“LET THE MUSIC DANCE!”
THE FUNCTIONS AND EFFECTS OF VERBAL IMAGERY IN CHORAL REHEARSALS

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The thesis is dedicated to my father who (unwittingly) taught me to sing!

Abstract

The main aim of the research was to determine the context and efficacy of verbal imagery in choral rehearsals. It sought to establish the types of imagery used and whether and how they were understood by singers. The research aimed to define the relationship between imagery and the other rehearsal strategies directors employ. The intention of the research was to establish what role imagery plays in choral directing pedagogy and what implications this has for choral directors' practice.

The investigation was completed over five years and adopted a multi-method approach, using videoed observations, questionnaires and interviews; twenty-one directors and 332 choir members across 15 choirs contributed to the research. Interpretative Phenomenological Analysis (IPA) was the most appropriate analytical approach for this research as it is concerned with how participants make sense of their experiences. The sung responses to imagery were examined in their rehearsal context.

The research identified five types of imagery in choral rehearsals: simple, multiple, themed, negative and stock images. It also determined nine functions and effects of imagery:

- Imagery is used to transmit clear objectives
- Imagery is used effectively to achieve objectives
- Imagery is used to change thinking
- Imagery is used to create multiple-effects
- Imagery is used as a mnemonic
- Imagery is used to save rehearsal time
- Imagery can replace technical terminology
- Imagery is used to illustrate the text
- Imagery is associated with a specified musical phrase.

Imagery is influential in developing singers' understanding of the concepts involved in choral singing and in enabling singers to create and modify vocal sounds in response to their director's requests. Choral directors can employ these findings to inform their thinking and practice, combining imagery with other rehearsal techniques in the knowledge that it is a useful and effective strategy.

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List of Key Terms

This section provides the author's definitions of terms as employed in this research, all of which are explored fully in later chapters.

Verbal Imagery

Verbal imagery is defined as an image, metaphor, analogy, simile or other figurative language, employed verbally by choral directors in rehearsals, to enhance explanations and whose function is to affect singers' responses.

Vocal Demonstration

The term *vocal demonstration* is separated into two parts: the first is sung demonstrations of, for example, pitch, rhythm and tonal colour, the formation of vowels and consonants, and models of where syllables or words are placed in relation to pitches or rhythms. The second is without pitch and includes the text, the pronunciation and articulation of words partially or in their entirety, and un-pitched rhythmic models including nonsense syllables.

Italian Terminology

Italian terminology refers to the standard terms encountered in music and writing about music, for example *legato, crescendo* and *andante*, which are frequently provided with one-word translations into English.

Technical Terminology

This includes expressions and vocabulary which relate to two facets, vocal terminology and musical terminology, but does not include Italian vocabulary. Musical terminology includes the descriptions and terms which relate to musical elements, for example dynamic levels, relative note lengths or pitches, and vocal timbres. Vocal terminology comprises all the language which relates to vocal production and technique, for example posture, breath management and articulation.

Gestures

Included under this heading are body language, posture, gesture or facial expression, and physical signalling which does not provide the beat.

Stop, Repeat Segment (SRS)

This strategy is used when directors ask their singers to stop and repeat a short section of music they have just sung (SRS). Some sections are quite short, possibly only one note, others are a couple of bars or phrases. This allows directors to highlight the example, adjust or correct it without using imagery, and to reinforce it through repetition. These differ from P&P (see below) due to the lack of imagery.

Pre and Post Imagery Examples (P&P)

This is simply an abbreviation for the following sequence of events: the choir sings a phrase or section of the music; the director perceives that the phrase is not appropriate and/or correct; the director stops the singing and provides an image to influence singers to create the appropriate change; the choir interprets the imagery in relation to the selected musical phrase; the choir responds vocally to the image; the director judges whether the response is acceptable. P&P examples are sung versions of the phrase prior to and post imagery deployment.

Types of Images

Simple Images

These are provided in only one or two words and are simple descriptions of an image, for example words like *bright* or *light.*

Multiple Images

These occur when several simple, unrelated images are provided in close proximity to each other, usually in the same sentence.

Themed Images

Themed images are series of images which are inextricably connected to the original image and to each other. Their extended nature embellishes the original image by providing further detail or elaboration with images which thematically relate to it.

Combined Images

As the name implies, this is simply where two or more types of imagery occur together in the same example.

Negative Images

An image is deemed to be negative if the response is not to be sung in the way referred to in the image; a negative image frequently identifies the opposite of the desired vocal response. Sometimes directors provide negative images in close proximity to the positive version, (the required sound), to form a contrast with it.

Stock Images

The term stock image refers to an image which is used repeatedly either within one rehearsal or from one rehearsal to another. Directors use a particular stock image to denote the same intention each time, so such images acquire a specific meaning within the context in which they are used and so are associated with that feature/attribute/quality each time they are employed. As there is consistency in this, the image becomes synonymous with the response required.

Chapter 1

Introduction

Introduction and Rationale

Let the music dance! Phrases such as this were the initial impetus for the current research. Through experience as a singer and choral director, I had heard and invented many similar examples of verbal imagery; however, I had not previously considered why such expressions were used or whether they were effective. Those questions were the stimulus for this research, which aims to investigate the use, functions and effects of verbal imagery in choral rehearsals. The research seeks to establish whether and how choral singers understand the verbal imagery their directors employ and what the consequent implications are for choral directors.

This area of research was chosen for two main reasons: firstly the lack of focus on verbal imagery in choral pedagogy, despite its existence in vocal and choral practice; secondly my previously expressed curiosity to discover how verbal imagery operated outside my own experience and whether patterns or relationships existed for other choral directors. It was necessary to restrict the area of research to achieve clarity and focus and to ensure that data collection was sufficiently specific to be meaningful during analysis. In order to achieve that narrower focus whilst recognising that many attributes of the choral director are interdependent, the research concentrated on verbal communication rather than, for example, gesture or body language or any non-verbal communication. Garnett (2009) has already examined gesture, and Durrant's (2003) comprehensive philosophy and practice guide contains a chapter on gesture but only two pages on verbal and non-verbal language. Both Upham (1993) and Sheldon (1999) examined verbalisations in rehearsals, but the first was not in a vocal or choral context, and the second was more generally in teaching and learning, so although some aspects of these studies were useful, they also revealed areas for discovery which influenced the focus of this research. More than thirty years ago, Funk recognised the imbalance between the abundance of material related to physical rehearsal techniques and that focussed on verbal rehearsal technique (1982, p. 60). Jacobsen's more recent study cited the growing body of information about choral rehearsal techniques and hoped her research would add verbal imagery to the list, though she asked how directors acquired those techniques given the apparent lack of study (2004, p. 6). Funk's focus on expressive content and Jacobsen's on vocal function highlighted the importance of studying verbal imagery not in contrived experimental situations but rather in a natural rehearsal context. In addition, Jansson highlighted the dangers of researching only one aspect of a director's role because of its complex and interdependent features (2014, p. 142). This made it necessary to consider how other conducting strategies, namely vocal demonstrations, gestures, the use of Italian terms and technical vocabulary, combined or interacted with imagery.

Recognising the role that imagery has traditionally played in vocal pedagogy, Welch and Sundberg recommend that it should be studied systematically (2002, p. 266). This might have inspired Chen's research, which found "widespread support amongst professional performing artists and arts educators for the use of imagery," (2007, p. 72), and Sell's study, which suggested that verbal imagery was solely useful for aspects of interpretation (2005, p. 177), though these two explored vocal rather than choral contexts. Expression and other intangible aspects were a concern for Schippers, whose study of metaphor recognised its proliferation in vocal teaching but acknowledged a lack of understanding of how teachers chose the right vocabulary (2006, pp. 214-5). This implied a need to examine the meaning of the imagery employed, which could only be gained by interviews and comparing rehearsal extracts. In1985, Overturf noted, "verbal imagery may influence a particular vocal sound," (Grimland, 2005, p. 26), whereas Silvey's concern was to help students to "make better sense of the music on a personal level" (2005, p. 117). These two emphasised the need to examine all effects of the imagery, which necessitated videoing rehearsals so that aural outcomes could be evidenced.

The rehearsal context, rather than performance, was chosen as it would supply evidence of the frequency and types of imagery and more importantly any changes which were produced as a result of imagery. Considering Smith and Sataloff's definition of choral pedagogy as that which "seeks to bridge the gap between choral conducting and choral singing," (2006, p. viii), rehearsals would reveal whether imagery existed within that gap and what position it held in the pedagogy. They affirmed the need for conductors to express ideas in vocabulary and a manner appropriate to the choir, using the "linguistic framework of the choir," (Smith & Sataloff, 2006, p. 10), which, although not specifically stated, nevertheless includes imagery.

The invisibility of the vocal instrument was highlighted as a challenge by Welch and Sundberg; more important to this study was their point that the three components of the vocal instrument and their functions were "susceptible (…) to focused development and conscious control," (Welch & Sundberg, 2002, p. 253), which raised questions as to how that might be accomplished. They were particularly interested in visual feedback, but a more general issue was the "awareness of the target in relation to possible means of achieving that target" (2002, p. 260). Studying imagery would reveal whether it is one of the strategies by which that can be accomplished.

Aims for the Thesis

The main aims of the research are to determine the following:

- What are the functions of verbal imagery?
- What types and modes of verbal imagery are evident?
- How is verbal imagery understood by singers?
- In which contexts is verbal imagery evident in choral rehearsals?
- What is the relationship between verbal imagery and the other rehearsal strategies directors employ?
- What role does verbal imagery play in choral directing pedagogy?
- What implications are there for choral directors' practice?

Structure of the Thesis

Once the aims of the research had been identified the structure of the thesis could be determined. First, prior research on imagery will be examined in Chapter 2, to establish the foundations on which to base the enquiry; Chapter 3 will show how the design of the research will address the aims and enable them to be investigated. The findings are wide-ranging and relate to different parts of the research aims, so are dealt with separately in the results, discussion and analysis chapters; Chapter 4 comprises results relating to the types and modes of imagery; the next chapter demonstrates the relationship between imagery and other rehearsal strategies; Chapter 6 discusses the functions and effects of imagery. Finally, conclusions are produced in Chapter 7 and from those the implications for choral directors are devised.

Chapter 2

Imagery in Choral Rehearsals

2.1 Imagery in Choral Rehearsals

Introduction

This chapter examines extant literature relating to imagery, firstly defining and investigating its nature and functions in general in Chapter 2.1 and then within vocal teaching in Chapter 2.2. Imagery in choral rehearsals is the focus in Chapter 2.3, followed by a sub-chapter examining the role of the choral director. The final section, Chapter 2.5 explores imagery beyond vocal and choral contexts.

The first clarification needed when discussing the use of imagery in choral rehearsals is a definition of imagery. More than a dozen pieces of research use a variety of expressions and many collate several terms under one heading; for example, Ortony suggests “following Aristotle we will treat similes as a variety of metaphor,” and he finds no cognitive difference between simile, metaphor and analogy, (Ortony, 1975, pp. 47, 52), though he notes the potential of figurative language to “transfer learning and understanding” (1975, p. 53). Table 2.1 demonstrates the preferred terms used by other authors.

Funk debates the differences between expressive language, figurative language and verbal imagery, but concludes that they overlap, as imagery is used to deal with expressive aspects of music, for example mood or atmosphere, but also relates to specific musical elements, for example rhythm or texture (1982, pp. 122, 126). Jacobsen provides separate definitions for each of image, imagery and verbal imagery, the last of which is “mental pictures created through spoken figures of speech, vivid descriptions, metaphor, simile, analogy, and poetic or figurative language” (2004, p. 3); however, in her later research she uses the term metaphoric language rather than imagery (2013, p. 25). Spitzer conflates a list of eleven or more terms into the word metaphor, saying it is “as difficult to define as imagination, perhaps because it is also an expression of creativity” (2004, p. 3). He labels his theory of musical metaphor *bidirectional*, where “musical experience shapes thought just as thought shapes music” (2004, p. 54). It is the latter which is most pertinent to this study: the image or metaphor verbalised by the director affects the thoughts of the singer, whose vocal response creates or changes the sound. There is sufficient evidence, therefore, to use verbal imagery as a collective noun for several terms, many of which relate to poetic imagery.

Table 2.1

Preferred Terms

Term Used	**Additional Information**	**Reference**
Metaphor		(Paivio & Begg, 1981, p. 269)
Metaphor		(Schippers, 2006, p. 210)
Metaphor	Note metaphor's cognitive importance	(Petrie & Oshlag, 1993, p. 580)
Metaphor (collective term)	Uses "affective language" to appeal to the imagination	(Burwell, 2006, pp. 336, 331)
Metaphor (collective term)	Includes simile and imagery in examples	(Watson, 2008, n.p.)
Imagery and analogy (paired together)	Does not include metaphor	(Durrant, 2003, pp. 125, 171)
Images and models, similes and metaphors	Title of chapter	(Miller, 1993, p. 357)
Likeness statements	Includes analogy, metaphor and simile	(Stollack & Alexander, 1998, p. 17)

Verbal Imagery: Definition and Discussion

The definition of verbal imagery used in this research is: "an image, metaphor, analogy, simile or other figurative language, employed verbally by choral directors in rehearsals, to enhance explanations and whose function is to affect singers' responses" (Black, 2014, p. 210). The emphasis here is on the imagery functioning as a prompt, the purpose of which is for choir members to actually produce the sound, rather than only visualising physical processes or creating mental images.

This definition is distinct from several other types of imagery, such as musical imagery as defined by Godøy and Jørgensen, whose focus is the "images of musical sounds in our minds (…) in the absence of a directly audible sound source" (2001, p. ix). Although directors might ask singers to remember singing Verdi's *Dies Irae,* for example, the difference in function of the imagery in this study is to generate sound, not to imagine it. Several of the contributors to Godøy and Jørgensen's (2001), book, and recent studies by

Bailes, Dean and Bishop (2013) and Bishop, Bailes and Dean (2014), also focus on musical imagery where auditory feedback is absent. Creating a visual image in the mind, to which Vesely refers (2007, p. 51), is only part of the function of imagery as employed in this study. DeGroote cites a middle school choral director who stresses that her *visual imagery* is the only way to get the right sound. She quotes visual examples for singers to watch and then literally apply to their own facial posture (2009, p. 63). Godøy finds that "we have more salient images of sound when we have more salient images of how the sounds are produced" (2001, p. 238). This is slightly closer to imagery as used in much vocal teaching, where singers try to imagine the internal vocal apparatus and relate it to the sound produced. Imagery in the current research differs from that of Kleinen (1997), which focuses on thinking about and listening to music but not performing it and is more concerned with metaphors used to describe experiencing music than with responding to it.

Paivio's definition of imagery is the opposite of Godøy and Jørgensen's to some extent as it is "*nonverbal* memory representations of concrete objects and events, or nonverbal modes of thought" (Paivio, 1971, p. 12). It is, therefore, completely internal to an individual and is not shared orally, which means it cannot be applied in choral rehearsals where directors are communicating verbally with their singers. Emmons and Thomas encourage singers to create silent imagery and suggest mental rehearsal (1998, p. 164). The notion of mental practice for musicians is, according to Lehmann and Jørgensen, "usually defined as the cognitive and imaginary rehearsal of a physical skill without overt muscular movement. Mental practice is not a strategy per se, it is an approach to learning that relies heavily on internal cognitive processes." They suggest preparing the music by developing visual, muscular and kinaesthetic images which contribute during playing (Lehmann & Jørgensen, 2012, p. 682). This resonates with the body-mind integration which provokes a physical response when practising mental imagery (Chen, 2007, p. 70). Mental practice has been demonstrated to be "effective in enhancing performance when undertaken in conjunction with physical practice, reducing the amount of physical practice required" (Hallam, 2012, p. 655). Mental practice in that respect is not included in this study.

There are several aspects of poetic imagery in the definition for this current research, including descriptions or representations of ideas, mental images (Simpson & Weiner, 1989, p. 668), literal or figurative references and sense impressions (Baldick, 1990, p. 106). This does not necessarily mean that singers form mental pictures when they hear a particular example of verbal imagery; included are also conceptual images to spark the imagination and kinaesthetic images, which might be particularly useful in choral rehearsals. Watson provides full definitions of literary devices, so there is no advantage in reproducing that list, except to note that it also includes onomatopoeia, not mentioned previously (2008, n. p.). The term *subjective imagery* (which includes analogy, metaphor and simile) is chosen by Sell, and implies an inherent problem of different interpretations. She disapproves of imagery, stating “apart from its use in stimulating the imagination for purposes of interpretation, [it] usually obscures more that it reveals where technique is concerned” (2005, pp. 77-8). She does allow the opportunity for judicious use of imagery for interpretation but seems to dismiss “stimulating the imagination” as being of no importance. For singers, using the imagination is routine, as they need to imagine a pitch before singing it.

An image, according to Piaget and Inhelder is “a symbol in that it constitutes the semiotic instrument necessary in order to evoke and think what has been perceived” (1971, p. 381). This is a particularly useful definition for two reasons; firstly it originates from a pedagogical context which has several parallels to the learning which occurs in choir rehearsals; secondly it highlights the need to understand and interpret the image in order for a response to be created. In fact, one of Piaget and Inhelder’s conclusions is that images only truly become cognitive when actions are the result (1971, p. 390). This is why examining the vocal responses to imagery is much more important than exploring interpretations of the words themselves.

Ortony’s three theses of metaphor are well established and comprise metaphor’s compactness, its inexpressibility and its vividness (1975, pp. 47, 48, 50). The first of these differs slightly from Miller’s (1956) idea of *chunking* in that it also constrains and directs the detail, so that messages do not need to be spelled out explicitly; the metaphor or image, therefore, results in conciseness in addition to precision (Ortony, 1975, p. 47). His second thesis is particularly important to both music and to singing. Ortony states that “metaphor enables the predication by transfer of characteristics which are unnameable” (1975, p. 48). He is referring to thoughts and their inability to be literally described, though exactly the same case can be made for many of the non-notated features of music, the sound itself and the invisible parts of the vocal mechanism. For these, “metaphor is essential as a vehicle for its expression” (Ortony, 1975, p. 48). In addition, Ortony remarks that metaphors are not used to transmit single characteristics if that can be easily communicated literally (1975, p. 50). Metaphors and images are capable of transferring complex and integrated meanings which provide holistic conceptual understanding. The vividness, which is Ortony’s third thesis, is generated due to metaphor's "greater proximity to perceived experience", in which the "sensory and cognitive aspects are more available" (1975, pp. 50-51). Those sensory and cognitive aspects are plainly evident in choral rehearsals, and in addition, directors can and do create images which directly relate to their singers or to shared experiences. Metaphors also function as guides for future actions, which then reinforce the power of the metaphor (Lakoff & Johnson, 1980, p. 156). Metaphors structure aesthetic experience (Lakoff & Johnson, 1980, p. 235), which might explain why metaphor is frequently used for interpretation and expression. Garnett adds one more feature to this, using the term *verbal metaphor*, which is "a perceptible, surface effect of our fundamental ways of understanding the world through interacting with it" (Garnett, 2009, p. 48). This relates to Piaget and Inhelder's conclusion, noted earlier.

The Nature of Imagery

As long ago as 1940, Bartholomew recommended imagery as a useful tool for singing but stated that no particular type of imagery or method should be an "indiscriminate panacea for all students." Instead, "the intelligent teacher will be familiar with all types of pedagogical imagery, including the various synaesthesiae of form, shape, substance, color, or taste, on which we fall back when we try to describe tone qualities" (1940, p. 124). Not only does this catalogue the types of imagery available but also relates to one of Watson's respondents who realised that images need to be appropriate to a particular group or individual (2008, n. p.). The need for imagery to be "designed and targeted to solve a particular vocal problem according to [an] individual student's ability" was also found by Chen (2007, p. 116).

Lakoff and Johnson declare that "the essence of metaphor is understanding and experiencing one kind of thing in terms of another." Therefore, whenever reference is made to metaphor, "it should be understood that *metaphor* means *metaphorical concept*" (1980, pp. 5, 6). They discuss several different types of metaphorical groupings, the most relevant of which is the *novel* metaphor, which provides a new way of thinking about something (1980, p. 53). Novelty is also noted by Stollack and Alexander (1998, p. 21) and evidenced by several directors in this study. Spitzer refers to the novel aspect of imagery as "semantic innovation," (2004, p. 96), a feature which is very much in evidence with some directors in this study. Creasey (2010) notes the need for novelty and Piavio goes further, stating that an emphasis on novelty overrides all other features of the rules for images (1971, p. 160)**.** Alongside the originality of images, vivid images, referred to as eidetic (Paivio, 1971, p.

481), might be particularly important in recall from one rehearsal to another. Images become more vivid if they relate to a specific context with which the singers are familiar. This is confirmed by Ortony, who states that vividness also encourages memorability (1975, p. 51).

The intensity or distinctness of imagery is not negated by its vagueness, though an incongruity noted by several authors, with Miller providing a particularly useful reason why vagueness of imagery might be essential. His description of "memory-images" demonstrates the notion of building a mental image and although this "remained vague in many respects, it was nonetheless a particular image" (1993, p. 359). The particular image is stored in the memory and can be built upon or modified in future encounters. Modification of images is apparent when singers describe different aspects of the same image and yet agree with each other about the overall description. Similarly, Paivio and Begg found that students remembered "the gist" of what was said, rather than the exact words. If students are better at "memory for meaning than memory for wording of linguistic material," (Paivio & Begg, 1981, p. 194), this has implications when looking for coincidences between director's imagery and the interpretation by singers. The same idea appears in Lakoff and Johnson's work, that "different images will give rise to different linguistic expressions of those mappings," (1999, p. 69), even though the conceptual understanding is the same. Meaning rather than literal words can be stored in long-term memory (Lieberman, 2004, p. 435), so images are unlikely to be verbalised in exactly the form in which they were provided but the meaning is still recalled. The pieces of research noted here answer one of the criticisms of imagery in choral contexts, that different people across a choir explain images with a variety of words. This is important when asking singers to verbalise their understanding of a particular image, especially in the case of stock[1] images.

In addition to Ortony's point earlier (1975, p. 50), there is further evidence that images and metaphors are able to represent more than one aspect of an idea simultaneously. For example, Pusch found "experience becomes shared, information rounded and more whole, when metaphors are sought" (1992, p. 187). When trying to recall images, it is an advantage that the "whole is greater than the sum of its parts," (Ahsen, 2005, p. 1), which means singers do not have to recall individual aspects of the image, for example the timbre or the dynamic, but are able to combine these in one image, and more importantly, recall them in that state. This is important as the sound also combines several elements simultaneously.

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[1] See key terms.

A slightly different point is made by Emmons and Chase, commenting on the fact that singers execute technical skills better if technique is not the focus of attention. They state that once motor skills are routine and automatic, they are not perceived as separate elements (2006, pp. 260-1). The authors compare riding a bicycle with singing, which comprises "many different elements, each learned separately, but each becoming part of the whole skill that resides in the brain as one entity, such as 'singing softly' or 'singing fast'" (2006, p. 261). There are obvious similarities between these two processes as the type of holistic learning described is customary in choral rehearsals. Similarly, when examining the process of learning a new piece, Silvey found singers talked of "their version" of the piece, where they come to "appreciate it." The focus on printed notation had been superseded by aesthetic perceptions, and this stage could not be reached when singers were still grappling with the details (Silvey, 2005, pp. 112-3). By the end of the process, the singers were able to see the "big picture." Silvey's concern is also that directors lack awareness that singers and the audience "might also be affected, inspired, or challenged by the artistic elements of the performed composition" (2005, pp. 115, 117). There are two main considerations here: firstly that singers came to perceive the piece as a whole unit, rather than individual notes or phrases; secondly, that a director needs to enable the singers to reach that stage by a strategy which will release the imagination, expressiveness and feeling for the piece which creates the big picture s/he refers to and transcends the technical aspects. Silvey does not suggest that imagery might do this, but it counteracts comments from those like Sell, for example, (2005, pp. 77-78), who would restrict imagery use to interpretation. If a holistic view of the piece can be created by the director's use of imagery that must surely be an advantage.

