

Transcription notation:

Bold font	Sung vocalisations
<ah>	Slower than normal talk
AH	Louder than normal talk
<u>ah</u>	Emphasis
ah-	Cut off
(.)	Pause
ah:	Lengthened syllable
Ch/Con	Choir/Conductor
ChA	Choir Alto section
LH/RH	Left/Right hand