Types and Modes of Imagery

Images exist in several modes, for example visual, aural, kinaesthetic, conceptual or relating to the emotions, with others listed by Paivio and Begg (1981, p. 272). However, Paivio notes elsewhere that verbal systems are more available, or accessible, when the verbal stimulus is auditory than when it is visual. He also states that a "verbal code must be stored along with the image, or be retrievable from it" (1971, pp. 239, 242). Although the singers' responses are not verbal, there may be some similarities with sung responses, and Paivio's ideas may also imply that vocal demonstrations provided alongside verbalised imagery are extremely efficacious.

Different modes are not always encountered singly in imagery; Mountain (2001) refers to multi-modal imagery, combining visual, auditory and/or kinaesthetic imagery, which is more complete and has “all the attributes of an entity or phenomenon of our physical environment” (p. 278). Similarly, Douville states that multi-sensory images are more elaborate and more memorable than single modality images (2004, p. 36).

Some metaphors are universal, some widespread and some culture-specific (Lakoff, 1993, p. 235). If *culture* here is applied to choirs then the notion of stock images which are choir specific or which are known across choirs is immediately reasonable. Watson refers to “tried and tested teaching approaches,” (2008, n. p.), and implies these are not invented by individual teachers. That idea is confirmed by Paivio and Walsh, who note “most metaphors are not newly created by their users, but all were once novel and new ones arise constantly even in the most commonplace of conversations” (1993, p. 307). This supports the idea of inter-choir stock images and metaphors, probably passed on by directors and vocal teachers. In fact Sticht goes further, making the analogy that “just as the repeated use of a hammer may strengthen the arm, the repeated use of metaphors may strengthen the powers of analysis and synthesis” (1993, p. 631). The implication here is threefold; the more directors use metaphors and images, the more easily singers are able to understand them; by using stock images, singers generate an in-depth and holistic understanding of their meaning due to their usage in different contexts each time; the more a singer works with the same director the more consistently the images will be understood and interpreted. This clearly resonates with Langer’s statement that intellectual vocabulary grows with the progress of conceptual thinking (1969, p. 142).

Schippers quotes several professional musicians and composers who have used negative metaphors to describe what should be avoided, for example ineffective practice techniques and inappropriate interpretation (2006, p. 212). Most negative images[2] are humorous, but even out of context are nevertheless immediately understandable. Similarly, Barten provides examples of conductors employing negative images in their rehearsals. She refers to these as *contrasts,* for example “it’s a courtly procession, not a football gesture” (1998, p. 94). The contrast is striking so emphasises the disparity between the two, allowing singers to clearly differentiate the appropriate response. The contrasts also tend to generate humour, which might make the image more memorable so has a two-fold purpose. Emmons and Thomas suggest creating strong and vivid images, but advise against introducing negative imagery (1998, p. 168); perhaps they imagine it would generate the wrong response.

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[2] See key terms.

Functions of Imagery

Imagery creates a reaction; the imagery acts as a prompt to the vocal response. Piaget and Inhelder show that the cognitive and affective factors in an action are integrated into a single whole (1971, p. 256), which is the image. Directors do not simply create images to no purpose; a vocal response to the image is required and the response relates to the image. Bradshaw considers that vocal teachers who do not use imagery will overlook the best opportunity to help a student, as it is not possible to sing well "just by consciously tilting the arytenoids" (1996, p. 11). Barten states that music by its very nature is expressive, but this is not necessarily an extra-musical expression or event (1998, p. 91). It follows then that expressive language is required to describe music, and she notes that "experientially, these descriptions are as direct and immediate as references to loudness, pitch, and tempo" (1998, p. 91). The need to describe music during choral rehearsals is evident as the director guides the performers to produce the sound. Expressive language is essential to achieve this, otherwise singers would simply read the score as their director was conducting and no verbal communication between them would be necessary.

The reasons why imagery is used are many and varied: "the great pedagogic value of figurative uses of language is to be found in their potential to transfer learning and understanding from what is known to what is less well-known and to do so in a very vivid manner" (Ortony, 1975, p. 53). Paivio and Begg note several advantages of imagery in relation to comprehension, two of which are cited here; firstly, that integrated images make for efficient storage and secondly, that imagery ensures processing flexibility (1981, pp. 283-4). Both of these are essential in choral rehearsals. Spitzer states that images structure thought and makes a comparison with traditional allegorical poetry where *faith* or *love* could be identified with a visual image. The images were used to "externalize and objectify inner thought and feelings; they were also harnessed in order to train the imagination" (Spitzer, 2004, p. 163). Images such as a *smooth vocal line* could be regarded in this way and relate to Garnett's reference to gestures as emblems (2009, p. 52), where images become so frequently used and easily understood that they become the stock images mentioned earlier.

Imagery is used to "locate problems with a particular conceptualisation and then bring about some sort of change" (Low, 2008, p. 213). This precise function, changing the sound, is vital in choral rehearsals. Thibodeau and Boroditsky note that “metaphors were most effective when they were presented early in the narrative and were then able to help organize (…) further incoming information” (2011, p. 9). The implication of this is that directors should not avoid using imagery even when initially introducing a piece to singers; in fact it might be helpful to do so to obviate repeating instructions if material recurs. Paivio refers to Glanzer and Clark’s (1963a) study which found that “stimuli that elicit a long verbalization will be handled less accurately that those that elicit short verbalizations” (Paivio, 1971, p. 90). This may be one of the reasons why simple, one-word images feature frequently in descriptions of vocal sounds.

Petrie and Oshlag note a number of functions of metaphor, particularly in relation to educational contexts. Metaphors are motivators, especially for difficult concepts; they permit the transmission of meaning for unfamiliar or abstract concepts and they enable teachers and students to share meaning (Petrie & Oshlag, 1993, pp. 602-3). In relation to this last function, directors and singers can develop intra-choir images which are employed, understood and responded to without further explanation. Barten provides three explanations for the widespread use of metaphor in music instruction; firstly, there is no more precise label for expressive and aesthetic properties; secondly, her respondents found figurative language to be effective pedagogically; thirdly, metaphors helped the students to “get beyond the notes.” Metaphor, therefore, “performs an integrative function” (1998, p. 95). It is obvious from earlier statements that these findings are not restricted to her study.

One function of imagery can be evidenced in a choral rehearsal but not with individual voices. The notion of having a unified sense of the emotional content of a piece is something Silvey proposes (2005, p. 114). The sharing of images during rehearsals is one way of achieving this, and Silvey is keen that singers “reflect on the meaning and artistic intentions of the score,” so they can “invest themselves in the process” (2005, p. 117). This suggests that directors might provide imagery but not necessarily dictate how singers interpret it.

An interesting idea is that, in the same way it is not possible to imagine a mountain without having seen one, it is not possible to imagine a particular sound without having heard it (Günter, 1992, pp. 7-8). However, this is exactly what imagery allows singers to do, to create a sound which they imagine is the one their director requires without having heard it. Even when directors provide vocal models, they produce a single-voiced model, so choir members still need to imagine how that relates to their choral sound. There are also some contradictions in Sell's view of how useful the imagination is to singers: at one point she states, "feeling and imagination are not enough; singers need to be aware of how their body language and their facial expressions really appear to an audience." However, later she declares "preparation (…) and positive, useful practising are vital. Imagination has to be stimulated and cultivated" (2005, pp. 129, 179). The second of these is perhaps more applicable in choral rehearsals, as singers are unlikely to practise outside rehearsal time and therefore benefit from the director stimulating and cultivating their imaginations. Carrington is sufficiently keen for singers to use the power of the imagination as to suggest directors guide singers through exercises such as singing "pivotal chords using different tone qualities: soft, (…); rich, thin etcetera"; or later he advises them to "vary the 'spin' of the sound to suggest the hidden meanings in the text: calm, reflective" (2012, pp. 287-8). Although these might be practised during warm-up sessions, they are clearly designed to have a lasting effect on the singers' awareness of what tonal colours are available. Spitzer states: "in the realm of perception, the productive imagination produces concepts; in the realm of language it produces emergent semantic innovation" (2004, p. 98). To this could be added: in the realm of choral rehearsals the imagination produces a change in vocal response. Similarly, he notes "the imagery of metaphor inspires thought; it sets into motion imaginative reflection" (2004, p. 99). In the case of choral rehearsals, the imagery sets in motion the singer's imagination of the sound to be produced.

Imagery is valuable in explaining what cannot be seen; there are two aspects to this, the first (discussed in chapter 2.2) is the inner workings of the singing mechanism. Much vocal pedagogy relies on singers having some conceptual understanding of physiology, some of which is not visible. It might be expected that imagery is more appropriate for interpretation and expression in music, but Schippers does not restrict it to this. When referring to technical instructions, he states that although these are provided mainly through unambiguous, physical instructions, imaginative language is used to evoke the right attitude needed to play [or sing with] the right technique (2006, pp. 212-3). The physical sensations felt during singing are "notoriously difficult to describe, and indeed the descriptions of this particular phenomenon are so many and so varied, that it is forgivable for a novice to become confused by them" (de Brett, 1996, p. 17). This acknowledges possible confusions, not restricted to novices, which may arise when using imagery. Sell presents a different point: "a singer who appears to be unimaginative in the use of dynamics [for example] may in fact be lacking in technique, not imagination" (2005, p. 126). Whether the technique she refers to can be developed without the use of imagery is debatable. In fact, if "singing, like speaking, is far more a mental-spiritual-artistic utterance which only uses muscles, cavities, and the whole body as tools," (Günter, 1992, p. 46), directors should be much more concerned with provoking a singer's imagination than describing the physiology.

Imagery creates a connection between vocal function and thought processes: "the singing voice works by discrete mental signals that coordinate with the vocal tract through breathing and imaging" (Smith & Sataloff, 2006, p. 126). This emphasises the significant role of the mind in controlling the physiology; when asking singers to produce a resonant sound, Hill, Jones and Ash talk of "other factors, many of which are rooted in the contribution of the imagination to singing." They also realise that it is the singers' perception of what is physically happening in their bodies which is important to them being able to produce the same effect at a later date (Hill, with Jones, & Ash, 2007, p. 72).

The second invisible aspect which might benefit from imagery is that which does not appear in the notation but is heard in performance, the nuances of the sound, which might be termed expression. Some aspects of expression and interpretation do appear in the score and choral directors may explain this verbally. However, choirs who use notated music need, at some point, to focus more on the sound produced rather than the written page. The notation guides singers and their directors but there is still much of the overall performance which is not in the notation. Composers may attempt to notate the mood which a section or piece of music might evoke with a single Italian instruction. However, Langer notes that composers create subtle complexes of feeling that language cannot name (1969, p. 222), but which directors subsequently attempt to interpret. As composers write music rather than words, it makes the director's interpretative role more difficult, as they are trying to express the inexpressible and to do that in a way which is understood by a diverse group of people. This links closely to Ortony's second thesis, quoted earlier. A similar view is expressed by Silvey who notes that "the score serves as a set of instructions for the musicians to follow but ultimately the music only exists in the perceptions of those who experience it" (2005, p. 103). Those who experience the music also includes the listeners, who do not see the notation and rely, therefore, on the singers to transmit any expression or feelings. When writing of analytical listeners, Dunn raises exactly that idea of hearing non-notated aspects of music, the qualities heard in performance (2011, p. 13). As these do not exist except in the minds of the performers, these qualities might be exactly why imagery is essential.

Problems with Imagery

There are several problematic areas in relation to imagery; the most frequently encountered is its imprecision and inconsistent interpretation. Welch, Howard, Himonides and Brereton (2005) highlight this when referring to the vocabulary of singing pedagogy. Commonly used terms, for example *focus* or *open throat*, are metaphors and as such might be “ambiguous in relation to the underlying coordination of anatomy and physiology, as well as concomitant vocal acoustic output” (2005, p. 227). The possibility of mistakes due to different ways in which metaphors can be understood is also found by Petrie and Oshlag (1993, p. 579). However, the disadvantages of ambiguous interpretation are not restricted to imagery, metaphor or choral and vocal contexts. Writers in general have “no guarantees how their words will be interpreted, what kinds of meanings they will constitute, how much of their contents will be congruent with those of their readers” (Pusch, 1992, p. 185). Chen defines imagery as “verbal stimulation as a means of forming images and linking patterns,” and, therefore, accepts that the same words will create a variety of perceptions across different people (2007, p. 60). Just as different teachers will explain an Italian term such as *crescendo* with different vocabulary, the same will be true of imagery. Similarly, vocal students will describe a single term, whether imagistic or not, with a variety of vocabulary; the words they use do not necessarily signify their understanding. Begg and Paivio demonstrated that meaning was not tied to specific words but to the object or event the words referred to, therefore the imagery or “nonverbal referential meaning” of the sentence is retained (1971, pp. 459-60). This is an important consideration when obtaining feedback from singers about their understanding of imagery. It may actually be of benefit that individuals develop a personal meaning and understanding for an image, as Reid suggests, rather than one which is replicated across the choir (2001, p. 40).

Problems of interpretation are evidenced beyond imagery: Grimland tries to differentiate between modelling and metaphor, suggesting that the former requires imitation but the latter, interpretation (2001, p. 216). If this applies to gesture it is improbable, as singers do not generally imitate the director’s gestures. If it applies to vocal demonstrations, it requires singers to have exactly the same vocal physiology, technique and understanding as their director. If it applies to direct instruction, for example to sing sharper or louder, the question would be to what extent. In an interesting piece of advice to choral directors Lamb states, “make your conducting gestures show exactly what you want. That way, no time will be wasted by having to tell your students” (2005, p. 1). Although gestures need to be clear, it is not possible to show exactly how to create a particular timbre, for example, so it may be that gestures are more limited in the types of information they can convey. Another point, from a study with inexperienced choirs, was that singers only looked at the conductor when they felt it was necessary (Skadsem, 1997, p. 516), so they may not have actually noticed the conductor's gesture. This means that, unless a rehearsal is extremely badly managed, singers are more likely to hear verbal information than see a gesture, something which might be even more probable with choirs who rely heavily on the written score.

Schippers uses several pieces of research to demonstrate reasons why metaphor is not successful; these include the metaphor being in the wrong context or genre, over complicated and obscure, too idiosyncratic, too simple and uninspiring. All these indicate that the frames of reference to interpret the metaphor do not exist in mind of the hearer (2006, p. 213). This is corroborated by Ortony: "a metaphor used successfully can give insight and comprehension; used unsuccessfully it can generate confusion and despair" (1975, p. 52). The question of how much guidance to provide is judged by directors and depends on how well they know their choirs; that knowledge might be more influential with larger and more heterogeneous groups (Ortony, 1975, p. 52). Cultural background plays an important part in interpreting metaphors (Low, 2008, p. 222), which has greater implications for guest directors. Bradshaw accepts that some singers will respond more to some images than others but does not necessarily see this as problematic (1996, p. 13), as it might be true of any type of communication. One of the instructors in Barten's study claimed that metaphoric language was too vague and imprecise to be useful but then subsequently used the phrase, "there's an accent, so you have to sting that note a little" (1998, p. 94). Similar contradictions have been noted, in Sell's (2005) writing for example, but this is not unexpected considering metaphor and imagery are so naturally included in everyday speech that avoiding them is not possible. Barten's instructor may simply not have been aware s/he was using imagery. It may be that a singer realises their failure to understand the metaphor or "attributes inappropriate characteristics to the topic and go away misled" (Ortony, 1975, p. 51). Nevertheless, whatever type of strategy is used with singers, directors would normally review the sounds produced and amend or confirm as appropriate. This would be true whether the input was through vocal demonstration, Italian terms, verbal description or imagery and emphasises the director's aural analysis rather than the variety of singers' vocabulary.

Another problem, according to Paivio and Begg, is the imprecision of metaphor, that it can distort real meaning. This is balanced though by metaphor being regarded as "the ultimate in creative and poetic expression" (Paivio & Begg, 1981, p. 268). They note later that understanding metaphors is a cognitive problem where a new conceptual entity is created from apparently disparate parts (1981, pp. 273-4). Similar disadvantages of metaphor, that it encourages sloppy thought or is misleading, are noted by Petrie and Oshlag (1993, p. 579). However, they declare these disadvantages are over-ridden by the fact that "metaphors and analogies play a central, even indispensable role in the pedagogical process of acquiring [a particular] subject" (1993, p. 581).

Imagery and Conceptual Understanding

The pedagogical use referred to above is exactly the function during choral rehearsals; singers develop conceptual understanding through their director's imagistic language. The case for using imagery in describing music is strongly made by Zbikowski amongst others, when highlighting the ephemeral and virtually intangible aspects of music. Cross-domain mapping between concrete physical objects and music has been accepted (Zbikowski, 2002, p. 14), and metaphors and images are frequently used for this purpose. Zbikowski refers to linguistic metaphors, which are expressions of such a mapping through language (2002, p. 66). Images are simply a way of capturing concepts, which "combine with concepts from other domains to create blended concepts that suggest striking possibilities for the imagination" (Zbikowski, 2002, pp. 68, 95). He notes that the models are for understanding in a particular set of circumstances (2002, p. 111), so if those circumstances are replicated, for example in a subsequent rehearsal, the understanding will be maintained.

Concepts of Music and Voice

It would be atypical for choir directors not to employ imagery in their rehearsals as Piavio and Begg found "that 'ordinary language' and metaphor are continuous phenomena, employing common cognitive and linguistic processes" (1981, p. 287). Some forms of experience, for example music, are too abstract to be conveyed clearly (Piaget & Inhelder, 1971, p. 380), but as directors need to employ language, singers need to learn to deal with words as an expressive issue (Burwell, 2006, p. 332). Lakoff states that "metaphor is the main mechanism through which we comprehend abstract concepts and perform abstract reasoning" (1993, p. 244). This is particularly pertinent when referring to aspects of singing or choral rehearsals which do not physically exist, for example *head voice* or *vocal line*. With

Lakoff's statement in mind, it is completely understandable why these concepts should be presented to singers through metaphor and imagery. As Chen shows, "we need verbal imagery in order to conceptualise the appropriate sound or interpretation as a condition of successful performance" (2007, p. 3). Though Durrant is referring to young children, he agrees that images will "create in their bodyminds a tonal concept that they are able to imagine and act upon." The words and images employed portray the musical intentions more accurately than "technical jargon, which often confuses" (2003, p. 126). Findings from Latukefu and Verenikina's study demonstrate partial agreement with this: singing students should be taught scientific concepts but this should not simply be by direct instruction, as this does not help in forming concepts. Instead, the scientific concepts should be integrated into the creative practice of singing (2011, pp. 184, 191). Although they do not outline how this might be achieved, there are definitely opportunities for imagery. Carrington provides several suggestions, simple one-word images, but advises that directors need to identify their ideal choral sound first, in order to achieve it (2012, pp. 282-3).

Zbikowski realises that conceptual models which relate to sound-objects are problematic with voices, "since it is difficult to find the physical object that correlates with vocal sound" (2002, p. 111). This is emphasised by Callaghan, Emmons and Popeil who state, "the musical instrument that is the voice is the whole person" (2012, p. 560). Their description of the act of singing makes it appear almost impossible to conceptualise:

> A vocalist's body may be thinking language and music while apprehending internal sensations of vibration, movement, and sound, and while attending/responding to external sensations: the sound of the voice; the sight and sound of instrumental accompaniment; other singers, and an audience. Plainly the brain is the most important vocal organ! (2012, p. 560)

Smith and Chipman make the same point about the brain's role (2007, p. 52), and in the case of choirs, there is additionally a response to the director's requests. Callaghan et al. note particularly that "those skills and understandings are combined as a gestalt in interpreting and communicating musical, textual, and emotional meanings" (2012, p. 566). With such complexity, it is unsurprising that singers and directors search for the most efficient explanations to ensure conceptual learning is integrated with practice.

There is a difference between knowing the skills in singing and understanding how those skills operate and develop, as Latukefu and Verenikina found. It also took time for their respondents to "acquire the concepts as their own" (2011, p. 186). However, language is not employed purely to inspire sounds but frequently also to describe the outcome. Welch and Sundberg highlight the problems of singers misinterpreting feedback (2002, p. 266), so directors need to clarify their requirements when trying to modify vocal responses as well as instigate them. Petrie and Oshlag highlight the central importance of the response:

> The key to understanding the learning of new categories (…) and comprehending metaphors (…) is that both processes are bound up with activities on the part of the student. It is not simply a case of hearing words, understanding them literally, and applying them directly. In both instances it is a case of acting in the ecology. (1993, p. 589)

Imagery must elicit a response and the response needs to be in the same context in which the imagery was generated. It is not sufficient to be able to explain or interpret the meaning of the imagery; of overriding importance is the response singers make to the imagery during the rehearsal.

Imagery, Memory and Learning

"The act of singing is a psychomotor process involving the coordination of mental and motor activities" (Phillips, Williams, & Edwin, 2012, p. 596). However, this is not a totally conscious act, as Chipman, Hoffman and Thomas point out: "the conscious mind's job is to give orders and orders alone. *Not* to do. After the order has been given there must be the will to do that order, and that is the work for the subconscious mind only" (2008, p. 3). Use of imagery and metaphor too is sub-conscious as Langer indicates (1969, p. 141), and they can "exemplify complex knowledge structures and influence people's reasoning" even if "fleeting and seemingly unnoticed in natural language" (Thibodeau & Boroditsky, 2011, p. 9). If singers and directors say they are unaware of using imagery, this is likely to be true as its use is automatic (Lakoff & Johnson, 1999, p. 56), and although Baddeley states that learners need to be attentive to the material they are rehearsing, they do not need the intention to commit it to memory (1997, pp. 123-4).

Cohen makes two interesting points about music and memory: firstly that it needs to be complete, exact and accurate, unlike language, where we remember and reconstruct the gist. Secondly, as Sloboda (1985) also finds, "memory for music is primarily receptive" (Cohen, 1996, pp. 211-2). This is why a mnemonic in the form of an image is useful as it allows the storage and retrieval of specific information, especially if directors highlight something they wish to be recalled later. Williams provides full descriptions of memory function in relation to music, coupled with techniques for improving memorisation skills. One of these is inventing a “simple inner picture” where “the sillier images are often the most memorable” (Williams, 2013, pp. 143-4). If those images are novel, the novelty “overrides all other features of the rules for images” (Paivio, 1971, pp. 159-60). Mnemonic techniques involve the imagination and association, connecting two items in order to recall a third one. These can be used more creatively when the aim is to change or affect the future in some way (Buzan & Buzan, 2003, pp. 128-9). This is important during choral rehearsals, where affecting the vocal response is the purpose of imagery. As mnemonic systems have been in use since the middle ages (Paivio, 1971, p. 166), they are accepted as normal in everyday situations.

Imagery and Memory

Images are “symbolic representations which may be evoked by the presentation of verbal information to be remembered over an indefinite period of time” (Richardson, 1980, p. 44). They are useful for remembering abstract concepts, for example *a round sound*, because an image is rich and distinct, therefore easy to retrieve (Lieberman, 2004, pp. 410-11). Paivio refers to single *peg words*, which serve as retrieval cues for several words (1971, p. 351). This relates to stock images and is particularly pertinent to themed images[3] which, once introduced, can be recalled through a single word. In fact, “the image-evoking value of words is the best predictor of performance in most verbal learning and memory tasks” (Paivio & Begg, 1981, p. 185). Although singing is not verbal learning, it does rely on singers being able to remember how to sing a particular phrase, and Paivio and Begg’s study shows the highest correlation between imagery and recall (1981, p. 187). In this they refer to Miller’s (1956) idea of *chunking,* where the chunk functions as a unit to be stored in the memory, stating “imagery is assumed to be a chunking mechanism” (Paivio & Begg, 1981, pp. 176,187); imagery, therefore, is highly effective as a memory code (Paivio, 1971, p. 297).

One of the other reasons imagery is useful during choral rehearsals relates to the fact that “speech is a fleeting, temporally linear means of communicating” (Sticht, 1993, p. 622). As soon as speech is heard, it disappears, therefore if directors wish their singers to remember and recall facets of the music about which they are speaking, images and metaphors are essential to “extend our capacity for active memory” (Sticht, 1993, p. 622). Another advantage of imagery is its ability to capture an idea as a whole and integrate it into a single unit of memory (Paivio & Begg, 1981, pp. 194, 200), as advocated earlier by Cohen (1996). Memory performance is based on the construction of a holistic mental representation, with the construction depending on contextual knowledge (Paivio & Begg, 1981, p. 198). Therefore, images which relate to the singers or from a context they recognise will be better remembered by them. Williams makes an interesting point about the ability to access the "right-brain, whole-picture, emotional aspect of a performance" (2013, p. 142). This is exactly the type of situation where imagery is most useful, to create a holistic picture, to harness the singer's feelings and to create the overall mood of the piece. The last two of these might be unachievable with a physiological approach alone.

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[3] See key terms.

Imagery and Learning

> *Learning* is central to successful choral work - learning the music and words; learning to sing together; learning to produce a good sound overall; learning to produce the voice individually. All learning activity (…) depends on concentration, repetition and practice, and the permission to 'get it wrong.' (Hill, with Jones, & Ash, 2007, p. 56)

This is undoubtedly true but the more interesting discussion is how this occurs. Schippers is not concerned with the philosophical aspect of this question but with the "application of metaphor as a pedagogical tool to elucidate approaches and concepts that are difficult to explain in cognitive terms" (2006, p. 210). Metaphor and imagery are effective for moving from the known to the less well-known, because they provide richness of detail and correlate very highly with learnability (Ortony, 1975, p. 51). They also allow shared understanding to develop between expert and novice (Latukefu & Verenikina, 2011, p. 192). Price and Byo advise that presenting information multi-modally is most effective in rehearsals, especially when verbal information is combined with modelling (2002, pp. 345, 347). Durrant provides a full discussion of different ways of learning and learner types, including reference to Gardner's (1983) theory of multiple intelligences (Durrant, 2003, pp. 23-6). This is the basis for one of Williams' recommendations, to "use varied strategies: aural, kinaesthetic and visual memories work better when linked with each other in the imagination" (2013, p. 146). Her inclusion of the imagination here is important and allows imagery to be assimilated into an accepted range of learning styles.

Having noted the performer is also the instrument, Callaghan et al. state that singing involves musical concepts and psychomotor skills which are interdependent. They suggest that a system of cues should be employed and that teachers should provide tasks and directions using “metaphor and mental images meaningful to the singer” (2012, p. 567). The learning process also involves feedback and “because music is sound artistically structured in time, musicians have relied heavily on auditory imagery and auditory and verbal feedback on the musical sound” (Callaghan, Emmons, & Popeil, 2012, p. 568). This is another reason why imagery is so frequently encountered and essential in vocal and choral contexts. It is evidently possible to acquire skills in choosing the most effective expressions for singers, as one study found that experienced choir directors expressed themselves differently to novice directors (Johnson, Darrow, & Eason, 2008, p. 80). The language of imagery is not only descriptive but allows the hearer to express new insights or make actions multidimensional (Pusch, 1992, p. 190), and enables directors to speak eloquently to each student’s imagination (Barten, 1998, p. 95).

Summary

The main function of imagery in choral rehearsals is to affect singers’ vocal responses, therefore, examining those responses is more efficacious than examining the words used to describe the imagery. Meaning is not attached to words but to the object or event referred to in the image; consequently, respondents may differ on the words to describe the same image but still agree on its conceptual understanding. In choral rehearsals, the director will analyse the sung responses and is, therefore, best placed to judge whether those responses are appropriate. In this study, imagery is not mental practice where the sound is absent but is the cause of the vocal effect. Imagery by its nature is vivid, novel, memorable and effective pedagogically as it allows holistic conceptual understanding. It functions to motivate singers, to evoke the imagination and is able to influence perception beyond the visible and concrete. Imagery appears in multi-modal and negative forms, and stock images can be generated which result in comprehensive understanding due to their deployment in different circumstances. Imagery also allows variation in learning styles to cater for large and diverse groups like choirs.

2.2 Imagery in Vocal Teaching

Imagery is used in vocal teaching; it is part of the pedagogy and that fact per se might result in problems and confusions; there are convincing reasons, though, why imagery is encountered so frequently.

Several pieces of research cite the invisibility of parts of the vocal mechanism as a reason for using imagery; Skoog (2004), Toms (1985), Vennard (1967) and Ware (1968), for example. It is not simply that some parts of the vocal apparatus are unseen, but that “the mechanism involved is complex, variable, and never entirely under conscious control,” (Bartholomew, 1940, p. 20), a viewpoint shared by Toms (1985, p. 17). In order to be able to exercise some control over that apparatus, the intermediary of language is utilised. Miller counteracts this to some extent, providing a long list of what is visible (1996, p. 30), to which list Sell adds the possibility of a videostroboscopy, which allows the physical process to be seen (2005, p. 128). This nevertheless relies on the singer remembering the sight, sensations and sound experienced and is furthermore not feasible in a choral rehearsal. Once experienced, there seems “no reason why [the sensations] cannot be verbally explained, and no reason why the content of that knowledge cannot be related to the content of voice science knowledge” (Callaghan, 1998, p. 37). Therefore, the invisibility of the voice is not in itself an argument for using imagery; a more convincing reason is the combination of invisibility and the lack of conscious control of some aspects of singing.

Historical Perspective of Imagery in Vocal Teaching

Imagery has been part of vocal pedagogy for many years as several histories demonstrate, for example Mason (2000), Miller (2006) and Williams (Williams, 2013); Nix 2012) also provides an overview of vocal teaching over the fifty years prior to 2012. As long ago as Garcia’s two treatises on singing (1854 and 1894), anatomical and physiological drawings and explanations of the interior of the singing mechanism have been available to vocal teachers (Chen, 2007, p. 18). This might have signalled the end of the need for imagistic descriptions of tonal quality, for example; however, that is not the case, as some of the recent overviews confirm. Jacobsen suggests that Giovanni Lamperti might have provided “one of the first recorded examples of verbal imagery addressing function accompanied by its physiological explanation” (2004, pp. 23-4). Chen’s summary includes inventions such as the laryngoscope, oscilloscope and the provision of spectrograms and acoustic analyses (2007, pp. 16-27), whilst Sell refers to Estill’s “*Voicecraft* philosophy using imagery” (Sell, 2005, pp. 38-9). The pioneers of real-time visual feedback, Welch, Rush and Howard (1989), who created SINGAD, realised their technology might be useful to teachers and students who would have “the opportunity to know that they are sharing common perceptions and conceptualisations of the student’s singing behaviours” (Welch, Howard, Himonides, & Brereton, 2005, p. 232). The resulting commonality would, therefore, counteract problems when teachers try to explain in words how the student might alter or improve a sound, as "imagery remains susceptible to ambiguous interpretation" (Hoppe, Sadakata, & Desain, 2006, p. 308). Whilst those technologies may be valuable to voice teachers, there is currently no possibility of them being transferred into a regular choral context, least of all with amateur choirs. The historical background is relevant, however, because the same instrument is fundamental to both the vocal and choral contexts so the pedagogy of the former will affect the latter.

There is evidence that the vocal knowledge of some voice teachers is "incomplete, faulty or 'imaginative'," (Callaghan, 1998, p. 28), a view endorsed by Haddon (2009, p. 57). Williams suggests vocal teaching is a complex role: as "singing is a whole body-mind experience, it relies on imagination and instinct," therefore, singing teaching "likewise depends on intuition, empathy and imagination" (2013, p. 200). Chen quotes Wurgler (1997), saying "most first-time voice teachers teach in a manner similar to one or more of their own previous voice teachers," (2007, p. 32), which may be one reason why there are examples of verbal imagery common to many voice teachers. It may also explain why, even when audio and video materials are now readily available to voice teachers, there is still reliance on the use of imagery.

The Science versus Imagery Debate

Hemsley bemoans the fact that most publications on singing are actually about anatomy, physiology and the mechanics of the vocal organs, not singing. His focus is more on "the human and imaginative dimension" which is essential to the art (1998, p. foreword). This sets out Hemsley's stance clearly and widens discussion on the roles imagery plays. He states that "singing must always have its source in vitality, initiated by the imagination," (1998, p. 44), so the mind inspires the body to act. In fact Hemsley states that "once the imagination is strong enough and the singer responsively alert, the body does not distinguish between the imagination and 'reality'" (1998, p. 124).

Miller's usage of imagery is more restrictive, advising that imagery should not be used in the first stage of teaching but is capable of unifying already established functions (1996, pp. 3-4). He appears initially to agree with some focus on the imagination, stating, "imaging in singing should ideally be directed to the artistic realization of text, drama, and musical content" (1996, p. 5). However, this is quite strict advice and can be put to the test using a common term, for example *vocal line*, which itself is an image. On one hand, it may be viewed as a musical concern for phrasing, in which case imagery can be used; alternatively, if it depends on the technical ability to maintain breath flow, imagery should not be considered. In practice, descriptions are not so easy to categorise separately. Despite the inclusion of imagery in vocal teaching over centuries, Helmsley and Miller's viewpoints contrast the scientific and imagistic vocabulary.

Ware dates the philosophical division between the two sides of this debate to the invention of the laryngoscope in 1854 (2013, p. 413). The increase in publications on the scientific study of singing during the final third of the nineteenth century may have been confusing, Sell suggests, partly because of the number of such publications but also because it was an unusual method of communication at that period. Previously established schools of vocal teaching had not been able to access that plethora of scientific knowledge and that may be the reason why the debate around the relative merits of each standpoint has emerged (Sell, 2005, p. 32). Similarly, Jacobsen provides the rationale that "verbal imagery was used to describe the unknown and unseen before science could substantiate mechanistic function" (2004, p. 9). Freed supplies a useful summary of the debate, which includes a comparison of voice teaching texts from the early 1900's with those from the late 1990's (2000, pp. 5-7). He found at least 79% of imagistic terms from the earlier period being used in the later period and 11% of the earlier texts which used no imagery at all (2000, p. 7), signalling that the situation is not so straightforward. Sell presents a balanced perspective, which does not disparage the use of imagery per se, but its overuse: "any competent singing teacher with a firmly grounded scientifically based pedagogy is the very last person to decry imagination. Artistry and imagination thrive in concert with a voice which functions efficiently and healthily" (2005, p. 69). She uses the word *imagination* but the explanation from teacher to student can only be transmitted verbally in the regular context of a vocal lesson.

Bartholomew was originally sceptical about the role of "fantastic and foolish imagery," (1935, p. 3), but demonstrates how scientific and imagistic language are integrated in his summary of good tone quality "characterized by the vibrato, or life, or warmth; by the low formant, or 'resonance,' or roundness, or sonority; and by the high formant, or 'ring,' or shimmer" (1935, p. 7). This view is in complete contrast to Emmons and Chase (2006, p. 264) and Miller (1996, pp. 3-4), but Bartholomew confirms his standpoint by showing repeatedly that "the *attempt* to feel head-resonance frequently improves the tone markedly," rather than relying on the actual sensations (1935, p. 13); the implication here is that imagination and mental processing are important factors.

The viewpoint of Hemsley is that by encouraging singers to use their imaginations and clarify their intentions, they sing better vocally; “that is what I call technique” (1998, p. 7). The physiology and anatomy must incorporate a musical purpose, otherwise they remain mechanical. He does not decry a scientific approach but stresses the human activity of singing (1998, p. 9). In fact Hemsley reduces the study of singing to two things: “training the mind and the imagination to give clear and precise impulses to which the body can react; training the body to react with maximum precision and energy” (1998, p. 8). He sees these two as inseparable, suggesting the second without the first will not cultivate the *art* of singing.

An interesting perspective is highlighted by Vennard (1973) who, according to Chen, acknowledges that vocal teachers can transmit the “scientific and psychological knowledge of singing” to their students but stresses that “the vocal musculature is controlled by the ear, and to a small degree by kinaesthetic sensations,” (Chen, 2007, p. 23); that view places aural analysis by the teacher at the heart of the pedagogy. One of Ware’s respondents similarly notes that success follows if “[I] keep my mind open and my ears attentive” (2013, p. 417). Whatever pedagogical or philosophical standpoint is taken, aural attention is essential to providing useful feedback and can be aided by computer based acoustic analysis. Sell mentions the use of the spectrograph which can provide the vibrato accuracy of pitch, for example; however, she also admits that “scientific analysis is not a substitute for the competent voice teacher, but is an extra tool of which the teacher may take advantage” (2005, p. 85). Callaghan et al. cite many publications on “physiology, medicine, speech pathology, acoustics, linguistics, education, psychology, and neurology, as well as singing and voice science,” (2012, p. 559), which might help voice teachers gain more detailed visual and auditory information.

One of Sell’s findings was a decline in the polarization between the two factions and she expects voice science will have an increasing role to play (2005, p. 178). Gradual modifications to the pedagogy are confirmed by the contrasts between Callaghan’s (1998) study and that of Ware fifteen years later. Callaghan makes some interesting comparisons between descriptions using “scientific understanding” or “current singing pedagogy,” finding for example, sub-glottal pressure explained as *column of air* and glottal efficiency and flow phonation as *singing on the breath* (1998, pp. 31-2). Given the imagistic nature of these and many other expressions she collated, it is not difficult to understand the reason for the small percentage of teachers she found not using imagery. Ware’s more recent evidence shows the majority of voice teachers have chosen a blend of voice science and imagery, with “84%

[who] consciously apply science in shaping their imagery" (2013, p. 416). It is interesting to note, however, that more than half of her respondents still believed that voice teachers were philosophically divided.

Edwin recommends that "we should not accept the status quo in terms of vocabulary and technique. All of us need to re-examine terminology such as support, focus, placement, head and chest voice in light of current pedagogical information and scientific research" (2001, p. 53). This is not to say that terms formerly in common usage should now be abandoned in favour of numerical analyses, but that recent research can be incorporated into explanations of previously inexplicable functions. It is not impossible to supply clarity and precision without an overload of technical vocabulary, as Welch and Sundberg's summary of the vocal instrument shows (2002, p. 253). Freed argues that "if teachers help students identify sensations and help them recur, it is difficult to fault the method, whether scientific or empirical" (2000, p. 10). The following example combines both of those aspects: "try lengthening the lower back by imagining the tail-bone is falling towards the floor, without actually tucking it under, this allows the lower abdominal muscles to engage [which produces] effective breathing" (Williams, 2013, p. 83).

One of Latukefu and Verenikina's conclusions was "the experience in singing class was that imagery is also a powerful teaching tool when combined with scientific knowledge" (2011, p. 192). They emphasise that the combination of these was important because "the scientific concepts stay the same, but the interpretation of how these concepts are applied in practice varies according to how students interpret the imagery," because "the students did not always grasp the scientific concepts straight away" (2011, pp. 192-3). In fact, they noticed that students needed to connect the scientific concepts to their own unique experiences in just the same manner as imagery (2011, p. 190). Creating conceptual understanding is, therefore, more important than anatomical identification or procedural knowledge.

It appears then, that the debate is not so much whether teachers should use imagery or scientific terminology but focuses on the language with which these are transmitted to the singer. A combination of both types of terms is the most appropriate option, providing the terms are acceptable to the singer.

The Language of Imagery in Vocal Teaching

One view of imagery comes via Freed quoting Taylor (1908), who states: “an effect cannot produce its cause. Correct tone-production must be there to cause the sensations, or the sensations are not awakened at all. Nothing else can bring about the sensations of correct singing, but correct singing itself” (Freed, 2000, p. 7). Whilst the essence of this argument may be true, Taylor does not declare how he intends to create the correct tone production in the first instance. There seems no reason why imagery should not be used to induce either the correct tone production or the sensations or both; the main issue here is one of communication. Chen provides a useful explanation: “voice teachers use verbal imagery to unlock and communicate physical sensations and to describe vocal characteristics and musical attributes that are often difficult or even impossible, to describe literally” (2007, p. 1). Teachers in her study suggested imagery could “by-pass complicated explanation of physiological aspect[s] of vocal tract and evoke several physiological movements in correcting vocal problems” (2007, p. 152). Similarly, Sell suggested teachers will devise different ways of communicating with the singer: “ultimately singers [and their teachers] will discover their own personal imagery for the sensations they feel when their singing is right. They will become aware that if it does not feel good, then it will not sound or look good” (2005, p. 120). Miller recognised that sensations vary with individual singers and that being able to repeat the sensations as well as the sounds generated is important (1996, pp. 73-4). This is judged by both teacher and student, hence the need for verbal responses to and from individual students. However, if singers are also to depend on sensations for reliable feedback, this is not possible without using the imagination to describe the physical feelings. If the singer describes those sensations using whatever vocabulary they choose, the teacher is “able to get a view of his thinking,” and “it also helps to reinforce his awareness,” (Chipman, with Hoffman, & Thomas, 2008, p. 3), and allows the teacher to judge the extent of the student’s conceptual understanding.

Miller recommends that “exact communicative language” is the best way of training singers (Miller R. , 1996, p. 5), but communication is a two-way process which relies as much on the singer’s understanding as on the language used by the teacher. Miller suggests that “after the singer has learned to coordinate breath management and proper laryngeal and resonatory responses, an image may be useful in unifying those functions. The superimposition of imagery on the student beforehand may bring more confusion than assistance” (1996, p. 4). It may be, however, that a singer at the initial stages of vocal learning is unable to conceptualise the terms and description such as the one Miller provides: "In the union of the *appoggio* and the *aggiustamento (coperatura)* maneuvers, radical changes do not occur at register demarcation points either in the anterolateral abdominal wall or in sternal positioning, nor in the resonator tract" (1996, p. 14). Although this description would confuse many experienced singers, taking the opposite stance is not necessarily a solution; Miller's criticism elsewhere that "vague imagery is insufficient for adequate communication" because of its "illogical verbiage," (1998, pp. 41-2), seems, therefore, rather perverse. Similarly, Sell's disparaging remarks on examples of imagery (2005, pp. 114-6) are just as understandable as the examples have no grounding in vocal physiology or pedagogy, nor do they provide a paradigm of the intended sound. If the imagery does not provide the singer with the anticipated acoustic outcome, there is no possibility of the singer being able to achieve it by any other means than chance.

Research by Chen (2007, p. 70) and Latukefu and Verenikina (2011, pp. 190-1), demonstrates an acceptance of imagery in vocal teaching, in particular, to encourage individualised images which apply to a specific context. This is easier to accomplish in the teacher-student relationship than in a choral rehearsal, but the notion of creative, vibrant and original images is retained. In voice lessons, "the teacher's perception of the student's singing behaviour is translated from a musical gesture into linguistic form" (Welch, Howard, Himonides, & Brereton, 2005, p. 227); this is why verbal feedback is so essential and why the language employed is crucial to success. Both teacher and student are responsible for what is learned in vocal lessons, so it is vital that interpretation of any aspect of the pedagogy is agreed upon; this would be true whether the term was *arytenoid cartilage* or *ringing tone*. Smith and Sataloff provide abundant examples of voice building exercises, which combine physiological descriptions with imagery (2006, p. 158). It is obvious that the authors are very familiar with the physiology and are perfectly capable of describing all aspects of posture without delving into imagistic representations. However, they choose not to do so, demonstrating the importance with which they regard imagery as a way of transmitting their intentions. Mason suggests that experienced teachers should use "whatever images and metaphors may occur to him [or her], thus helping the development of a strong yet subtle connection between aural and physical sensations" (2000, p. 210). Miller presents a long list of examples of the types of language used in published vocal pedagogies, "expressed in the linguistic garb of imaginative physiologic or acoustic imagery," which he criticises for its incorrect information and blames for most vocal problems (1996, pp. 71-2). It is not that

Miller objects to imagery being used, and he recognises that factual information does not hinder artistic imagination (1996, p. 72), but his main plea is for voices to be used efficiently.

Ware offers the term “anatomically informed imagery,” (2013, p. 415), as a way of representing images and other indicators that are based on scientific principles. Although some might quibble with the word *anatomically*, it is nevertheless a useful phrase. Frequently technical terms and imagery are completely integrated and, in some instances, imagery is employed where it might be assumed that only technical terms would suffice. The descriptions of vocal registers provided by Nix (2012, pp. 552-556), and explanations of operatic tonal qualities in the *Fach* system (Callaghan, Emmons, & Popeil, 2012, pp. 570-572), for example, are permeated with imagery.

Sell disapproves of the use of imagery for the wrong purpose, commenting that a well-educated voice teacher can easily describe the functions of the larynx and pharynx and, therefore, has no use for imagery (2005, p. 124). Although that is true, the description may not signify the same thing to the singing student who does not yet have that security of vocal knowledge. There is the possibility of misinterpretation of technical vocabulary just as there is of imagery. If a knowledgeable vocal teacher uses imagery without any explanation or reference to function or physiology, the likelihood is that the student will either simply remember the imagery allied to a particular sound or that the student will be confused by the imagery, ignore it, and try to formulate their own way of reproducing the required sound. This may be why Sell quotes Kemp (2000):

> the processes of learning to sing are so subjective [and] seem to encourage a plethora of contradictory theories, which may leave singers, at best bemused, and at worst, highly anxious and constantly unsure about whether they are performing correctly or doing themselves untold damage. (2005, p. 180)

A similarly confusing situation might also arise if a vocal teacher used a technical term without any explanation of its use and function. Freed, for example, contrasts the phrase “raise the zygomatic arch” with “place the tone in the masque,” (2000, p. 10); both of these would be equally difficult to act upon without further explanation. Freed offers a “guarded yes” to the use of imagery by knowledgeable teachers, with the proviso that teachers “should know the difference between image and physiological truth” and also that the difference should be explained to the student (2000, p. 10). This is consistent with Bartholomew’s notion, though the latter expands the idea, recognising that imagery, being individual and variable, is not true, as physical explanations are (1935, p. 19); this is a positive and productive strategy.

Summary

The most important point here is that the vocal teacher’s role is to ensure the student’s full understanding by whatever means is most appropriate. This will include the use of technical terminology and imagery but with explanations of each, rather than simply providing the term or the image in the hope that the student will decipher it alone. The description, therefore, depends both on the teacher’s knowledge and his/her imagination, as well as those of the student. In addition, whatever verbal explanation is provided, this will surely be accompanied by either a teacher’s vocal demonstration or a vocal attempt by the student. At this point the conscientious teacher will either approve the sound or provide further clarification until the desired sound is produced. Whether that further clarification is through imagery, technical vocabulary, vocal demonstration or a combination of strategies, should be a choice the teacher makes according to the needs of the student.

2.3 Imagery in Choral Rehearsals

The voice, whether used in individual vocal lessons or in choral rehearsals is the same instrument, therefore, there are inherent and important connections between the two contexts, despite their differences. There are dissimilarities in vocal knowledge and experience between vocal teachers, just as there are between choral directors and indeed choral singers. Imagery is employed regularly in both contexts, demonstrating its importance and fundamental position.

Prior Exploration of Imagery in Choral Rehearsals

Coward’s 1914 publication states that if directors are aiming for perfection in performance, their attention must be on the “supreme factor in musical achievement – *the rehearsal*” (1914, p. 8). He provides three main methods of rehearsing which he has devised from his years directing choirs. He introduces his “modern techniques” with six attributes of progressive choral training of which four are vocally focussed, the first being “greater vocal control on the part of the singers” (1914, pp. 3-4). Many of the attributes are expressed with imagery, his descriptions of voice types in choirs as “tinny (…) strident (…) hooty,” for example (1914, p. 19), but it is very clear that they originate from the choir director's viewpoint, rather than the vocal teacher's. Smith and Sataloff provide an example from a post-war voice building choir book containing pedagogical imagery (2006, p. 152). Those images transferred to North America, with household names assigned to vocal technical skills (Smith & Sataloff, 2006, p. 152), which allowed the systematic development of singing skills there.

Despite these earlier accounts, according to Geisler (2012) there have been only three pieces of research on imagery in choral rehearsals in the last fifty years; Funk (1982), Jacobsen (2004) and McCarthy (2002). McCarthy's work is explored in Chapter 2.5. Funk's study provides four main findings:

> that (a) creative verbal imagery played an important role in the rehearsal techniques of the three [well-known university choral directors] subjects (b) verbal imagery may work well in the choral rehearsal situation because it shares many common characteristics with music (c) the style of music is not a limiting factor in relation to the use of verbal imagery, and (d) verbal imagery was used with many different kinds of rehearsal activities. (1982, p. iii)

As his focus was the expressive content of choral rehearsals, a rather unexpected result is that "verbal imagery is an especially effective force when vocal skills [in the singers] are lacking" (1982, p. 124). This resonates more closely with Jacobsen's area of research and contradicts several views expressed earlier stating that imagery should be limited to interpretation.

Jacobsen's research (2004) seeks to investigate the reasons for the existence of verbal imagery in choral rehearsals, focussing particularly on vocal function. She quotes Titze (1989) bemoaning the lack of universally agreed terminology, which has neither uniformity nor consistency (Jacobsen, 2004, p. 11), and suggests the lack of exact information allows imagistic and traditional language to come into common usage (2004, p. 13). Even Miller (1994), not renowned for favouring the use of imagery, suggests these *old saws* "embody concepts held essential or useful in accomplishing the tasks of singing. Many have been around for a long time" (Jacobsen, 2004, p. 13). Jacobsen states that because individual teachers develop unique pedagogical approaches, verbal imagery has become particularly useful "when explaining difficult concepts" (2004, p. 13). This presumably includes the notion of describing the unseen parts of the vocal mechanism. It also might include the sensations felt whilst varying tone production or interpretation, as Funk found (1982, p. 60).

Several of Jacobsen's findings are worthy of further investigation. Although she found imagery was not used by three out of her eight directors (2004, p. 71), those three "supported the use of imagery as a pedagogical device" (2004, p. 74). These figures might be misleading unless it is remembered that she examined only vocal function. There are of course other circumstances and purposes for imagery which she does not include. Regarding knowledge of vocal techniques, Jacobsen says directors may use the imagery they previously encountered in the same context but without understanding its purpose or effect (2004, p. 80). If the director does not recognise the purpose it is impossible to know whether the imagery has been successful. She gives a specific example and then states, "based in faulty physiology, this image will probably give an uneven result, though not an entirely unsatisfactory one" (2004, p. 84). This would be true for any explanation, whether or not imagery is employed and might particularly apply to directors whose vocal knowledge is inconsistent or incomplete.

Another reason Jacobsen proffers for why nearly half of her directors did not use imagery is because of the timing of data collection during the cycle of rehearsals. She suggests that "after technical issues have been resolved, music is learned, and the performance draws near, artistic imagery could be applied to enhance the musical concerns of the repertoire" (2004, p. 75). This has several implications: that all directors work with the same sequence of events in the process of learning material; that the other five directors were not aware of this sequence and instead used imagery whenever they wanted to; that learning the music and resolving technical issues are not *musical concerns*. Presumably, by *musical concerns*, she means concerns of interpretation, phrasing, expression, motivation and stylistic attributes, which might be treated as supplementary to the already correct rhythms and pitches. However, Funk found that "verbal imagery should be used early in the learning process because it establishes the basis for technique" (1982, p. 124). This is an interesting finding, coming from research which sought evidence of imagery affecting expression, and contradicts Jacobsen's view.

There is an interesting comment from Jacobsen on one of her directors: "through the study of voice science, this participant's vocal pedagogy and resultant imagery are based in technical and mechanistic vocal function to which creativity is applied" (2004, p. 76). This is the type of well-grounded imagery that directors could use if they had appropriate vocal knowledge and skills. Jacobsen's description demonstrates how the inter-relationship between science and imagery might be purposeful and effective. The use of the word *creativity* describes the generation of images, emphasising the importance of the director's ability to invent the images, and describe and transmit them to singers.

Durrant states that demonstration, explanation, and imaginative use of imagery and analogy are key communication skills in rehearsals. This is because, although directors may have adequate musical skills, they also need the communicative ability to utilise these effectively, otherwise singers will be demotivated (Durrant, 2003, p. 171). One of Jacobsen's participants draws attention to the association between teaching and communication (2004, p. 81), and provokes discussion of whether a singer's conceptual understanding might be shaken through the introduction of new technical language or imagery, whichever is the least familiar. A balance between the two types of language is important to comprehension. In relation to the types of explanations used, Funk found that "use of imaginative and creative (novel) expressions in the rehearsals was at a rate higher than the average rate found for speakers in other situations," (1982, pp. 123-4), which reiterates the focus on creativity in the expressions directors use. Funk compares at length the functions and characteristics of figurative language in general with that of figurative language in music, for example the idea of music as metaphor. This perspective has an influence on what he found, for example, that the language used in rehearsals is important to the development of aesthetic perception (1982, p. 122). The emphasis on expression is obviously very different to Jacobsen's focus on vocal function.

In relation to imagery, Funk suggests "a language system that promotes imaginative thinking may provide a partial answer to the problem of discussing musical expression in the choral rehearsal" (1982, p. 122).This is a very valuable point and opens up the possibility that singers should be mentally as well as vocally active when making their response. The singer's interpretation of language is, therefore, part of that discussion, even though it is not usually verbalised. The singer's imagination is also required in reproducing the sounds subsequently. If imaginative thinking is to be promoted it need not be vague and amorphous; Funk confirms that directors created imagery spontaneously, though sometimes after "serious score study" (1982, p. 125). This may have been stated to counteract the implication that imagery was purely fanciful imaginings which bore no relationship to the valid activity of directing from a score. Hill, Jones and Ash note the value of the imagination to both connect with and express the music and also for understanding the workings of the voice (2007, p. 25), therefore, they give exercises for both of these aspects. They are particularly keen for the director to communicate their vision of what a piece of music might convey, even if singers are very skilled notation readers and have perfect pitch (2007, p. 25). They further suggest that directors should use exercises which enable singers to imagine themselves into the notes, encouraging them to take risks (2007, p. 76). The risk taking might be vocal or creative but the onus for the use of imagination is on both singer and director.

Hemsley is keen to stress the impulse, musical and dramatic interpretation of singing, noting that pitch, timbre and text can be expressed if they are formed in the imagination (1998, p. 46). Although he does not use the word imagery, the emphasis on prior creative activity necessitates some way of inspiring the singer's imagination. Hemsley's belief that the vocal sound is the end-result, rather than the beginning, is key to his third principle of singing, which is: "Imagination, together with the intention, is an essential prerequisite of good singing, and not an optional extra" (1998, p. 49). This must surely involve imagery in some part of the process.

Jacobsen found several images that were used to target more than one vocal function and labelled these multi-purpose images (2004, p. 82). She might have anticipated this outcome on the grounds of the holistic nature of imagery and its history as a useful pedagogic tool in teaching. In addition, the function of one aspect of vocal technique is closely connected to another, for example posture affects breath management, which affects stability of tone. Therefore, if imagery is employed it is likely to have a holistic effect on the sound, simply because a change in one aspect will affect another. Funk also found that imagery could create a wide range of outcomes, for example a change of mood (1982, p. 125). A similar breadth of influences was also noted by Skoog, who whilst examining image and metaphor found that a "creative approach to vocal sound engages singers physically, mentally, and sensually, resulting in greater energy and joy in the rehearsal experience" (2004, pp. 47-8). The mental and sensual effects may be more difficult to discern, given their invisibility.

Jacobsen maintains that, if directors do not have physiological knowledge, they "may not realize that an image intended to correct more than one function may solve one problem but not the other" (2004, p. 83). Although this may be correct, it applies whether or not directors use imagery. If they provide a solution using purely scientific terminology, they may also cause confusion, due to the inter-connected nature of vocal function. Regarding the opposition of the scientific and imagistic viewpoints found in vocal teaching, Jacobsen suggests that "through finding meaning in both teaching approaches, the choral director may come to have an appreciation for the complementary rationale that the verbal imagery has within both schools of thought" (2004, p. 10).

In Jacobsen's later research (Jacobsen, 2013), she investigates this matter further and also includes examination of time issues, individual differences, and contextual concerns in the processing of metaphoric language. Here she uses the term *metaphoric languag*e rather than *imagery* but the focus is the same. She found that multi-purpose images were being used in two ways; sometimes an image was being used to address multiple vocal issues; alternatively, multiple images[4] were being employed to address a single vocal issue (2013, p. 26). It is the first of these in which she points out the problem of "layering imagistic instruction in the choral rehearsal while expecting the choir to understand each usage and to correctly and successfully, within a limited rehearsal period, interpret these images vocally and/or expressively, with continuity, over time" (2013, p. 26). Expressed in this way, it appears an almost insurmountable problem but in fact she is focussing on one type of instance which might be evident in only a very small number of cases. She exemplifies this with the word *stretch* which, she says, might be interpreted in terms of either dynamics or tonal quality. However, if the director is not consistent in the use of terms, the choir will be confused in any case, whether or not imagery is employed. It is the lack of consistency rather than the inaccuracy of interpretation that would cause confusion.

Jacobsen points out the complexity of the "mental gymnastics [required] for one metaphoric instruction" (2013, p. 30). The process which she describes, of remembering a set of meanings, inferring and evaluating them, would, however, be measured in milliseconds and would provide an almost instantaneous response. She recommends that directors evaluate the imagery they currently use, possibly refining it into a prepared set of images which are "physiologically correct and pedagogically sound," in order to avoid "spontaneous flights of fancy" (2013, p. 32). Funk is prepared to defend imagery against that type of application; he showed that "words which form imaginative language may come to the mind and tongue as a result of the serious reflective study of the expressive elements of the music" (1982, p. 125). In fact, he recommends the creation of a method of score study which relates creating verbal imagery to the expressive elements in the score, to enable directors to use that type of language more spontaneously in rehearsals. The first of Jacobsen's earlier recommendations might be worth pursuing, but if, for example, a compendium of stock images and their meanings were to be compiled, it would negate the opportunity for directors to create images which were specifically related to the context of their choirs, which is one of imagery's advantageous features. Perhaps Funk's proposal may be more efficacious as it would allow directors to make their own decisions about the invention and application of imagery.

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[4] See key terms.

In addition to blending instances of imagery, it is evident that directors also combine choral directing strategies or replace one with another. Indeed, Funk found that directors resorted to imagery when gestures and/or vocal demonstrations had failed to produce the desired result (1982, p. 124). Experienced directors, like those in Funk's study, would have within their repertoire a selection of strategies which could be exploited to create the required response. Price and Byo stress that both verbal and non-verbal communication are needed and to suggest that one should happen without the other is an "extremist view" (2002, p. 345). There are as yet no studies to detect any occurrences of imagery failing to meet its intended outcome and noting what strategy was employed in its place but, given the evidence of their close juxtaposition, it is likely that all the strategies are used interchangeably and possibly concurrently.

Grimland noted that music teachers of high school choirs "often use intentional modeling, interspersed with verbal instructions, imagery and the non-verbal gestures of conducting" (2005, pp. 2-3). He reports that "audible models were sometimes preceded, followed, or interspersed with verbal instructional activities" (2005, p. 208).[5]

Jansson remarks that although gesture is the most visible aspect of the director's role, it is only one of many (2014, p. 147). This may be one of the reasons why it has been examined more than aspects which are less easy to discern. Durrant lists the ways in which gestures can be effective as "an aesthetic reflection and representation of musical expression, efficient and unambiguous, [and] vocally friendly" (2003, p. 151). Durrant's exemplar gesture descriptions are replete with imagery, for example, "stroking a cat" or stabbing and flicking (2003, p. 150). The second and third of these do not need to be explained verbally; the first does, however, as the gesture is combined with imagery and may not necessarily be understood without it. The same point is made by Price and Byo, who recognise that "a better understanding of movements and their possible interpretive meanings might well strengthen the communication between conductors and ensembles" (2002, p. 345). The implication here is that gesture, like imagery, needs some verbal supplement to ensure the performers understand the specific interpretation the conductor wants. Durrant notes that singers will understand the gesture better if it is closely linked to imagery and analogy. His exemplar is for use during a rehearsal but the image is then “internalized in the bodymind and easily recalled during performance” (2003, p. 129). In this instance, the imagery has the same function as verbal imagery without actions, to produce a response which can be recalled and replicated in performance.

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[5] However, the instruction he provides as an exemplar is actually an image, implying he has conflated all verbal activities.

Interrelationships between Vocal and Choral Settings

There are several differences between the contexts of an individual vocal lesson and choral singing, some of which are examined here. Smith and Sataloff provide many exercises for “building a choral voice” (2006, p. 168). This raises the issue of the existence of a *choral voice*, as opposed to a solo voice and how this might be cultivated in rehearsals. Smith and Sataloff refer to the blended voices in a choir as a whole, (2006, p. 117), rather than an individual creating a particular sound for use only in a choir, though these are not mutually exclusive.

One of the differences between the two contexts relates to choral techniques, which only occur in a choral setting; the first concerns breathing, the second relates to tone production. Sneed provides a list of techniques focussed on breathing, which specifically cater for choirs and try to eliminate confusion by balancing precise physiology and clear imaging (2000, pp. 52-3). Smith and Sataloff present advice specifically on “choral breathing,” commonly known as *staggered breathing*, which is “a corporate feeding of the choral tone” (2006, p. 161). The *feeding* is to be achieved by replenishing the breath mid-phrase, without disturbing the phrase in other ways. They further suggest that choral breathing is “the foundation of the choral art” so “it should be trained and encouraged” (2006, p. vii). It is debateable whether staggered breathing is a choral technique or an imagistic idea. Experienced choral singers will know the term and use the strategy readily, which indicates it is a choral technique. Smith and Sataloff’s advice implies that it can be learned through training, which again suggests a specific technique. It is a corporate action though, which cannot be carried out by individuals but rather by unspoken negotiation between them. It is based on an idea in addition to the action and the idea too is a corporate one. Each individual choir member needs to have an image of what the concept of staggered breathing is before they can embark on its enactment. This gives more weight to the argument that it is imagistic.

A second topic to be examined is the notion of *choral blend*. This is an area which has much focus in the United States, and involves “correctly trained singers who are willing to listen and adapt to the sounds around them [so] will naturally blend with other voices of a choir,” and that this blend will “enhance the quality of the choir” (Chipman, with Hoffman & Thomas, 2008, p. 142). The authors suggest problems are likely to occur with those whose technique is not sufficiently flexible to adapt to different repertoire and styles of singing. Smith and Sataloff go further, stating that “the goal in choral singing is the blending of individual vocal and intellectual components to achieve a choral sound” (2006, p. 117); Ternström, Jers and Nix have a similar aim (2012, p. 581). In order to achieve that goal, Emmons and Chase suggest that sometimes directors ask for the least resonant sound possible, even if it were not the most desirable, as it would be achievable by the entire choir (2006, p. 126). The blend might also be achieved by mixing voice parts and arranging seating, with weaker and stronger singers together, to achieve choral blend and accurate tuning (Smith & Sataloff, 2006, p. 184). Ternström et al. provide a useful definition for choral blend: “the degree to which multiple voices are perceived as a single unit/whole, rather than as individuals; this is achieved through a matching of pitch, volume, timbre, vowel, and timing” (2012, p. 581). This supplies directors with a range of musical starting points from which to work. Glover suggests unison warm-ups, even in mixed choirs, in order to “maximise the resonance and volume” (2001, p. 20). She states that the director also needs to decide to what extent vocally advanced singers need to adjust their sound to the blend, an adjustment which could be helped by well-constructed warm-ups (2001, p. 22).

Instead of highlighting only the differences between the contexts, Smith and Sataloff state that “relaxation, posture and breathing, are beneficial in solo and choral singing in equal measure” (2006, p. 117). They acknowledge that choral singers will need to adjust their resonance, suggesting that singers should be taught how to do this (2006, p. 117). Williams, in contrast, notes the conflict solo singers might face if trying to blend their voice in a choir. She suggests that it might compromise their vocal production, limit their personal expressiveness and inhibit their development if maintained over a long period (2013, p. 176). Although this may be true, it is unlikely to affect the thousands of amateur solo and choral singers across the UK who are able to perform in both contexts with equal enjoyment and reward. In fact Coward suggests that it is better to have blending voices of varied qualities recognising that each individual voice will not be of the same timbre (1914, p. 25). Miller agrees, using the term *balancing* the voices, so the highest quality sound from a choral ensemble would be where voices are used efficiently, and it is the director’s role to ensure this (1996, p. 58). Hill et al. similarly accept the balancing of natural, individual sounds, implying that the aural analysis and vocal advice of the director is more important than adjustments made by the singers, which in turn puts more emphasis on the vocal and aural abilities of the director (2007, p. 28).

An ideal choral blend or balance needs to pre-exist in the mind of the director (Hill, with Jones, & Ash, 2007, p. 28), which means a prior conceptual model of the required sound. This might include an aural image of the sound and although particular strategies can be employed to achieve the blend, it is the director’s image which is the aim. The idea of choral blend may also exist in the minds of choir members; a factor noted by Ternström et al. is that “choral musicians sing based on experience” (2012, p. 592). The implication here is that, once directors hear the required blend from their choirs, whatever strategies are used to produce it, they should employ that same procedure again to enable singers to hear and reproduce that blend.

Although Miller admits imagery has a role in vocal teaching, even in the teaching of technique (1996, p. 3), his restrictions as to timing and purpose seem to disregard the variety of types of teaching and learning available. This is particularly important in relation to choirs where singers have varied vocal experiences and expertise. When discussing vocal pedagogy, Sell states that if the student does not understand the instructions, then “visual reproduction such as spectrographs, pictures of muscles and models of the larynx may help to accelerate their understanding” (2005, p. 70). Whilst this is possible in some vocal studios, it is not the case for most choral contexts, except in the case of professional choirs where each singer has individual vocal coaching and the appropriate apparatus might be available. Visual representation of sounds would provide an interesting and unique experience but is unlikely to be offered to amateur choral singers. Although they might benefit from that type of feedback, choral singers must rely on listening to the entire choir or section rather than only their own voice, which they are unlikely to be able to hear clearly. Sell’s suggestion that singing teachers should also be teachers of hearing (2005, p. 127) transfers easily into the choral context, where the director takes on that role. The director is able to hear the sound of the whole choir and is, therefore, in a better position to advise their singers and judge whether their explanations have been understood and responded to in the way s/he expected.

In individual voice lessons, students will be learning specific techniques appropriate to their stage of vocal development so the teacher can adapt the style of teaching to suit that individual. The singer would, therefore, come to choral rehearsals able to apply that knowledge. In the choral context, however, the director needs to cater for every singer whatever their vocal skill level and, therefore, has to provide a variety of ways of explaining the requirements, so that each person will gain something from it. It is inevitable that some of the least skilled choral singers will be vocally unable to reproduce exactly what their director requires. This applies to amateurs taking singing lessons who also sing in a choir, but relates more to the large number of choral singers who do not have voice lessons (see Appendix D, Q12). Hill et al. indicate that directors can be flexible about what type of explanations they use to achieve the desired sound as “voice production depends upon individual as well as common characteristics” (2007, p. 70). This assumes that directors know their singers sufficiently well to be able to match explanations to them and whilst this might be uncomplicated for a voice teacher, it is harder in a small ensemble, even one with settled membership, and almost impossible in large choral societies.

Another feature which connects vocal and choral contexts but excludes other instruments is the text, which needs to be interpreted and transmitted. According to Emmons and Chase, directors who examine the text separately from the music are losing some features as it is the composer’s interpretation of the text that is being performed (2006, p. 262). Interpreting the composer’s intentions is an accepted part of a director’s role and here they are in the position of intermediaries between the composer and choir. There are two parts in the interpretative process; in the first, the director tries to portray his/her particular interpretation to choir members; the second is that singers attempt to depict their director’s ideas to the audience. Emmons and Chase relate this to the emotional content and the drama in the music (2006, p. 261); however, there is no reason to suppose it is limited to those aspects. They suggest the situation is different for singers because instrumentalists only have the music to draw on for their interpretation, whereas with singers, “words limit interpretive possibilities for choral music, but they also fill out and enhance its meaning” (2006, p. 262). Decker and Kirk note a “triumvirate” between composer, performer and listener, where the “beauty, empathy (…) emotion (…) and lyricism” all need to be communicated (1988, p. 130). They unite choir and conductor as the performer but do not elaborate on how the two parties should agree on that communication or whether imagery should be employed.

Hemsley points out that in most instances, composers are inspired by the text to create music which emphasises and gives expression to the words. Considering this, he suggests that as the text is an essential component of the composition, singers should not learn a piece and then attempt to add the feeling and expression afterwards (1998, pp. 111-2). This contradicts the view of Miller (1996), who suggests that imagery should be used only for the expressive elements of singing, implying it is something additional. Decker and Kirk's idea that directors can "utilize word pictures or clear analogies (…) [for] a desired mood or feeling," (1988, p. 109), appears to agree with Miller (1996, p. 5). Hemsley is keen to point out that singers, and by implication also directors, should aim to interpret the composer's intentions as closely as possible, therefore, they need to try to understand what the composer's intentions were (1998, p. 116). "The composer began with the text, and so must the singer," (Hemsley, 1998, p. 117), and, therefore, so too the director. It would be unrealistic to imagine that sharing of the composer's interpretation could be done by technical terms or mechanistic descriptions rather than by imagery. Hemsley's attention to interpreting the text using a singer's imagination distinguishes his position, though the idea that singers should focus less on "mere sound making" and more on communication (Smith & Chipman, 2007, p. 29), is similar.

One of the issues mentioned above is that, although it is the director's role to make decisions about interpretation, it is the choir who actually perform. Therefore, the choir are asked not only to "share the interpretive vision" but also "to be the means of implementing it" (Emmons & Chase, 2006, p. 261). Decker and Kirk note that a conductor's ability to communicate is dependent upon the musical skills and responsiveness of his [or her] instrument: the choir (1988, p. 136). The implication here is twofold: the interpretive vision needs to be shared with choir members in such a way that their implementation of it presents a unified picture to the audience. The sharing is not only between director and choir members but also between one chorister and another. The sharing occurs through many strategies, including verbalisations. Whether the director dictates what type of interpretation singers try to portray or whether imagery enables them to choose their own interpretation depends on the co-operative relationship between choir members and the director.

The Language of Imagery in Choral Rehearsals

In an interesting mixture of imagery and technical terminology, George suggests that singers "support all soft singing on a fine breath-stream, thinking a long vertical vowel at the back of the throat. A raised soft palate and a loose jaw will result in a warm vocal color created by greater pharyngeal space" (2003, p. 54). This advice maybe just as confusing to choir members without prior vocal knowledge as to those who are well informed of vocal physiology. However, it does indicate how completely and frequently the terms are integrated.

Durrant states, "the use of imagery and analogy in the choral rehearsal can facilitate meaningful interpretation of musical character and be so much more effective than any technical instruction" (2003, p. 125). The first point seems to restrict the application of imagery to *character*, rather than allowing that it might also affect rhythms, pitches and other musical aspects. Even when the text is imaginative and inspiring, directors are still likely to exploit imagery to provide sufficient character for singers to interpret. The second point, that imagery outweighs the effectiveness of technical language is possibly unbelievable to those who have not rehearsed with an inspiring and creative director, but completely understandable to those who have. Durrant also suggests that both instructions and imagery should be followed by practice to reinforce the efficacy (2003, p. 125).

Sneed notes confusion might arise in choral rehearsals if directors use metaphorical terms, unless they are underpinned by clearly defined physiological terminology (2000, p. 51). She recommends directors take a deliberate and systematic approach to creating their own definitions having engaged in thorough pedagogical research (2000, p. 52). This recommendation would ensure definitions were suitable to a particular context but nevertheless does not preclude imagery. In a rehearsal, without the support of a vocal teacher's resources, choir directors might be unable to succinctly provide verbal descriptions for something which is invisible; resonance or tone quality might be the most difficult area of vocal technique to describe. Vennard for example, seeks to differentiate between the "mumbo jumbo" or "incantation used by the teacher (…) to hide his lack of discernment," and the "legitimate imagery used in teaching people how to sing (…) related to resonance," (1967, p. 149), which he exemplifies (1967, p. 256). That justification for imagery is particularly acceptable at a time when regular use of scientific advances in singing teaching was not possible. More recently Hill et al. recommend to learning choral directors, "ask your choir whether they attach any particular images to the internal sensations of the voice moving through different registers" (2007, p. 19). This is presumably so that directors learn to recognise their singers often rely on sensations for confirmation they are creating the correct effect. Not all the vocal mechanism is, however, totally unseen; for example, when advising directors on training their singers, Emmons and Chase give a description of what can be seen in relation to *appoggio.*[6] It is interesting that they provide both a physiological and imagistic account, advising that directors need to know the first in order to be able to provide the second (2006, pp. 19-20).

Funk found "imagery is a device that is utilized by choral directors and voice teachers as a way of clarifying a 'feel' or sensation of tone production" (1982, p. 60). De Brett is similarly "concerned not with what actually happens, but with what the singer *feels* is happening. The sound does not actually proceed from the top of the head, but it feels as if it does" (1996, p. 17). Resonance can be explained in scientific terms, for example:

> The sound waves produced in the vocal mechanism travel through the higher structures of the vocal tract. The resonators (the pharynx), the oral cavity, and the nasal cavities) work together to shape the acoustical properties from the frequencies set forth by the vocal folds (voice source signal). (Smith & Sataloff, 2006, p. 165)

However accurate this description, it is unlikely to be helpful to singers unless they already have a good grounding in vocal technique in which case the information is liable to be superfluous. Instead Smith and Sataloff suggest that singing on the letter Z for example, should allow choral singers the "experience of hearing and feeling" which "creates a memory of coordinated thought and action and of sounds and sensations" (2006, p. 166). The combination of these experiences is important as is the link to memory. Once singers have practised that combination of sensation and sound, it can be drawn out of the memory through the image of a mosquito buzzing, for example. When the image is specifically connected to vocal resonance using terms such as *focus* or *placement*, the sounds and sensations are still recalled. It may be that directors use those terms more readily than imagery as they give the impression they are technical vocabulary and so seem less amorphous and more substantial.

In relation to the language used in choral settings, Jacobsen refers to Edwin's (1988)[7] opinion that "concepts … can and do produce positive results" (Jacobsen, 2004, p. 29). Toms agrees, noting, "we do not consciously manipulate our vocal musculature to say 'father' for example. Our mental concept dictates the adjustment of muscles and action. Likewise in singing, our concept of the sound dictates the action of the musculature" (1985, p. 17). The mental concept Toms refers to might be achieved if directors speak less of the mechanics of how to achieve a particular sound and more of the qualities of the desired sound; that is where imagery is efficacious. Price and Byo talk of conceptual rehearsing (2002, p. 342), that is, trying to transfer concepts from one passage or work to another, rather than simply relating it to one instance and having to repeat instructions; using imagery would facilitate that transfer between contexts.

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[6] Appoggio is "a raised sternum and expanded ribs (shoulders remaining low) maintained from beginning to end of the phrase. While breath is being replenished for the next phrase, nothing should change" (Emmons & Chase, 2006, p. 19).

[7] Jacobsen cites this as Edwin (2000) though it is actually (Edwin, Plain Talk, 1988).

Directors need to enable their singers to develop conceptual understanding, rather than rely on physiological descriptions. That conceptual understanding is of the sound produced, rather than of whichever muscles are being employed to create the sound. Smith and Sataloff point out healthy singing tone comes from "a process of neurologic signals that are expressed through the vocal tract," but this can only be created if singers have clear mental images of the sound beforehand (2006, p. 122). Unless the text provides the image it needs to be created through language; imagistic language can be used to promote conceptual understanding rather than provide description. This might be a persuasive argument in the twenty-first century when access to accurate visual, audio and audio-visual information is easy.

The Roles and Functions of Imagery in Choral Rehearsals

Jacobsen suggests several reasons why choral directors use imagery in rehearsals, which "includes, but is not limited to, a method of clarification, an imaginative device to manipulate the unseen, a creative, spontaneous device, a quick, time-honored 'bag of tricks'" (2013, p. 26). Several of these have been discussed previously, but the final two merit further examination.

Grimland quotes Thurman's (1977) study, which compared the duration and frequency of different rehearsal strategies; Thurman found:

> (1) all conductors, except one, used demonstration more often and devoted more time to it than to verbal explanation or imagery; (2) verbal imagery was used twice as often as verbal explanation, and when used in rehearsal, verbal explanation took twice as much time per incidence of occurrence; (3) verbal imagery consumed the least amount of rehearsal time, followed by demonstration and explanation. (Grimland F. , 2005, p. 19)

Rehearsal time is often at a premium so these results might encourage directors to modify their verbalisations to exclude lengthy explanations and replace them with vocal demonstrations and/or well substantiated imagery. The brevity and frequency of imagery creates advantages in terms of both time and efficacy. Price and Byo are clear in their statement that directors should focus on efficient verbalisations, keeping them to a minimum, while enhancing nonverbal behaviours (2002, p. 335). They suggest that conductors can quicken the pace of rehearsals by speaking more succinctly (2002, p. 337), though they do not specify that imagery might achieve this. The importance of concise communication is also noted by Durrant (2003, p. 68). Similarly, Jansson in one of his interventions, namely the balance between “telling versus showing,” outlines the distractions or interference of talk as opposed to that which is “invaluable for conveying contextual meaning and succinctly addressing specific and detailed problems” (2014, p. 154). This relates to aspects of Thurman’s findings and although again Jansson does not specify that imagery could fulfil the role of conveying meaning, it has previously been demonstrated to be possible.

Price and Byo note that less experienced conductors tend to stop and talk more frequently than those who are more experienced. They suggest, therefore, that when they do stop, “they should make concise and substantive suggestions” (2002, p. 341). They also quote Davis’s (1998) findings that directors talk less when a concert date is nearer (Price & Byo, 2002, p. 342). Imagery could be effective in both of these circumstances, firstly by aiding the brevity of explanations and secondly by the use of imagery as a mnemonic. In connection with efficiency, some images obviate the need for any further explanation. Smith and Sataloff’s exercises for facial muscles include “imitate a clown face with elevated eyebrows and expansive smile” (2006, p. 157). Here the imagery is being used to draw a comparison with a known image, but the physical effects of the resulting actions will directly affect the sound; the director, therefore, does not need to explain what the consequence will be.

In addition to Funk’s main findings presented earlier (1982, p. iii), there are several other results worthy of note. One was that imagery added pacing and vitality to rehearsals (1982, p. 124), which relates to Price and Byo’s advice to speak more succinctly (2002, p. 337). Funk also found that imagery established relationships between the music and the people involved (1982, p. 125). This might be relatively easy to achieve if directors are creating imagery spontaneously for a choir about whom they have relevant information, even if they do not have a long acquaintance. In such cases, images can be generated with a specific group in mind and refer to ideas or events with which director and singers are both familiar. Stollack and Alexander recommend this as a positive course of action (1998, p. 21).

Perhaps it is not surprising that Funk found imagery was used across different styles of music (1982, p. 125). Images are created to produce specific effects, and although some effects may be style-specific, there is no reason to suggest that certain images are not suited to a particular type of music. He also comments that imagery can be used to “deal with the discipline of the choir,” (1982, p. 125), though this may not be relevant to adult choirs. These functions demonstrate the broader potential for imagery, if enabled by the director.

Stock Images

The “time-honored ‘bag of tricks’” quoted earlier (Jacobsen, 2013, p. 26), merits further examination. When advising on warm-up exercises for choirs, Smith and Sataloff use dozens of imagery examples, including: “Imagine the body to be a marionette, pulled by imaginary strings. First the right shoulder and then the left are lifted from above and relaxed. Next lift the arms and legs” (2006, p. 156). This image may have been noted in their research, but it is one that is not confined to their investigation nor to the United States. Appendix P provides a list of twenty-five images which are evidenced in more than one publication; some examples are repeated verbatim but there are also variations. Appendix P includes: Puppet on a string (and variations); Cradling or petting something in the arms; Biting an apple (and variations); Smelling a rose; Spin the tone; Sting; Exaggerated clown smile; String of pearls. It may be the fact of their publication which induces widespread knowledge and subsequent use of these images. However, they have been located through an in-depth literature search and are unlikely to have been read by many amateur directors, especially in the UK. All the examples have also surfaced during the data collection in the current research and are dealt with in Chapter 4 of this research. Some examples are explained more comprehensively in the original publications, with clear links to detailed vocal pedagogy. Others are provided with little explication, though their context in published literature rather than in a rehearsal may account for that. In addition, only three of the sources, Skoog (2004), Smith and Sataloff (2006), and Stollack and Alexander (1998), are directed at choirs and their directors; the others are intended for singers and their teachers, which demonstrates the interchange between the two contexts. The *puppet on a string* image is useful provided that, during its transmission to singers the emphasis is on an upright rather than a tense posture. The effect required from *cradling something in the arms* might be just as easily accomplished by asking singers to use *a lullaby voice*, and might obviate the possible arm tension created by the cradling position. In “sing as if you have a hot potato on your tongue,” Williams is actually criticising the imagery but nevertheless recognises it as a “persistent idea” (2013, pp. 174-5). All of the examples provide evidence of the existence of inter-choir stock images.[8]

Negative Strategies

It could be expected that reference to negative models or imagery would be detected in extant literature. In terms of modelling, Sneed suggests that directors should deliberately provide incorrect vocal models first, asking their singers to reproduce these, followed by correct models and singer imitation of the correct version. The purpose of these is to demonstrate to the singers how to manipulate their voices, which, if carried out consciously initially, can be incorporated into singers’ regular practice later (Sneed, 2000, p. 53). These positive and negative models alert singers to audible contrasts between the two versions, and Price and Byo also note the same phenomena, suggesting they can be used to minimise verbalisations (2002, p. 342). Grimland’s encounters are slightly different as the director imitated the incorrect version; “sometimes this mimicry was exaggerated, like the hyperbole of literary figures of speech,” in order to clarify what not to sing (2001, p. 205). The director having subsequently modelled the correct version might ask the singers to reflect on a comparison between the two to reinforce the appropriate response (Grimland, 2001, p. 219). None of the published stock images (Appendix P) were negative images, though that does not signify their non-existence in extant literature.

Summary of Chapters 2.1, 2.2 and 2.3

When debating the relative merits of imagery, Skoog quotes Vennard (1967):[9] “Scientific language is inadequate in teaching an art, and we can fill out the deficiency with poetic imagery, as long as we do not confuse fancy with fact” (2004, p. 44). This raises two important points: the first is that singing, whether alone or in a choir, is an art rather than a science. When debating the conflicts in teaching voice, Bartholomew suggests similarly that “where art is concerned, more criteria than those of mechanical efficiency must be considered” (1940, p. 20). In the same way that a computer-generated rendition of a Beethoven sonata can be 100% accurate but not engage its audience due to a lack of empathy or expression, it is possible for a singer or choir to be technically flawless but less appealing to listen to. Hemsley advises that singing should never be separated from its source, the source being not the vocal instrument, but energy and emotion which needs to be expressed (1998, p. 25).

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[8] See key terms.

[9] Skoog incorrectly gives the date as 1968.

What directors try to do is create the most musically effective performance a choir is capable of producing. During a performance, enthusiasm from the singers might mean over-exaggerated dynamics, but the effect transmitted to the audience might be spellbinding. High quality and artistic singing are not measured on the same scale as scientific accuracy. Williams provides the case of a singer asked to sing the same song twice, the first time correctly, and the second time to “think about certain images in her head” related to the text of the song (2013, p. 10). Williams compares the two versions to demonstrate that the singer’s secure technique was evident during the second rendition, and she also shows that the images had provoked the singer into thinking appropriate thoughts, so was able to produce a more “uplifting” performance (2013, p. 10).

Directors try to communicate with the choir by the most effective means, transmitting their intentions in a way the singers can comprehend. The language, expressions and vocabulary used will depend on the piece, the choir, the rehearsal room and many other factors. It is not sufficient that directors know the function of the vocal folds or the meaning of the word *crescendo*. What is paramount is their ability to transmit the information or skill or enthusiasm to their singers; this is true whether the concept is an aspect of vocal technique or expression. For example, the waveform produced by an oscilloscope will mean little to a singer unless they know how to interpret it, so the reading has to be explained using an approach the singer can relate to. In one of their conclusions, Latukefu and Verenikina suggest that “without possessing scientific concepts the students are completely reliant on their teachers to give them positive or negative feedback on their own performance” (2011, p. 191). Whilst this may be true, it pertains much more to the choral context, as singers may not be able to evaluate either the overall sound or their own role within it and rely for this on their director. The reliance on the director also applies to other strategies, for example imagery or vocal demonstrations from the director.

Following feedback, singers need to be able to create or change the sound to match more closely the desired effect. This is a complex process, and in the choral context it is made more difficult by the number of voices and, therefore, different vocal skill levels, location within the section, and by differences in conceptual understanding of choir members. Ternström et al. note the lack of exploration of real-time visual-feedback in the choral context

(2012, p. 591), for these reasons and several others. However, when directors know their choirs sufficiently well, they will undoubtedly use whatever means are at their disposal to communicate their requirements. A combination of verbal imagery and technical vocabulary must surely be included.

One of Jacobsen's final remarks focuses on imagery as a pedagogical tool with an important place in vocal and choral contexts (2004, p. 91). The role of the director needs to encompass aspects of both artist and teacher, with sufficient vocal, musical and choral knowledge to be able to communicate it efficiently to choir members.

2.4 The Role of the Choral Director

Directors' Choral Background

Directors who come to choral directing through either orchestral conducting or playing the organ may be ill-equipped to express information appropriately for choral singers: "the general assumption seems to be that if you are a graduate of a college of music, particularly if you are an organist, you automatically know about choir training and directing" (Hill, with Jones, & Ash, 2007, p. 30). Day agrees, particularly in relation to those whose background is the English cathedral-choir tradition[10] (2000, p. 125). Some choral directors may be relying solely on their own choral experience for their knowledge of vocal pedagogy, which may or may not be limited depending on the circumstances. Others may have come to choral directing through instrumental conducting, without any personal knowledge of working with choral singers. If this is the case, Smith and Sataloff suggest that in order to aid singers' vocal development, a programme of voice building should be embarked upon, which would include exercises and techniques to promote a vocal rather than an instrumental approach to rehearsals (2006, pp. 150-151). The exercises for "building a choral voice," (2006, p. 168), may be completely unknown to directors unless their prior experience has been vocally orientated.

Choir rehearsals are often at the end of a day of work so "concentration may not be of the best. Good conductors will be aware of this and make allowances for singers taking a little longer to interpret their thoughts" (Liimola, 2000, p. 156). The implications here are twofold: firstly, that directors recognise singers need time to understand their ideas and secondly, that directors who have personal knowledge through their own choral singing experience would realise that engaging singers' concentration is part of their role as director. In Finland, amateur singers are mostly enthusiasts who could have become professionals (Liimola, 2000, p. 151). This picture contrasts with the more common one (Smith & Sataloff, 2006, p. 149), where most choral singers are amateurs with "sometimes more interest than aptitude," but a deep commitment to the choir (Smith & Sataloff, 2006, p. vii). Consequently, the director needs to ensure singers produce the appropriate sound "without special guidance during choral rehearsals" (Smith & Sataloff, 2006, p. 149). This situation does not of course apply to professional choirs where there is a separate vocal coach who provides that specialist guidance.

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[10] That profile though applies almost exclusively to Anglican church choirs and excludes, until recently, any females.

The Role of the Choral Director

"The job of effective choral conductors is to rehearse and conduct singers in a way that optimum preparation and performance of music happens" (Durrant, 2003, p. 34). Durrant provides a historical perspective of the conductor's role and also a full account of the personality and behaviour characteristics of directors (2003), making repetition superfluous here. Durrant devises a model for an effective choral conductor with seventeen requirements, of which the interpersonal skill "the capacity to communicate clearly and unambiguously," (2003, p. 100), is perhaps the most pertinent. The emphasis here is on how directors communicate their requirements both for interpreting the music and how their singers can achieve this. Durrant talks of the sharing of ideas in relation to music's expressive character, and in the sense of purpose and enjoyment (2005, p. 95). Jansson notes that "although everyone in the choir is making sense of the music (…) the sensemaking is a dedicated function of the conductor's position" (2014, pp. 150-1). This means directors need to find some way of communicating the sense and intentions they experience to choir members; frequently this occurs through a combination of gestures and words. However, when Skadsem (1997) compared different methods of communicating dynamic levels, she found that although students evaluated gesture the highest, (most effective), analysis of recordings showed that verbal instructions produced the better results, a point which directors might remember.

Efficient communication is also an issue for Price and Byo in terms of both time and accuracy: "fast paced rehearsals are usually the most effective, and comprise frequent and generally brief episodes of teacher talk” (2002, p. 335). Keeping verbalisations to a minimum will also quicken the pace of rehearsals (Price & Byo, 2002, p. 337), which may be one reason why verbal imagery is used. However, Jansson notes that on occasion, even if a director is lacking in gestural or communicative skills, s/he can be effective if singers find her/him compelling in their devotion and passion (2014, p. 151). This indicates that some parts of the director’s role are not easy to detect visually or aurally, even though singers may recognise the concrete and tangible aspects of conducting.

A century ago, Coward recognised one of the chief functions of a director is to interpret the music, rather than conduct it. This demonstrates an emphasis not on baton technique and beating patterns but on interpretation of the sounds which lie behind the notation and which can be achieved by “hard-thinking and imagination” (1914, p. 251). Coward highlights the inter-relationship between director and singers and a similarly democratic view comes from Rao, who would like “conductor’s awareness, focused attention, and deep concentration (…) to take into account the human beings who are our singers” (2012, p. 242). Choral directors have a very difficult task according to Williams, as it “requires an individual who is not only an expert in vocal pedagogy, but also a skilled conductor and an inspirational communicator” (2013, p. 173). One of the difficulties she notes is that, whether imagery or technical terms are used, both need to be decoded and this might be understood differently across the choir. She suggests that images such as “bright, warm, ringing or dark” are relatively easy to interpret, but “on the breath (…) covered (…) supported (…) and focussed” are to be avoided; these “images that sound like technical instructions,” (2013, p. 173), are explored in Chapter 5.5.

Jansson compares his prototype (2014, p. 148), which focuses more on the shared process of rehearsing and conducting, with Durrant’s model (2003, p. 100), which is a comprehensive and balanced view of a conductor’s capabilities (Jansson, 2014, p. 159). Both of these approaches have value in trying to define and outline the director’s role. The connections between the role of director and that of teacher are highlighted by several authors including Price and Byo (2002), who emphasise that clarity of communication is essential. Communication may be varied by the use of different learning styles or the use of imagery and other types of figurative language, for which Stollack and Alexander (1998) are advocates. Choral directors who recognise similarities with the teacher’s role may use verbal imagery frequently because of this (Petrie & Oshlag, 1993, p. 580). Durrant also remarks that in the rehearsal context, conducting is essentially teaching (2003, p. 85). He presents several pieces of advice to conductors and teachers on giving feedback to singers, one of which is, “use a wide range of *imagery and analogy* to help produce appropriate vocal timbre and musical expression. (This will be far more effective and expedient than a barrage of technical terms that may be misconstrued)” (2003, p. 156). Price and Byo assert that “*variation* in conductor behaviour is perhaps more salient than doing *more* of a behaviour,” (2002, p. 339), which implies that imagery should be included even if only for variety.

Although addressing individual teachers, Chipman et al. provide a useful suggestion (2008, p. 153) that singing students should create their own imagery, having experienced the sound and physical sensations, an idea also pointed out by Brown (1996) in Jacobsen (Jacobsen, 2004, p. 15). Chipman et al. warn against teachers imposing imagery on their singers, as “an image that works for one singer may not make any sense to the mind of another” (2008, p. 153). That notion is even more useful in a choral context; directors could ask singers to create their own imagery which might avoid confusion. Additionally, Emmons and Chase propose that directors should inform singers when they have responded appropriately so they can create images linked to those correct sensations. “When the visual and auditory images are theirs, not yours, their execution will be more efficient” (2006, p. 22). This is an interesting view which has not been evidenced during the current research.

Emmons and Chase call the director’s role an *art*, which requires musical, vocal and linguistic skills amongst others (2006, p. 3). This is not to imply that the role cannot be learned, but they stress that in addition to expressing their ideas in physical movements, directors require “a strong command of spoken language [which] facilitates communication via word choice and inflection” (2006, p. 3). Directors should use the “powerfully efficient tools” of “articulate, evocative language and the imagery that inspires it” (2006, p. 3). There is a definite emphasis on language here because the director’s instrument is the chorus (2006, p. 6), therefore, clear and detailed communication between the two is essential. Despite the need for clarity, they do not rule out imagery but in fact recommend its deliberate and skilled use, which “increases efficiency, improves consistency, and reinforces performance levels” (2006, p. 8). This incitement to employ imagery is measured, however, not only because of a recognition that it is not a substitute for other technical skills (2006, p. 8), but also that it should be supported by comprehensive vocal knowledge so that it achieves its aims.

That focus on language is rare in choral conducting advice: Hill et al. devote a chapter to the roles and techniques of the conductor, the first being communication, but the emphasis is on beating patterns and non-verbal communication (2007, p. 38). In the later chapters there are abundant examples of warm-ups and voice projection exercises, most of which are illustrated with imagery, but yet there is no reference to this as an efficient means of communication. It might be supposed that a choral conducting book, with the sub-title "Focus on Communication," (Decker & Kirk, 1988), would contain at least one chapter dealing with the director's use of language, but this is not the case. The authors recognise that lengthy or repeated explanations create disinterest amongst singers so advise directors, "be careful not to talk too much!" (1988, p. 108). They too provide many examples, several of which use imagery (1988, pp. 130-5), so there is an unspoken acknowledgement that imagery can be both useful and succinct. Appropriate vocabulary is essential, especially when referring to vocal technique; for example, by referring to inhalation by its pedagogical designation, *inspiration*, this might encourage singers to produce a deep, calm breath (Smith & Sataloff, 2006, p. 161).

Jansson states that most conductor research is biased, as it examines the process only from the director's viewpoint, something which he addresses in his recent study (2014, p. 142), and which is considered in the current research. Collaboration between director and choir is essential as it is the choir creating the sound and who are, therefore, not only responding to the director's vision of the music, but also influencing it (Hill, with Jones, & Ash, 2007, p. 38). This idea is shared by Morrison and Demorest, who prefer that, rather than simply following directions, something happens *because* of the singers rather than something happening *to* them (2012, p. 840). Communication between singers then should be natural, clear, understandable and respectful (Erkkilä, 2013, p. 4), and it would be unnatural to exclude imagery.

Choral Rehearsals and Training

Durrant devotes a chapter of his book to the *craft* of rehearsing, usefully outlining eight key areas for consideration by intending directors, including the use of imagery in some suggested warm-ups (2003, p. 117). The final section of a rehearsal might be dedicated to cooling down exercises, as advocated by Emmons and Chase (2006, p. 189) and Sell (2005, p. 131), who provide several examples including imagery. Meredith's advice on revitalising rehearsals if a plateau is reached is replete with images, such as reminding singers to "physically connect the consonant to the breath" (1995, pp. 21-22). Gorelick's (2001) and Zielinski's (2005) articles, and to some extent Meredith's too (1995), focus on planning and time management, but directors should remember developing the vocal sound of their choir over a sustained period is a more valuable goal. Warm ups are the most important part of a rehearsal, according to Sneed, because they establish and teach good vocal technique, allowing singers to gain conceptual and verbal understanding of, for example, sustained phrasing (2000, pp. 51, 55). As has been evidenced in Chapter 2.1, imagery enables conceptual understanding so is justified, though as George asserts emphatically warm ups are a “waste of time if you do not understand the voice,” (2003, p. 58), so the imagery must be vocally centred.

Despite Liimola declaring that comprehensive singing technique is needed (2000, p. 153), his advice on warm-up exercises is an assortment of imagery and technical terms, with a suggestion that singers should “keep the sound consistent” (2000, p. 156). This last phrase might mean maintaining the vowel shape, or tonal quality or pitch or the volume, but it is not clear which; the resulting lack of clarity might indeed strengthen his espousal of singing technique. Glover’s advice to keep warm ups interesting and varied is to be expected, and she explains this is to “capture and maintain the focus of every member of a group, keeping their brains engaged” (2001, p. 19). The connection to motivational and emotional facets of rehearsing links to a proposal by Hill et al. that choirs need psychological warm-ups too, which stimulate the imagination of the choir and build a better rapport with the music (2007, p. 57). Imagination allows singers to go beyond the mere physical or notational aspects of the music, but only if the director creates the situation where this happens.

There are several sources of guidance on what might be the most appropriate training for choral directors. Garnett notes that the training of conductors in the United States has more emphasis on technical proficiency (2009, p. 203), which implies no reference to verbal imagery. Durrant’s nine point initial conducting course (2003, p. 176) is a comprehensive plan, and it is interesting that he places sufficient emphasis on the “use of imagery, analogy and demonstration” as to include it as one of his rehearsal strategies (2003, p. 177), recognising imagery’s value and efficacy even for beginners. Sell’s list of training suggestions is devised for singers and voice teachers and is, therefore, dominated by vocal issues; however, she recognises that this could easily be transferred to choral directors (2005, pp. 179,181). Similarly, the first chapter of Hill et al.’s training advice for directors focuses on voice production, signalling its importance (2007), whereas Spurgeon’s advice remarks that most methodologies [in the United States] focus too heavily on conducting skills [gestures], rehearsal techniques and the administration of programmes and repertoire, rather than on singing, which ought to be fundamental (2004, p. 28). Rao (2012) presents a different point, stating that reflective practices are equally important in improving self-awareness, listening capability and concentration. She notes that these “internal, less visible skills” can be taught alongside the more widely studied score analysis and conducting technique (2012, p. 242). If those less visible skills are to be taught, imagery would be useful in doing so.

One of Jacobsen’s remarks in her conclusion makes a slightly different point: “without basic training in vocal pedagogy, more advanced techniques such as verbal imagery can be misunderstood and misapplied” (2004, p. 78). The first part of this generates a positive recommendation that choral educators should be amply prepared in vocal pedagogy (2004, p. 25). Her argument is understandable, especially by those directors who do have such knowledge. The lack of understanding of imagery is one of the major criticisms of it as a useful strategy in choral rehearsals, and those with good vocal knowledge can base their imagery on this secure foundation. However, it is interesting to note that Jacbosen believes creating verbal imagery is a more advanced technique for choral directors. She confirms this, saying that the requirement for vocal pedagogy is “so that verbal imagery can be an illuminator in the pursuit of understanding vocal function, pedagogical terminology and the effective and creative use of verbal imagery” (2004, p. 25). Although this appears a rather one-sided view, as directors are also able to use vocal pedagogic knowledge to provide technical descriptions and vocal demonstrations for example, it highlights the value Jacobsen holds for the deployment of imagery in choral rehearsals.

The Necessity of Vocal Training for Choral Directors

There are numerous authors who recognise the essential value of vocal skills and/or knowledge of vocal pedagogy for a choral director. There are several reasons for this, not least because of the need to understand the voice as an instrument (George, 2003, p. 45), in order to provide correct verbal instructions and vocal models (Smith & Sataloff, 2006, p. 119). If directors have that knowledge, they can maintain a practical approach with few technical terms (Decker & Kirk, 1988, pp. 118-9). However, directors should not ignore the fact that experience of vocal techniques is different to information about it. Researching and reading material is not the same as feeling, hearing and seeing the effect of that information. Directors who are not singers may not be aware of the process by which singers create a particular pitch and the need to imagine not only the aural goal but also the physical and mental process which creates the correct pitch. Naming a note on a score is quite different from maintaining an aural image of its pitch (Smith & Sataloff, 2006, p. 167). Even if an aural image could be maintained, there is no guarantee a particular pitch would be produced. Directors who have considerable experience of sight singing are much more likely to understand any difficulties choir members are likely to encounter.

As noted earlier, the director’s instrument is the choral voice (Emmons & Chase, 2006, p. 6), and for many, the choir director will be a choral singer’s only voice teacher (Decker & Kirk, 1988, p. 118; Smith & Sataloff, 2006, p. 122; Webb, 2007, p. 2). This places a great responsibility onto the director and causes him/her to be also a teacher of singing (Durrant, 2005, p. 95). With amateur choirs, the director’s role is to find effective vocabulary with which to do that and imagery may be useful in this situation, where not all singers are familiar with technical vocabulary. The chapter in Miller’s book on the choral conductor’s role as a teacher of vocal technique signifies the importance with which he regards this. His argument is that as choral music is also vocal music, it needs to be “effective vocalism,” therefore directors need to be technically proficient in order to lead improvement (1996, pp. 57-8). Vocal progress, or lack of it, is an issue raised by Sell (2005, p. 178) and Chipman et al., who are eager to generate correct and healthy singing habits (2008, p. 133). This relates to one of the results of Sell’s study with vocal teachers (2005, p. 178), and is certainly applicable to choral directors, who need to protect against vocal problems and misunderstandings. It might be even more crucial that directors do this, especially with amateur choral singers who are unlikely to be able to guard against the problems themselves. Although Sell does not suggest this, negative imagery can be effective in such situations.

Vocally experienced choral directors will be able to avoid the pitfall of focussing mainly on enunciation of the text or letting this take precedence over tone production. They will know to what extent the diaphragm is capable of being controlled by singers, for instance, or how to create changes of pitch, timbre or volume, just as they should know whether a section of music is in D major or minor. If choir directors require information about vocal pedagogy, apart from the sources mentioned previously, a section within Hill et al.’s book is specifically written for directors (2007, pp. 17-24). Smith and Sataloff too supply a comprehensive guide (2006), and Miller provides detailed technical information and exercises which, when used systematically, will improve all aspects of choral sound (1996, pp. 59-70). More recently, Goetze, Fales and Smishkewych’s chapter examines vocal production and gives comparisons between different styles around the world (2012), and in the same volume, Carrington provides some useful advice for rehearsal techniques which extend beyond the most frequently presented topics (2012).

Summary: Imagery and the Choral Director

Liimola advises that comprehensive vocal knowledge would allow directors a position of strength when explaining singing technique; however, he is keen to insist that directors "don't try to blind singers with science; they may have as much knowledge of the metaphors used in describing singing (head/chest voice and so on) as you have" (2000, p. 153). The interesting point here is his recognition that thorough knowledge of vocal technique will include metaphors; this is true, even given the picture he presents of highly skilled singers.

Jacobsen reports that directors might use imagery due to their lack of physiological knowledge," (2013, p. 26), and continues: "without vocal technique in place, imagery can be of seemingly little value to the singer in obtaining consistent vocal results" (2004, p. 37). This presumably refers to the vocal technique of the director because although spontaneous images can work, unless they are based on factual and functional knowledge they are unlikely to be useful. Jacobsen provides an amusing themed image which demonstrates exactly that lack of knowledge and a contrasting one which displays complete vocal understanding, proving her point (2004, pp. 86, 88).

With reference to the vocal skills of choral singers, Emmons and Chase state that imagery can be used as an "effective tool for teaching specific skills, and for guiding choirs to the best performances they are capable of giving. Imagery cannot, however, create skill of its own accord" (Emmons & Chase, 2006, p. 8). They acknowledge the legitimacy of imagery,[11] advising that the issue for directors is not whether they should use imagery, but how to use it most effectively (2006, p. 7). Similarly, Jacobsen stresses that "imagistic language can best support function if one knows what the function is" (2004, p. 30). She goes further: "there appears to be no replacement for understanding vocal function for the choral director as a diagnostician. (…) This knowledge is the foundation upon which imagery can be used to address and correct vocal function" (2004, p. 31).

Using imagery can never be a substitute for lack of knowledge or deficient vocabulary in explaining what is required. If the physiological or anatomical basis is unknown or the connection from the physical to the function is unsound, the director is likely to produce imagery which will at best be ineffective and, at worst, create more problems than it could resolve. The director's vocal knowledge is, therefore, fundamental and imagery useful only if that knowledge underpins it. If this is the case, directors can create spontaneous and unique imagery suitable for a specific choir or piece. This approach might be the most efficacious course of action for those directors of amateur choirs who are unable to rely on the vocal knowledge of their singers.

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[11] A section of their book is entitled, The Legitimate Role of Imagery in the Choral Director's Work.

2.5 Verbal Imagery Beyond Choral and Vocal Contexts

Verbal Imagery in Instrumental Teaching

When George says "language is the only difference between conducting a chorus and an orchestra," (2003, p. 50), he is referring to the text, rather than the verbalisations used to address either group; there are studies which support and contradict George's view. Four studies examined the use of imagery with instruments rather than voices. In a detailed but dated study, Grechesky (1985) compared the time and frequency of verbal and non-verbal conducting behaviours with high school bands. He subdivided the verbalisations into three types, instructions, technical explanations and use of metaphor and verbal imagery, and found that although the technical explanations were necessary, verbal imagery had a much stronger impact on how judges ranked the performances (1985, pp. vi, 6). Upham's study with wind quintets produced some similar findings: verbal imagery helped motivate players as they found it helped them complete their learning tasks more efficiently than verbal explanations (1993).

In a more recent study of instrumental teachers, Chester examined four instructional approaches and compared the effectiveness of modelling alone, verbal communication using technical explanation, verbal communication using imagery and metaphor, and no instruction. She only scrutinised expressive skills which included articulation, dynamics and *ritardando* markings but surprisingly found no statistically significant relationship between the four variables (2008, p. i). This lack of correlation may have been because she examined only limited factors or that the young age of the performers limited their ability to either interpret the instructions or to perform with perceptible differences in levels of expression. Watson's subjects were also instrumental teachers, but she examined the use of analogy, imagery, metaphor, onomatopoeia and simile and how they were employed to teach the technical characteristics of rhythm, beat, articulation pitch and posture. She found onomatopoeia was particularly useful for teaching rhythm and note groupings, but the other literary devices were widespread across the three remaining areas, and concluded that the teachers clearly depended on the literary devices for the technical aspects of playing instruments (2008, para 1,11). This has clear implications for singing teachers and choral directors, who should not, therefore, assume that imagery can only be effective for the expressive and interpretative aspects of performance.

A further three studies examined mixed groups of voices and instruments, the earliest of which, by Gabrielsson and Juslin, focussed on differences between an individual performer's intention and the listener's experience of emotional expression in performance. One of the main findings was that “the performer’s expressive intention had a marked effect on all analysed variables,” such as tempo, dynamics, timing, articulation, intonation and timbre (1996, p. 68). This might not appear important until it is revealed that the performer’s intentions were created by using imagistic words such as “fearful, tender, solemn as well as no expression” (1996, p. 72). This indicates that not only were the performers themselves affected by the imagery, but the effect was also transferable to listeners who knew nothing of the original imagery. Although these results may not necessarily be generalised to other areas of performance, they highlight the transformational ability of imagery in relation to expression. It is not within the scope of this research to do so, but a similar study with a comparison between individual vocal teaching and choral rehearsals might be devised.

Musical expression in instrumental teaching was also Karlsson and Juslin’s focus when they examined the types of language employed in feedback to students. They found lessons were dominated by talk rather than playing or singing, which they say suggests a pattern of teaching in which the teacher typically tells the student what to do and the student responds briefly to the instructions (2008, pp. 316, 317). The types of feedback language were coded and metaphor was found to be the least frequently used, even though it was deemed to be one of “the ‘traditional’ teaching strategies aimed at enhancing expression” (2008, p. 328). In addition, they commented that neither teachers nor students frequently asked questions, provided analyses or discussed expressive aspects of performance (2008, p. 317), which corroborates their finding that communication was based around instructions. This may partially explain why there was little evidence of metaphor, but another suggestion is that metaphor and imagery may be more useful in stimulating and promoting ideas than they are in evaluating responses.

Gaunt asked vocal and instrumental teachers to report on the characteristics of their one-to-one lessons, and although one of the categories she sought response to was the use of explanation/question/metaphor (2008, p. 244), there is no mention of metaphor or imagery in the findings. Verbal communication was not a particular focus of the study but it is interesting to note that imagery did not feature in the teachers' perceptions of their lessons and indicates either that they are unaware of whether they employ imagery or that teachers are not aware of the possible functions that imagery provides.

Hemsley presents some interesting comparisons between singing and playing an instrument. He states that playing an instrument begins as a conscious act, for example pressing a sequence of keys which are stepping to the right on a piano, and learning to do this efficiently changes them from voluntary into reflex actions. With singing he maintains the opposite is true: that natural and reflex actions are being refined, controlled and made conscious and voluntary (1998, p. 20). In these circumstances, imagery would be needed to create those reflex actions. A second difference Hemsley notes is a sliding scale of the measure of freedom of interpretation for a piece of music. An instrumentalist with a melody line has more freedom than if a piece has harmony, which adds mood and colour; both have more opportunity for interpretation than if text is present (1998, p. 113). Therefore, singers have less autonomy than instrumentalists in creating their own interpretation, and a director might be misguided if he/she tries to interpret the music but ignores the text (1998, p. 114). If this is true it could be expected that studies would reveal more time was devoted to teaching expression in instrumental lessons than in vocal teaching; in fact, Burwell's results do not wholly support this idea (2006, p. 345).

Regarding text, Bartholomew explains that listeners need to understand the words, which requires clear consonants from singers. However, consonants are produced by partial or complete mouth closures which have to be balanced by opening the mouth to produce power and quality; these two are "forever at odds," (1940, p. 23); this is a technical dilemma which arises from the nature of the physical instrument. Burwell's study focussed on verbal dialogue and any features distinguishing vocal from instrumental teachers in the areas of technique and interpretation. Three of her four main results are:

> More verbal dialogue is devoted to technique at the expense of interpretation, in singing lessons, than in instrumental lessons; vocal teachers tend to draw upon metaphorical (as distinct from literal) vocabulary, more than instrumental teachers;

> when discussing interpretation, the singer's attention to the poetic or dramatic text seems to be given at the expense of the discussion of music itself. (2006, p. 345)

The communication of text is in addition to any musical and technical issues which instrumental students have and this is one of the "unique traits [which] would seem to make a metaphorical vocabulary indispensable to [vocal] teachers and students" (Burwell, 2006, p. 345). For vocal students, as for choral singers, interpretation of the text is synonymous with a discussion of the music, an idea which accords with Emmons and Chase's earlier point that composers intend text, music and interpretation to be united (2006, p. 262). In fact Burwell suggests that all teachers could use metaphorical, experiential and emotional vocabulary with their students, whether singers or not (2006, p. 345).

Another point Burwell makes relates to the types of skills singers or instrumentalists might be learning, and she distinguishes between acquisition of psycho-motor skills and development of cognitive skills (2006, p. 344). Acquisition of conceptual understanding has already been discussed, but her point provokes comparisons with imagery in sports and physical activity. Perhaps the most obvious connections are to be found in imagery used in choral warm ups, for example, "practice golf or tennis swings. Imitate a swimmer's stroke or a skier's slide" (Smith & Sataloff, 2006, p. 156). These are intended not only to develop cognitive understanding but also to be physically carried out during choral warm-up exercises. The use of imagery in McCarthy's study is structured much less by the director. Her aim is to use imagery and gesture to foster musical understanding, particularly to "feel 'how the music goes'" and to "discover how we can *anchor* musical knowing 'in the contexts and purposes of specific musical practices'" (2002, p. 215). She uses imagery to physically engage the students (2002, p. 221), who choose their own gestures or interpretations and use the "movement analogues" during the piece (2002, p. 223). McCarthy does not intend that the music should be choreographed nor that singers move to the music, but instead that singers seek "movements that would have evoked this music" (2002, p. 224); this approach, which she terms *gesture-as-imagery* is not comparable to movements typically performed by gospel choirs. Both of the examples above use imagery to produce a physical as well as vocal response.

Verbal Imagery in Sports and Dance Training

The use of imagery is sports training has many parallels with the type of musical imagery to which Godøy and Jørgensen refer (2001). Imagery is frequently employed for performance practice as mental rehearsal for a physical event. Murphy notes that although this may appear to be a mental skill, it might better be described as a cognitive process because imagining the physical actions occurs in the brain or nervous system (2005, p. 132). In fact "imagery activates the same cognitive templates in the brain that are used for athletic performance," creating "functional equivalence." Therefore, each time the physical act is performed, the cognitive template becomes stronger (2005, p. 133). This assumes that the sports person practises fairly frequently, which is unlikely to be the case for choral singers, who will only be able to practice with imagery during their rehearsals, commonly once a week. If imagery does indeed create a cognitive template, in choral singers this will be formed very slowly, perhaps over a period of years. This may be one of the reasons why, when working with the same director over a long period, singers come to understand the exact nature of response to a particular image with no further explanation. It may also explain why, when singers are asked to explain their director's imagery, they do not necessarily use exactly the same language. The concept is understood and singers are describing the concept in their own words.

Smith, Wright, Allsopp and Westhead carried out research to "aid practitioners in producing functionally equivalent mental simulation," to be employed when "implementing motor-based imagery interventions" (2007, p. 80). Using the same model which provides imagery guidelines, some of the same researchers later found that not only did the imagery enhance cognitive tasks but that it was as effective as physical practice (Wright & Smith, 2007). Orlick's (2000) research in sport focuses on the same idea, that of mentally rehearsing the intended action in a specific, sometimes predictable situation (Chen, 2007, p. 61). The athletes are not rehearsing physically but in their imaginations, visualising movements and recalling feelings rather than enacting them. This demonstrates the power of imagery when used in this fashion but does not transfer easily into the choral context because the singers are actually producing the sound rather than imagining it.

There is evidence then that imagery is important for skill learning and is, therefore, vital that it features in warm-ups which are designed to produce particular types of sound or technical achievement. Directors, therefore, need to be clear in their aims for warm-ups and in using imagery to build skills over a long period, associating the warm up with whatever is being rehearsed later. Imagery is also used in sports for retaining skills over time; by rehearsing or practising, the cognitive template is revisited and this regular activation of the template will help maintain skills (Murphy, 2005, p. 139). This generates a second reason why warm ups should be purposeful and systematic.

"Imagery is best described as a method of using all the senses to create or re-create an experience in the mind" (Hale, 1998, p. 4). With this definition, Hale clearly differentiates between imagery used in sport and movement and its use in choral singing. He clarifies the process as being in three stages, observation, physical practice and then the imagery (1998, p. 35), demonstrating that imagery comes at the end of the process. Sportsmen and women create the imagery to recall something which has already been accomplished. This is entirely dissimilar from the use in choral rehearsals for several reasons: firstly in choirs, the imagery is heard prior to the sound being created. It is used as the stimulus which generates or modifies the sound; the imagery is the cause of the effect. Secondly, in most cases it is the director who creates the imagery but the singers who perform the response. It may be that the director has already invented his/her own imagery which is reproduced for the choir but the resulting sound is not made by the creator of the imagery. The imagery is being transmitted from its source to a recipient and is, therefore, one step removed from it. Thirdly, although the imagery is heard prior to the sound, it is probably still being considered simultaneously with the sound being produced, so it is less of a linear sequence than with sports imagery. Fourthly, the intention is not that singers are practising the imagery, making it more efficient, but practising the effect which the imagery has created. The director might practise creating the imagery very frequently, but this will not necessarily affect the imagery which is produced nor the resulting sound. In the case of choral rehearsals, therefore, imagery plays an intermediary role between the director's requests and the sound the choir supplies.

Despite the differences highlighted above, there are several similarities between imagery use in sports and choral contexts; Murphy (2005), notes that some of these concern the nature of imagery itself. In sports psychology, practitioners create images which refer not only to physical appearance but also auditory and tactile features, known as *modalities.* Imagery in choral rehearsals has been identified as having different modes. Those who use combinations of modalities create more vivid images with both internal and external perspectives (Murphy, 2005, p. 129). Tasks in sports often require coordination of several actions simultaneously which links to the notion of imagery enabling holistic outcomes, a feature also noted by Chen (2007, p. 61). As imagery has more associations than other cognitive processes, this might explain its effectiveness as a cognitive template for skilled performance (Murphy, 2005, pp. 136-7), a feature which is useful in the choral context.

Using imagery to keep focus and maintain concentration is also common to the two disciplines; for example, Hale notes that imagery provides cues or triggers which can be learned during practice. The cues are then employed to motivate and galvanise performers immediately prior to a performance (1998, pp. 17-18). In choirs, this might be undertaken by directors during warm-ups but is unlikely to be carried out by individuals. Some of Hale's work is immediately transferable into vocal and choral contexts as Emmons and Thomas (1998, p. 163), and Emmons and Chase (2006, p. 265), demonstrate.

Another area in which imagery has a similar function in dance and choral rehearsals is noted by Hanrahan and Salmela, who found imagery was used to "promote communication between the dance teacher and students by improving conciseness and accuracy of description" (1990, p. 18). The two facets of succinctness combined with precision are exactly what Price and Byo (2002, pp. 335, 345), noted and seem to be fundamental when physical actions are the focus as they eliminate the need for lengthy explanations.

In the context of dance, Overby's (1990) survey of dance teachers showed they used four types of imagery, visual, kinaesthetic, direct and indirect, very frequently with their students. In addition to frequency, dance teachers were invited to comment on the use of imagery as a teaching tool, which generated such comments as, "it brings life and immediacy to dance that is its very essence and is germane to the art form" (1990, p. 26). This indicates there are more similarities between dance and choral rehearsals than between sports practice and choral rehearsals as dance is also an art form and consequently there may be more opportunities for expression and interpretation. A more recent study by Klockare, Gustafsson and Nordin-Bates (2011) included imagery as one of their psychological skills for teaching dance. All of the teachers in their study used imagery to develop group cohesion, self-confidence and anxiety management, and dance students were encouraged to participate in applying imagery. One of their most interesting findings was that their teachers had little formal training in performance psychology, but used their own experiences to develop their teaching methodologies (2011, p. 277). This has particular parallels with use of stock images in vocal teaching, where certain images are passed down through generations of vocal teachers. Franklin uses the term *mental imagery* to describe space, time, and shape in dance, showing how it is fundamental in techniques classes. He also provides a background to the history, theory, and uses of imagery in dance (2014). This indicates another similarity between dance and the vocal and choral contexts.

Summary

The fact that imagery has recognised functions and effects in sport or movement should indicate that despite the differences between the physical and choral contexts, imagery’s role in choral singing is equally valuable. Perhaps it is simply that research in sports imagery is further advanced and a study such as the current research is needed to confirm that imagery has an effective place in choral pedagogy.

One of the questions Burwell asked in her study was why singers focus so much on technique rather than interpretation. Her opinion is because a “singer’s technique is regarded as embracing additional dimensions, not only of words and their expressive import but of the art of performance and communication” (2006, p. 342). She suggests that those *additional dimensions* should not be regarded as a burden to singers but rather as natural strengths. More specifically she proposes that “singers are able to rely on the innately musical qualities of their instruments so much that they can focus largely on the cultivation of technique, confident that the interpretative or purely music aspects will follow” (2006, p. 343). This bold idea might be challenging to those, like George (2003, p. 50), who perceive no differences between vocal and instrumental contexts. Some might argue that not all voices, especially amateur choral singers, have the *innate musical qualities* to which Burwell refers, but the vocal instrument is different in nature, not only because of the portrayal of text. Singers, whether choral or solo, communicate everything their instrumentalist peers do, phrasing, dynamic contrasts or structural similarities, for example, but they are the specialists with regards to interpretation and the use of the imagination. If instrumental teachers wish to enhance the communicative and expressive performance skills of their students, perhaps they should take Burwell’s advice to emulate vocal teachers’ consistent cultivation of imagery and affective language in lessons (2006, p. 344).

2.6 Impact of Literature on the Current Research

Several previous studies influenced both the design and scope of the current research. Jansson discusses the risks researchers run through "overinterpreting singer experiences and conceptualising beyond what can be drawn from the interpretations" (2014, p. 161). He further suggests that models, such as the one he devised (2014, p. 161), are ways of understanding what the interviewed singers said and meant. Although the intention of the current research was not to produce such a model, the focus on qualitative data and phenomenological enquiry generated some insight into understanding the singers' responses. Studies by Funk and Chen also examined verbal imagery, and aspects of their research influenced the design of the current study, for example in the use of observations, questionnaires and interviews (Chen, 2007, pp. 75-77; Funk, 1982, p. 123). The idea of interviewing choir members and providing them with an opportunity to determine the effectiveness of imagery extends previous work in this area (Funk, 1982, p. 123; Jacobsen, 2004, pp. 13-4).

It is the intention in the current research to maintain as much ecological validity as possible, though it is acknowledged this is not totally achievable. One of Chen's respondents reported that "effective verbal imagery can only be demonstrated by students' improvement and performance" (2007, p. 118). This indicated that the effects of imagery could be judged solely on vocal responses, highlighting the importance of videos and P&P[12] examples to the current research. It was deemed too onerous a task for directors to attempt to categorise all their imagery examples themselves (Grimland, 2001); instead the innovation in this research is the opportunity for directors to examine a small number of images on video and to explain any aural effects.

Jacobsen suggests several recommendations which were most relevant to this study: to widen the context, to examine what she termed "artistic concerns" as well as vocal function and to consider other strategies being used alongside the imagery (2004, pp. 90-1). These had several implications for the design of the current study, the first of which was an emphasis on examining imagery in its context. For example, Jacobsen provided a selection of images from her participants, related to colour. She then questioned the efficacy of the colours saying, "Sing blue. Is it calm? Is it royal blue, is it navy?" (2004, pp. 84-86). However, simply quoting the images out of context is to miss the point; imagery is provided within a particular context and affects a specific musical phrase or note. Jacobsen’s quote confirmed the importance of examining the imagery in context but also revealed the need to investigate its relationship to other strategies directors employ; this was incorporated into the current research.

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[12] See key terms.

Jacobsen’s advice to widen the scope of the research is taken; although there is an overall preponderance of university student choirs in the current research, of those who provide the richest evidence through videos and interviews, half are not university choirs. Jacobsen only examined imagery’s effects on vocal function which prompted this researcher to gather information on directors’ vocal experience. Funk’s (1982) study is also restricted in its focus on expressive content. The current research was designed to maximise the variety of effects encountered by creating a wide range of categories into which the data was classified, thereby enabling a full range of effects to be examined. The literature to date indicates that such a study would be indispensable; Chapter 3 demonstrates how this was accomplished.

Chapter 3

Methodology

Aims and Introduction

The main aims of the research are to determine the following:

- What are the functions of verbal imagery?
- What types and modes of verbal imagery are evident?
- How is verbal imagery understood by singers?
- In which contexts is verbal imagery evident in choral rehearsals?
- What is the relationship between verbal imagery and the other rehearsal strategies directors employ?
- What role does verbal imagery play in choral directing pedagogy?
- What implications are there for choral directors' practice?

In order to reveal the circumstances under which imagery was encountered and how respondents understood and responded to verbal imagery, the investigation adopted a multi-method approach. Four different types of materials were used: observations and video recordings captured the imagery in its natural context; questionnaires allowed large amounts of information to be gathered in a limited time and enabled respondents to volunteer to be interviewed; interviews provided a richer source of material and allowed more detailed investigation of imagery examples. One of the aims of such a multi-method approach was to allow for triangulation of data in order to gain a rich and detailed insight into the uses and interpretations of imagery during choir rehearsals (Coimbra & Davidson, 2004, p. 206; Litman, 2006, p. 23).

The research needed to be empirical, relying on the evidence gathered and focussing on the phenomena within its context (Robson, 2002, p. 179). Imagery occurs during rehearsals so it was important to examine its use and effects within those circumstances, rather than arrange experimental situations which would have produced different and, therefore, invalid results. The evidence gathering necessitated a hybrid, flexible design which unfolded as the research proceeded (Robson, 2002, pp. 5, 87, 91), and allowed a holistic approach which produced wide ranging results.

As the research focussed on interpretation, quantitative data would have been insufficient; it supplements qualitative data by enabling patterns and themes to be noted and any exceptions or generalisations to be established. A mixed-method approach had, therefore, several advantages. Not all the data gathered can be represented in this research; that which has been included corresponded most closely to the central research questions.

3.1 Participants and Referencing Codes

Initially, the choice of directors and choirs relied mainly on availability, geographic location, convenience and willingness to take part, though the range was broadened later to create a more diverse group. A variety of choral experiences across respondents was desirable, to gauge whether imagery was comprehensible by singers with different levels of experience (see Appendix D, Q1). The ability of respondents to express themselves freely in written and verbal form was required; children were not included as they would also have needed further parental permission, and Sticht questions their comprehension of metaphor (1993, p. 624). Awareness of the gender of respondents was prompted by Coimbra and Davidson’s work (2004, p. 207), but was not taken into consideration as it had little relevance to the aims of the study. Many choirs were student-based as these were easily accessible, as the researcher was working in a university; in cases where respondents were known to the researcher, details are noted in the choir and director profiles (Appendix A), as this may have influenced their willingness (or otherwise) to take part in the study. Directors were initially approached by email; choir respondents were invited to complete the questionnaires, though there was no compulsion to do so, and some volunteered to take part in the interviews having completed the questionnaires. Consent forms, informed by Robson (2002, p. 381), are included in Appendix H. All materials were completed anonymously with respondents being given identifying codes; directors who contributed the most data are identified with names as opposed to numbers or initials, to aid clarity. Brief information on participants is provided in Table 3.1; fuller choir and director profiles are provided in Appendix A.

Phase 1 functioned as a pilot study, so that materials, resources and procedures could be trialled before gathering the data for phase 2, which would be scrutinised in more detail. The separation into sub-stages in phase 1 is determined only by the changes in types of data collected; see Table 3.3.

Table 3.1

Participants

Phase	**Director Code (Choir)**	**Type of Choir**	**Voicing**	**Number in Choir**[13]
1.1	DL	Volunteer choir	SATB	
	DR	Auditioned choral society	SATB	
1.2	Rob (C Rob)	Community choir	SATB	
1.3	Sam (C Sam)	University choir	SATB	32
	Pete (C Pete)	Auditioned university choir	SATB	21
1.4	D4 (C4)	Student /community	SATB	8
	D5 (C5)	Student/community	SATB	6
	D6 (C6)	Student	SATB	8
	D7 (C7)	Student	SATB	10
	D8 (C8)	Student	SATB	16
	D9 (C9)	Auditioned student	SATB	18
	D10 (C10)	Auditioned student	S A	10
	D11 (C11)	Student/community	SATB	10
	D12 (C12)	Auditioned student	SATB	23
	D13 (C13)	Auditioned student	SATB	19
2	Emma (C Emma)	Double-auditioned student	S/S/A/A T/Bar/B	7
	Ken (C Ken)	Auditioned community	SATB	101
	Tim (C Tim)	Community gospel, open access	SAT	43
	DW	Church/ Student choirs		
	DP	Professional choir		
	DG	Church/Community/Student auditioned		

Directors are referred to by their codes; choir respondents are identified by a number followed by their director code, so the choir to which they belong is obvious; for example, the third respondent in Sam's choir is 3Sam. There are slight variations in referencing data across the two stages due to the detail being collected in Phase 2. There is no significance to the number allocated to a respondent other than the chronological order in which they supplied data. (For example respondents 14Ken and 15Ken were not necessarily sitting next to each other when they completed the questionnaires.) Samples codes are provided in Table 3.2 for each type of data.

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[13] Number who directly contributed to the research.

Table 3.2

Data Referencing Codes [14]

Type of Data	Identifying Information	Referencing Code
Examples from rehearsals	Respondent code, rehearsal number, time	Pete, R2, 14:26
Transcriptions of rehearsals	Respondent code, rehearsal number, page number, section	Ken R1, p. 13:1
Interviews: Phase 1	Respondent code, type of data, page number	8Sam, Int, p. 1 or 8&9 Sam, Int, p. 1 for group interviews
Interviews: Phase 2	Respondent code, page number, extract or question	Tim, p. 9, ex.2 or 8&9Sam, p. 6, ex. 3 for group interviews.
Rehearsal extracts used in interviews	Respondent code, number of rehearsal extract	Emma, R ex. 3
Questionnaires	Respondent code, question number	Emma, Q13 or 6Sam, Q6 & 8

Overall 21 directors took part though there were different levels of contribution depending on either the stage of the research or their availability. For example, the first two directors (DL and DR) were only observed, and those visiting from the United States participated in interviews and questionnaires only. In total, 8 were observed during rehearsals, 6 had rehearsals videoed, 18 completed questionnaires, and 8 were interviewed. Three hundred and thirty two choir members across 15 choirs completed questionnaires and 42 singers from five choirs were interviewed; the details are shown in Table 3.3 and Table 3.1.

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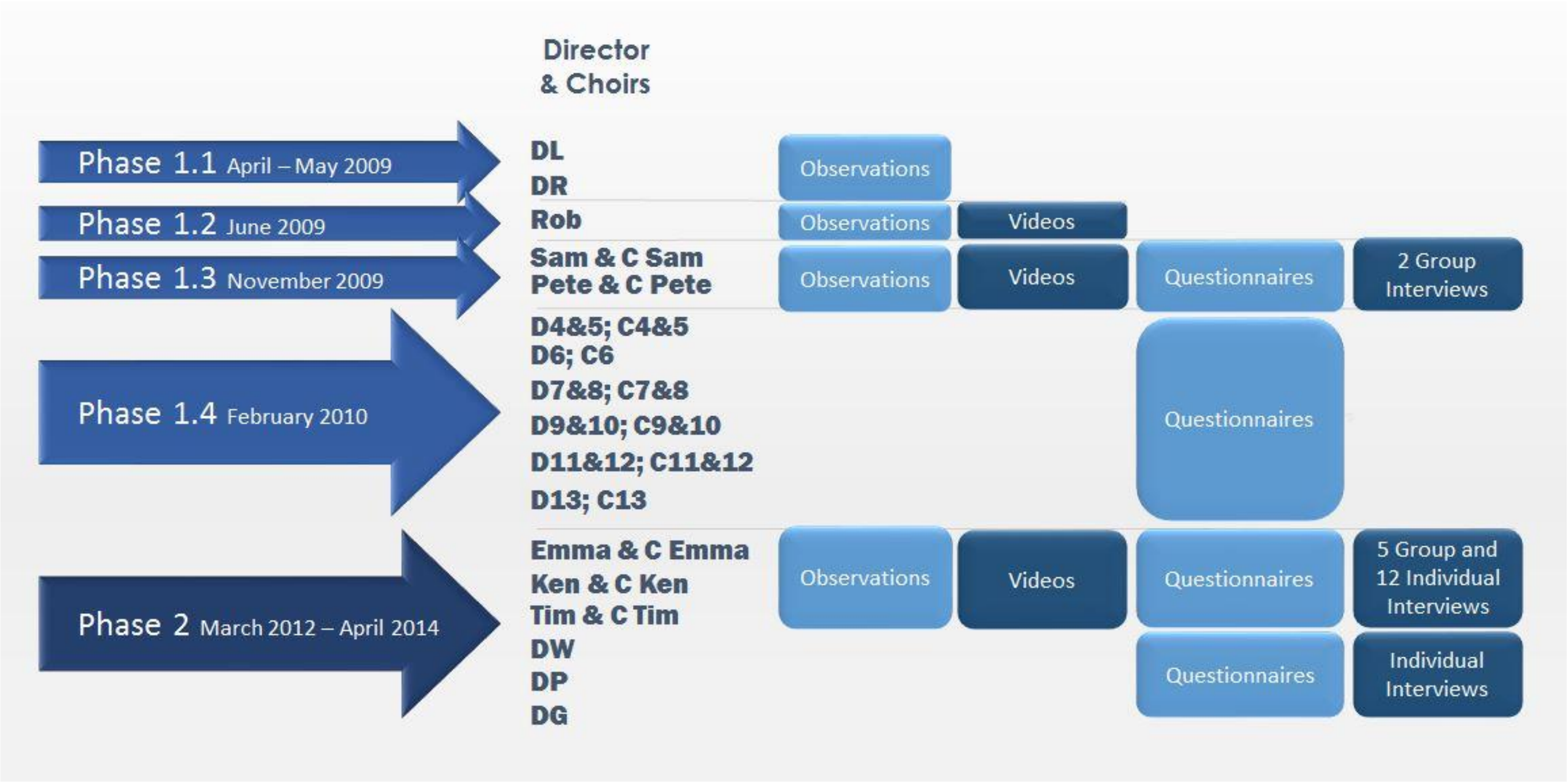
[14] This can also be found in Appendix B.

Table 3.3

Materials and Participants



	Director & Choirs				
Phase 1.1 April – May 2009	DL DR	Observations			
Phase 1.2 June 2009	Rob	Observations	Videos		
Phase 1.3 November 2009	Sam & C Sam Pete & C Pete	Observations	Videos	Questionnaires	2 Group Interviews
Phase 1.4 February 2010	D4&5; C4&5 D6; C6 D7&8; C7&8 D9&10; C9&10 D11&12; C11&12 D13; C13			Questionnaires	
Phase 2 March 2012 – April 2014	Emma & C Emma Ken & C Ken Tim & C Tim	Observations	Videos	Questionnaires	5 Group and 12 Individual Interviews
	DW DP DG			Questionnaires	Individual Interviews

3.2 Materials and Procedures

Materials

Table 3.3 provides detail of the data gathering process and the types of materials used.

Observations and Video Recordings

The initial aim of the observations was to examine whether this was a profitable method of collecting examples of imagery. Previous use of observation schedules by the researcher highlighted the value of such materials so exploratory observation schedules were created (Appendix I), based on that by Barrett (2007), and influenced by Robson, who cites Spradley's (1980) dimensions of descriptive observation (Robson, 2002, p. 320). The schedule included notes written against a time line during observations, with reflections added later (Silverman, 2006, p. 284), and a coding scheme was developed over Phase 1 (Robson, 2002, p. 326). Observations at Phase 1.1 determined that notes needed to include specific reference to the piece/section being sung (Barrett, 2007, p. 242), and identified possible types of behaviour for future observations (Byo, 1994, p. 41).

Video recordings were included to assure exact recall of the imagery (Chen, 2007, p. 92) and to enable examination of extracts during the interviews, where they were used to stimulate recall as they were more reliable than the respondent reading words the director had previously spoken. Transcriptions were made and reflections added to establish possible extracts for use in the interviews. It was important to ensure contextual validity by using videos, but the director's voice was not always clear due to the positioning of the video camera; any instances of this are noted in the transcriptions.

Questionnaires

There were two main aims for the questionnaires: the first was to provide factual and contextual information on the respondents for the videos and interviews; the second was to gather opinions on the deployment and efficacy of imagery and other strategies.

A series of questionnaires was devised over the course of the research (nine for choir respondents and four for directors), with initial results regarding the ambiguity or appropriateness of questions and the most efficient layout informing subsequent versions;

sample schedules are provided in Appendix J; others are available on request. Any questions in earlier stages which did not supply sufficiently focussed information, for example, “What do you think are the benefits of singing in a choir?” were omitted from later stages. Factual questions concerning the type of choir and prior choral experience were arranged first, to allow respondents to gain confidence in their ability to answer. These were followed by a mix of multiple choice options, attitude scales and questions which sought opinions, as advised by Robson (2002, pp. 238-249), and informed by Burland (2009). Opinions were initially sought on a range of directing strategies and their effectiveness; subsequent similar questions focussed on imagery and its uses.

The main themes of the director questionnaires were: information about directing experience; information about the choir under scrutiny; information about strategies employed; effectiveness of strategies; use and effectiveness of imagery; information about vocal experience; value of vocal training for directors; other comments. The main themes of the choir questionnaires were: information about choral experience; information about the director’s strategies; effectiveness of director’s strategies; effectiveness of imagery; imagery generation; information about vocal training; value of vocal training for directors; invitation to be interviewed.

At Phase 1.4, core questions were the same across the six variants of the questionnaire, but each variant requested interpretation of different imagery examples which had been provided, anonymously, by previous respondents. The examples were designed to generate interpretations of imagery, but were impractical because they were not in the context of any rehearsal, were written and did not relate to any music. As metaphoric language is not easily comprehended outside its original context (Barten, 1998, p. 95), there is little value in seeking an interpretation from someone who has not experienced that context. Subsequently, respondents only interpreted imagery on video from their own rehearsals. Choir questionnaire data is provided (Appendix D) with spellings corrected where applicable.

Interviews

The main aim of the interviews was to determine respondents’ interpretations of the imagery examples from rehearsals.

Semi-structured interviews were carried out using interview schedules (Robson, 2002, p. 251), to ensure as far as possible the same questions and focus for each respondent within a particular choir. Respondents were provided with the questions and transcription of the extract. The first part and majority of the interview entailed viewing video extracts from the previous week's rehearsal. After each extract was viewed, questions were asked about respondents' interpretation of the imagery and, in the case of P&P examples, whether any differences could be heard between one version and the next. Questions on each extract followed the same pattern and all respondents within the same choir viewed the same extracts. The final two questions sought opinions on which of the director's strategies were most helpful in understanding how to respond, and how respondents knew whether the response was correct. Interpretations of imagery were sought from directors and singers (and later also the researcher) in an attempt at triangulating responses from more than one source (Robson, 2002, p. 174).

Several issues influenced the choice of extracts, including the time-scale for the researcher; this involved locating examples, editing videos, arranging interview times, transcribing written versions of the questions and extracts for respondents and creating interviewer schedules (Appendix K) within one week. The primary influence on the choice of extracts was the need for them to be self-contained and self-explanatory when separated from the rehearsal. The duration of extracts was also a consideration; some were lengthy and where extracts were P&P, interviewees needed to be able to remember and compare two different versions of a particular phrase. Other influences included the total number of imagery examples from which to choose, the clarity of the director's words and variety of strategies within the three or four extracts chosen. Directors' comments immediately after sung phrases were not included in the extracts to avoid influencing interviewees.

Procedures

The research was completed over five years in two stages, with the first stage acting as a pilot for the second. Initial attempts to collect data and create schedules functioned as trials for the remainder of the research, testing materials and procedures for reliability and validity. Any limitations discovered at Phase 1 influenced the design of subsequent data gathering, for example the omission of ambiguous or unfocussed questions. Some data gathered at Phase 1 is included where it either contrasts with data at Phase 2 or supplies perspective for it. Reflections and tentative summaries of the results from Phase 1 produced a series of initial findings (Black, 2014, pp. 218-221), which influenced the main themes to be investigated subsequently.

During observations, the researcher was positioned as unobtrusively as possible and, apart from the first choir, avoided being a participant observer to avoid influencing outcomes (Robson, 2002, p. 328), and aid the researcher’s concentration. The video camera on a tripod was positioned parallel with choir members except with Ken’s choir, where that was not physically possible, and it was placed parallel with the director. The camera remained static, focussed on the director, and choir members were reminded of this; all participants were verbally reassured of their anonymity before videoing started.

Choir questionnaires were distributed at the break or end of the first of two consecutive rehearsals depending on the director; the time was limited by the break length or dedication of respondents, and questionnaires were returned to a box in the rehearsal room. Director questionnaires were either sent in advance or completed prior to the interview. Questionnaire data was entered onto spreadsheets and data tables generated from quantitative and where possible qualitative results, for example Appendix D; alternative display formats were devised for the remaining data, for example in Table 6.4.

In cases where there were more volunteers for interviews than would have been practicable, three criteria operated for selecting interviewees; firstly a cross-section of choral experience within the choir, secondly the completeness of contact information and thirdly whether initial contact produced a response. Interviewees were assigned groups randomly, based on availability, which may have affected respondents’ confidence to contribute. Interview dates for choir respondents were arranged by email or phone, depending on information supplied by the respondent, and took place either on the day of the second rehearsal or within one week of it. Phase 1.3 interviews and the group interviews at Phase 2 took place in the rehearsal venue, but at Phase 2 respondents had indicated on questionnaires whether they preferred individual or group interviews, and individual interviewees had choices of time and venue. Directors were all individually interviewed between one and three weeks after the second rehearsal and again had choice of time and venue.

Interviews were conducted face-to-face with the computer screen showing the videos as the centre of attention. Interviews were audio recorded and transcribed later, leaving the researcher to listen carefully and make notes. Other interviewing protocols were observed (Robson, 2002, pp. 271-322), for example making non-committal comments after answers;

notes are made in the transcripts where these have not been maintained. Choir respondents were assured their responses were not going to be revealed to their director. The interviewer alerted respondents if extracts were P&P as respondents needed to compare responses within the extract.

Interviews lasted for between seven and twenty four minutes, depending on respondents, as they were not prevented from digressing or expanding on ideas; long digressions are excluded from the transcripts. Many choir respondents showed great loyalty to their director by stating things which they could not later explain, for example that they could hear a difference in sound after a director’s comment; the opposite is also true. These are noted as is any agreement or disagreement amongst group interviewees. Interviews were transcribed verbatim (available on request); columns for reference codes, initial comments and emergent IPA themes were added, with these versions being used for quotations within the thesis (Smith, 2007, pp. 67, 74).

Reflections on Materials and Procedures

There are some further issues which deserve comment: directors are likely to have been affected by the camera, for example being more conscious of their behaviour, though only Ken once acknowledged the camera. This might have been especially true in the more intimate setting of Emma’s rehearsal; one of Rob’s choir, however, reassured the researcher after the first rehearsal that it had operated as usual.

Questionnaires allowed large amounts of data to be collected, but a comparison between questionnaire answers and rehearsal videos revealed several contradictions (for example Ken Q12), which indicated the videos were more valid (Robson, 2002, p. 484). Asking for volunteers for interviews might have self-selected the most enthusiastic respondents; however, this would not necessarily have correlated with those who understood most about imagery and was, therefore, deemed not to be influential. Freer (2008, p. 111), Silvey (2005, p. 107) and Welch, Howard, Himonides and Brereton (2005, p. 232) used respondents’ written reports; however, reminding singers of the imagery and its effects via the videos seemed less complex. Reports might have encouraged spontaneous reactions if completed during the rehearsals or if viewing the video extracts alone.

Many respondents made positive comments about the skills of their directors as a result of realising what strategies were involved, and some may have tried to provide answers which they perceived to be anticipated by the researcher; as far as possible, these are noted or discounted. It would have been possible and interesting to include accompanists' responses in the research (Silvey, 2005, p. 107), but these were discounted as their responses to imagery were on the piano rather than vocal and were, therefore, outside the research focus.

Protocols for Research

Protocols for all stages of data collection and analysis have been observed, including adherence to the ethical procedures required for this thesis (Ethics Reference Number AREA 08-061). These include preserving anonymity for respondents and destroying recordings after the research is completed. Video recordings are not included in appendices as these would compromise anonymity; respondents have been provided with pseudonyms or reference codes, explained in Chapter 3.1, and only vague locations are noted. Respondents were under no pressure to take part and were repeatedly reassured of anonymity. They were not told the specific focus of the research in advance to avoid undue influence, though this may be viewed as an unethical strategy. The researcher tried to present an open and positive attitude, welcoming any data whether relevant or not, to try to put respondents at ease. Interim findings have already been made available to directors and comments invited; full findings will be available to respondents when the thesis is approved. Any assistance with the research is credited in the acknowledgements.

3.3 Categorisation

The focus of the research was on the effects which the imagery produced, therefore categories needed to be designed, trialled and modified, to discover which effects were being produced. The categories needed to be sufficiently robust to be reliable but also flexible enough to allow all the images to be examined.

Categorising Imagery

It became apparent during the first observation that defining categories for the imagery would be a protracted and demanding task, as evidenced by the reflective commentary on DL's rehearsal, which also highlighted initial difficulties in defining what constituted an example of verbal imagery. Similar reflections over the course of the Phase 1 data collection cycle acted as trials (Robson, 2002, p. 253), whereby the categories emerged

(Madsen, 2009, p. 52). These combined with reference to literature to produce the original key for categorisation in Table 3.4, divided according to type and purpose, with the latter being sub-divided further.

The original categories and their division were informed by Chen (2007), Grimland (2001), Jacobsen (2004) and Mountain (2001) amongst others. All examples of imagery provided at Phase 1 were filtered through these categories to determine robustness, validity and reliability. This process was extremely enlightening; for example, although *Italian or musical technical* terms were encountered, it became obvious that these did not constitute imagery, so were discounted from subsequent versions. Similarly, any images which were taken directly from the text were excluded as they had no communal purpose but relied on whatever the text defined. The categories have been evolving throughout the analysis producing at least three other versions before the final key to categories emerged (see Table 3.5). Some of the more influential revisions are discussed next.

The reason for changing the categorisation from *Purpose* to *Effect* was to distinguish the function for which imagery was being employed. However, it should be noted that it was the researcher's perception of the function which was being examined until Phase 1.3, where director interviews began (see Table 3.3 earlier). The consequent refocussing on the director's interpretation was crucial, even though it was not possible to apply it to every image; for example, Ken supplied nearly 100 images but his interview could only focus on a small number so only those images have been interpreted by him. It also confirmed that categorising images which had been collected out of context, as in Phase 1.4, were much less valid. Deciding the function of some images proved problematic if they were supplied by respondents on questionnaires, rather than being witnessed in rehearsal: for example, in "table tennis balls suspended on jets of water," supplied by D12, a change of sound could be achieved through managing the breath, but a difference in tonal quality would also be heard. This is because several aspects of vocal technique are inextricably linked so a change in one may cause different effects simultaneously, all of which needed to be recorded. That close linkage is demonstrated, for example, by Jacobsen and Miller's views on which category *diction* belongs to (Jacobsen, 2004, p. 53; Miller, 1996, pp. 19, 27). It was therefore decided to categorise according to effect, as this was what directors wished to change by using the imagery.

Table 3.4

Original Key for Categorisation

Type of Imagery	Code
Visual	V
Aural	A
Kinaesthetic	K
Conceptual: musical or non-musical reference	C
Textual	X
Emotional	E
Italian or musical technical term	
Purpose: Musical	
Tone quality	Mt
Rhythm	Mr
Pitch	Mp
Dynamic	Md
Speed/flow	Ms
Texture	Mx
Articulation	Ma
Purpose: Technical	
Breath management	Tb
Vocal register and tone quality	Tv
Larynx and phonation	Tl
Posture	Tp
Articulation of vowels, consonants	Ta
Purpose: Interpretation	
Text	It
Imagination (not directly from text)	Ii
Referential (not directly from text but something that exists or existed)	Ir

Table 3.5

Final Key for Categorising Effects [15]

Theme	Effect	Code
Voice Production and Technique	Breath management /control, support, respiration, energy	B
	Tone quality, register, tone colour, resonance, vibrato	T
	Voice production, projection, how or where sound is created, larynx and phonation	V
	Posture, stance, body position/alignment, facial expression, mouth shape	Po
	Articulation consonants, vowel shape or formation, diction, pronunciation (including glottal stops)	A
	Flow of piece/phrase; line, shape of phrase, phrasing, how phrase moves, urgency (but not where this is related to text, for example, commas and not flow of breath)	F
Expression /Interpretation	Interpretation, expression, imagination, may or may not refer to text	EX
Motivation	Motivation, enthusiasm, readiness, concentration, confidence, alertness, use of humour to motivate	M
Musical Elements	Dynamic, volume, emphasis, accent, stress	D
	Rhythm, rhythmic reading and accuracy, detached, staccato, timing, entries together, ensemble	R
	Pitch, intonation, range, melodic reading and accuracy	Pi
	Texture, balance of voices, parts interweaving, one voice part standing out	TX
	Speed, tempo, metronomic pulse keeping NB connection to rhythm above	S

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[15] This can also be found in Appendix C.

Burwell’s important question, cited in Chapter 2, produces the suggestion that “singers’ technique includes expression, the art of performance and communication” (2006, p. 342). An examination of the final categories in Table 3.5 exhibits some corroboration for this with the inclusion of the expression, motivation and articulation categories, though singers also communicate through posture and tonal quality, so communication may be a more wide-ranging category. Considering this information, it might be expected that imagery would be focussed more on the slightly amorphous category of expression; however, this is not in evidence, as later discussion will demonstrate. It was decided to allow multi-effect images, as Price showed that generalised ratings were more reliable than assessing individual factors if looking for performance quality (Price, 2006, p. 1).

Reference to the literature, for example Douville (2004), Mountain (2001), Price & Byo (2002) and others, indicated the term *Modes* would be clearer than *Types* which appeared on the original categories, Table 3.4. This reflects the sensory modalities and emotive power Ortony describes (1975, p. 51), and includes conceptual imagery; it also allows the existence of multi-modal images. These should not be confused with Jacobsen’s multi-purpose imagery (Jacobsen, 2013), which focuses on the effect rather than the modality of the image. In order to clarify this distinction even further, the *Effects* categories were completely separated from the *Modes*, so scrutiny of images was performed with each set of categories separately. Table 4.5 (in chapter 4) shows the final key to the modes, through which Phase 1 images were filtered. Where multi-modal images were encountered, these could be clearly identified and could exist in many combinations. Due to the revised focus of the research onto the effect of the imagery, the modes were not examined in Phase 2.

3.4 Validity of the Research

In order to preserve as much ecological validity as possible, intrusive methods of investigation, such as the computer-assisted vocal analysis Chen introduced (2007), were avoided. Instead, changes in effect produced by the imagery were judged aurally by the researcher and respondents, mirroring the rehearsal process. Acknowledgement of the intrusiveness of a video camera, however, must be made.

Respondents were not informed of the specific research area of imagery prior to questionnaires or observations (Chen, 2007, p. 91), in order to avoid biasing their responses.

Instead the vague term *rehearsal strategies* was used and the actual focus revealed after the interviews.

Reviewing the video was designed to provoke aural memory of the context but it also meant images heard during the interview extracts were more likely to be cited by respondents. It was important to complete questionnaires prior to interviews as questionnaires requested imagery recalled from prior rehearsals, and the reverse order would have affected the outcome (Skadsem, 1997, p. 513).

In order to validate the effectiveness of the imagery, this study required the director to judge the success of a particular image. One approach to this might have been to use the same judge or director across choirs to verify whether the desired sound had been achieved (Sheldon, 2004). However, in order for that to happen, the judge would be inserting an additional layer of interpretation of the image between those of the director and singer, therefore making the process more complex and less valid. The contextual validity has already been disturbed by asking respondents to examine extracts after the rehearsal and the consequent addition of questioning is an extra layer in the process. In choral rehearsals, it is the director who decides whether the required sound has been produced, so using him/her as the source of interpretation for the current study is a logical choice which retains as much ecological validity as is possible to achieve in such a context.

It is difficult to avoid bias in qualitative research so acknowledgement of this is important. Prior experience of the researcher generated a positive attitude towards imagery, which might be summarised in a quote from Ken: “I’ve found out what works and I use what works” (Ken, p. 7, fq). Interviews are meaningful rather than impartial (Smith, Flowers, & Larkin, 2009, p. 66), so non-verbal cues in the interviews and observational bias (Robson, 2002, pp. 273, 325) have occurred during design, data collection and analysis. Bias may have been particularly influential when examining imagery examples, where it was difficult to isolate imagery or determine the relative effects of other strategies on vocal outcomes. In contrast, the researcher’s self-reflection as singer, teacher and director enabled informed insight on, for example, what vocal categories a particular image could affect, so was valuable in constructing meaning. Researcher interpretation is always open to bias so the analytical approach needed to allow the meaning of data to be investigated, rather than simply recounting it.

3.5 Limitations of the Research

The findings and discussion are based on one set of data, therefore, results are not necessarily replicable with different data sets. Whilst there was some variety in the types of choirs studied, this did not include any professional choirs and was carried out only in the north of England; all but one choir was mixed-voice, many were university based, and all but one used notation. Although the research period was several years long, it was not a longitudinal study in terms of revisiting the same respondents or maintaining focus on one set of respondents over an extensive period. Expanding each of these restrictions might produce more reliable or different results. The repertoire was not taken into consideration and the background information and prior experience of choirs and directors was brief. Judgements on the meaning and effects of imagery were subjective as they were carried out by those involved in the rehearsals, some of whom may have provided information they thought the researcher desired. External assessors would bring different perspectives, opinions and conclusions though they would need to be familiar with the research contexts and criteria in order to make valid assessments. All of the factors noted above influenced the research, and parallel studies with different data may not replicate these outcomes.

Although it is within the nature of qualitative research that interpretations and categorisations change, there still remains some flexibility within the categories which may not be replicated in other studies, and the researcher’s inherent bias and opinions will have influenced not only the outcomes but the methodology. The effects of imagery could have been examined in reflective interviews, as in this study, or respondents could have been asked to make instantaneous judgements on the imagery as it occurred, which would have disturbed the rehearsals. In either case, due to the nature and context of the material, total ecological validity could not be preserved. Another study which employed different methodologies may, therefore, produce dissimilar findings.

3.6 Approaches to Analysis

Interpretative Phenomenological Analysis (IPA) was considered the most appropriate approach for this research as it is concerned with how participants make sense of their experiences (Smith, 2011), and results in a subjective account of what the analyst thinks the participant is thinking (Smith, Flowers, & Larkin, 2009, p. 80). The key processes for IPA are clearly outlined in Smith et al. and can be summarised in several steps: reading and re-reading to focus on the participant’s voice; initial noting, which allows a shift towards overarching understanding; deconstruction to investigate the context; developing emerging themes and mapping relationships; searching for connections across the themes; mapping the themes and looking for patterns (2009, pp. 82-96). An examination of this approach and a study by Price (2006) demonstrated that IPA was suitable for empirical research with choral directors. In this current research the phenomena are the imagery examples and the interpretations are performed by the directors, choir members and the researcher. IPA allows the researcher to adapt the process and be sensitive to the context (Smith, 2007, pp. 66, 232), so it was suitable as imagery does not function reliably outside its setting. IPA allowed examination of how and why directors employed verbal imagery and whether it affected the sounds their singers created.

Data reduction was not based on prevalence but on relevance to the themes (Smith, 2007, p. 76), although the number of comments per theme was logged. This proved advantageous in highlighting their relative importance and identifying emergent patterns of convergence and divergence within the data (Smith, 2007, p. 73). Flowers’ advice (2008) to print, cut up and lay themes out on the floor was useful as, although sorting them was time consuming, it enabled the location of recurring identifiers (Smith, 2007, p. 72), such as *stock images,* and profound reflections on how themes related or over-lapped with each other. This resulted in the construction of two director and five choir *scrap books* (see Appendix M), thematically arranged with 25 themes and more than 330 sub-themes. Themes were modified and some were later dropped (Smith, 2007, p. 73); for example, imagery which was explained by employing another strategy, vocal demonstration for instance, occupied eighteen pages (in Choir Book 2, pages 30-48). However, sustained engagement with and interpretation of the comments (Smith, 2007, p. 66), combined with reference to the literature, indicated these were not central to the functions of imagery. In this extrapolation of themes (Smith, 1995), it was important to include outliers and negative evidence (Robson, 2002, p. 484), for example any confusions or contradictions which arose during group interviews; these were facilitated by emphasising to respondents that individual opinions were being sought and there were no right answers. A revised list of themes was created (Appendix L), which became the focus for the presentation of results. During the iterative process some of those themes proved less important, for example the exact coincidence of vocabulary used to explain an image, and resumed their subservience to the major theme of demonstrating the functions of imagery; this also changed the focus from Phase 1 to Phase 2 (Black, 2014, p. 217).

As this is qualitative data, it appeared more logical to present the results and discussion together (Smith, 2007, p. 77), which allowed more expansive writing after the data reduction (Smith, Flowers, & Larkin, 2009, p. 76). The amount of data necessitated subdividing its presentation, therefore, Chapters 4, 5 and 6 each contain results, discussion and analysis but deal with the types and modes of imagery, the contexts of imagery and the functions of imagery, respectively.

Chapter 4

Types and Modes of Imagery: Results, Analysis and Discussion

Introduction

During data collection for this current research, one of the most difficult tasks initially was to identify actually what constituted an example of imagery, as their appearances in the data were so varied. In this chapter, an attempt is made to identify the imagery as it occurred in this research and to classify it in terms of both type and modality. The types and modes initially related to the original categories for imagery (in Chapter 3) but have been modified over the course of data collection and analysis to produce the classifications in this chapter. The classifications here, therefore, refer to their occurrence within the data rather than their function, which is dealt with in Chapter 6, though there are inevitably connections between these.

4.1 Types of Imagery

Simple Images

Images such as *energy, light* or *swell* are classified as simple in the sense that they are short, often only one word; their succinctness is advantageous as they are time-expedient, for instance, numbers 1 and 2 in Table 4.1.1. Simple images were provided by all directors in this research and are identified as comprising a single idea, even if that idea is intrinsically elaborate and sophisticated. During early stages of data collection, simple images were the most difficult to classify; many were so commonplace in choral rehearsals they were initially viewed as descriptions of the sound. This is not the case however; rather the image initiates an impression which singers try to interpret vocally. For example, in number 1, a singer cannot literally put *energy* into a phrase or note; instead the singer interprets the energetic movement of a phrase using their breath to achieve a particular outcome.

Table 4.1.1 [16]

Types of Imagery: Simple; Multiple; Themed

No. / Dir.	**Example**	**Interpretation**
	Simple Images	
1 Ken	Put more energy into that moment	
2 Emma	And now with the sopranos, let's just keep it really light	Just not too heavy really, not too overpowering. (2Emma)
		Not too heavy, not dragging it all down, but keeping the pitch up and also the whole balance of the ensemble. (3Emma)
3 Tim	Ok, so just let's work on the swell a little bit.	Starting off slightly quieter and then you're increasing the sound and the feeling as you swell, a bit like a wave gains power (...) make it more powerful, more feeling, full of feeling really. (9Tim)
		Start quietly and move more loudly and also he usually says he wants it to be quite smooth as well. (10Tim)
	Multiple Images	
4 Emma	I'm just trying to make our singing smoother (…) and more instrumental in a way and a little bit lighter.	Try and connect the vowels more; an outward, forward sound. (2Emma)
		More lyrical quality to the voice; more in your head and towards the front of your mouth. (4Emma)
		Lower dynamics; not emphasise the [letter] D as much; singing more from here [abdomen]. (6Emma)
5 Tim	What I'm trying to do is to first of all, get us to sing a little harsher, and then step back into it. (…) I want us to find where the bite is, where that power is, and then, if it's a little bit too harsh, we can bring it back.	He means the rhythm because sometimes it's syncopated isn't it then if you don't get the syncopation, it becomes flat [tone not pitch]. (5Tim) I wonder if he meant that was the bite when you actually stop at some bit and then, otherwise it all rolls into one. (7Tim) I think that he says it means the rhythm, it goes with the rhythm. (5Tim)

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[16] Table 4.1.2 contains the remainder of the types of imagery. The tables are sub-divided simply for convenience.

		Yes he says if you bring it back, if we soften it or if it gets a little bit too harsh. (7Tim)
	Themed Images	
6 Ken	If we get slower, it's death to the music. We've got to keep the pulse really strongly. (…) and breathe really energetically between the phrases.	It goes slower and slower and slower and it would be impossible to actually sing well, because everything's slowing down and (…) you just don't see the end of the phrase, you don't see yourself getting there. Therefore it's death to the music, cos you feel you can't do it, it's a physical thing really, it's a breathing thing. (Ken)
7 Ken	This is the build up towards the battle as it says so it's kind of moments when (…) you're inspiring people to go into battle, go over the top, as it were, out of the trenches.	
8 Ken	You do these (…) sliding sounds, glissandi. (...) So come on then; start with intent and then back away, make it sound as though it's at distance. You can hear all the cries in the distance, as if you're then walking towards the wounded and you hear it more and more.	

The interpretation and variety of effects created by simple images, therefore, may be more complex than initially anticipated. The most obvious response to the word *light*, example 2, may be in terms of the tone quality; however, interpretations from two choir respondents demonstrate understanding to be more multi-faceted. One was concerned with tone quality and the relative balance of the dynamic and texture of the ensemble (2Emma, p. 1, ex. 1); the second also referred to tone quality and balance but incorporated his role as a bass in maintaining intonation (3Emma, p. 1, ex. 1). Although the single-word image contains only one idea and is, therefore, classed as simple, it affects four categories; (for Categories see Appendix C).

The idea of producing multi-effects also appeared in Tim's rehearsals, example 3, where the word *swell* implied a slow but gradual increase and decrease in volume. Even though the most obvious effect was a dynamic change, Tim did not use the words *louder* or *crescendo*, implying that the image was richer in meaning. *Swell* may have summoned up a visual image, for example the waves mentioned by 9Tim, which had the supplementary meaning of strength and power, added to the smoothness highlighted by 10Tim. Other respondents spoke of "control from the diaphragm," (2Tim, p. 1, ex. 1), or that the sound "resonates in the whole of the back of your head" (8Tim, p. 1, ex. 1). The combination of these four responses shows that *swell* influences changes in four categories, dynamic, tone quality, breath management and flow. It is interesting to note that two of those categories relate to voice production and technique, not immediately obvious from the original image, but certainly understood by respondents. Several respondents, notably 8 and 9Tim, spoke at length about the image, demonstrating the richness of their understanding. The single idea of a simple image, therefore, has an intrinsic wealth of interpretations and when applied in the rehearsal context, that multiplicity is retained. Simple images, therefore, are concise and comprise one idea which is full of meaning which respondents can comprehend. Some simple images are encountered so frequently in choral and vocal contexts as to have become regarded as technical terminology, for example *head voice* (discussed in Chapter 5), and some have become stock images (discussed in Chapter 4.3).

Multiple Images

Sometimes, several seemingly unrelated images occurred in close proximity to each other, usually in the same sentence. The manner in which they occurred, rather than any other distinguishing feature, is what causes them to be identified as multiple images, for example number 4 in Table 4.1.1. The three images in number 4 had no relationship to each other except that they could be combined to create the desired sound; whether the instrumental sound is smoother and/or lighter depended on the instrument and how it was played. There were coincidences within the interpretations of these images across some respondents; for example, respondents 2Emma and 4Emma stated how they would create the tone quality. However, considering the number of effects each simple image could create, that amount would increase considerably with multiple images.

The multiplicity of images and consequent effects was a possible cause for confusion, as shown in example 5. The conversation between two respondents demonstrated 5Tim's apparent conviction that the focus was rhythmic, but 7Tim's interpretation related to dynamic, flow and tone quality. It is not so important that respondents understand the images to relate to varied categories, but the expressions they used imply some insecurity in their comprehension. This is despite the 84% of Tim’s choir who stated they do not find imagery in general confusing or ineffective (see Appendix D, Q10).

Themed Images

The difference between multiple and themed images is that the images in the latter are related. It is a relationship through the meaning of the image rather than of the effect it inspires, where each phrase, word or expression within the theme embellishes or elaborates the main image. This relationship may be subconscious as in example 6, where it is unlikely that Ken decided beforehand to make the connection in all three images between slow, breathing, pulse and death. The connecting theme also has associations with maintaining consistent breath production, though this again may have been unintentional; the themed images correspond to the categories of breath management, flow, speed and rhythm. Ken’s focus during the rehearsal was probably on eliciting the appropriate response, rather than whether or how he was using imagery. However, his interpretation in the interview when asked to focus on the imagery had more obvious parallels between life ebbing away and the music slowing down. It appeared that the prompt of the original imagery had rekindled the entire theme referred to during the rehearsal several weeks previously. Each part of the interpretation provided more detail of the imagery, expanding and extending it with a comprehensive description of the result if *death to the music* was allowed to happen. The wide range of the themed image influenced several minutes of the rehearsal.

The themed image extended over a much longer section of the rehearsal in examples 7 and 8, where the text of two movements, *Hymn Before Action* and *Charge* from Jenkins’ *The Armed Man,* both focussed on a battle. Ken utilised this theme to illustrate the types of response he required on the choir’s first sing-through of that section. The underlying theme of motivation to venture into the unknown was transferred from one context to the other, the text to the rehearsal and may also have enabled initial attempts at interpreting the text. As the text generated the imagery, it is probable that the theme was a more deliberate choice; the result was that whilst motivation remained the theme of the text, it persisted as the effect of the imagery. Around eighteen minutes later, Ken was rehearsing the *Charge* movement, where the only text was the syllable *Ah*, example 8, with several instructions in the score including: “Sing any notes and randomly *gliss*. up and down (…) Breathe individually where necessary. Convey horror!” (Jenkins, 2003, p. 67). The Italian terms and other instructions were unambiguous in terms of choir members being able to understand them. However, Ken still supplemented these with several examples of themed imagery. The imagery served to locate choir members in the role of soldiers on the battlefield discovering the horror of the battle-charge for themselves. The two instances of the word *distance* accompanied by *walking towards* implied that the volume change was gradual, which was compounded by Ken’s imagery of the cries of the wounded getting louder as individuals neared them. Ken was trying to create a slow *crescendo* overall but with each singer working independently rather than following his direction as to how and when the volume increased. The independence of individuals was, therefore, important and was emphasised by personalising the location and role to choir members through the imagery, which was interpreted as the length or height of the *glissandi* or when singers breathed. Several categories were affected here, pitch, rhythm, breath management, tone colour, dynamic, texture and motivation; however, the most prominent category was interpretation, which was generated by the all-encompassing themed imagery. Choir respondents were not asked to alter the volume or tone quality in a specified way, but the constant and continued focus on the theme supplied so many opportunities for interpretation as to strengthen it and make it easier to accomplish.

Not only did the themed imagery pervade more than an hour of the rehearsal, but it also enabled a much more personal response from singers, particularly at a point in the score where that was essential. The independence, which may have been difficult with such large numbers who were used to reading from a score, was created through the imaginative connections Ken was constructing and generating in the singers. He did not prescribe the interpretation individuals should make, but the intensity of the imagery allowed it to stimulate whatever response each singer chose. The origin of the theme is obviously specific to that piece and was the springboard for all the imagery in that section of the rehearsal. However, it was the imagery which Ken invented from the theme which allowed both it and the text to have more impact on the singers. The battle theme shaped the whole of that section of the rehearsal, even to the extent of Ken dismissing the choir saying, “you’ve been very heroic tonight, well done!” (Ken, R1, p. 18:1). The text, the music, the interpretation and possibly the feelings of choir members were all influenced by the themed imagery, which added an extra dimension to the rehearsal.

Types of Images Combined

During rehearsals directors were seldom conscious of employing imagery, so any pre-planned consideration of which type of imagery to employ and whether to combine different types, was even less likely. It seemed that combining different types of images in the same phrase or sentence was common. (This does not include combining different types of imagery with different rehearsal strategies, which is examined in detail in Chapter 5.) Most types of image are susceptible to being combined, though obviously if two images occur in close proximity, they are by default either multiple or themed depending on the relationship between the images. A subtle way of combining images is where one image can be classified as belonging to two types simultaneously, for example numbers 2 or 3 in Table 4.1.1, which are both simple, stock images, or number 5, where both *bite* and *power* are stock images within the multiple setting, or numbers 11 to 13 in Table 4.1.2, which are a combination of multiple and negative images. Even simple images can produce more than one effect, so combined images are even more likely to do so. They also have more potential to confuse respondents because, as noted with multiple images earlier, if one type of image is not understood, the combination may either clarify or further complicate the director's intentions.

There are potentially many reasons why directors combine images, including the possibility that the very act of combining them is what makes the imagery effective. If each image provides a little more detail for how singers should respond, when directors combine imagery they do so because the response is so multi-faceted. Another suggestion is that only through combining images can explanations derive sufficient impact to be successful, but this implies that single images are not effective, which is demonstrably not the case. Directors may also combine imagery in an effort to provide differentiated methods of explaining their requirements and so address the different learning styles of their singers. In practice though, directors' choices are much less deliberate than these reasons suggest. Combined imagery is complex in terms of the difficulty of assessing what impact each separate type of image has. It has not been possible to separate the different types of imagery within a combined image and, as they were actually employed in combination, it is not constructive to do so.

4.2 Negative Images

Chapter 4.2 examines the phenomena of negative images. Many images employed by the directors were used to inspire the creation of a response but negative imagery was discernible for the opposite reason; directors invented negative imagery to indicate how the response should not be sung. Negative versions of vocal demonstrations have been documented since at least the late 1980s (Grimland, 2005), but the same is not true for negative imagery. Example 9 in Table 4.1.2 has inherent negative connotations in relation to singing and the fact that it is an aural image makes it even more applicable. By utilising such a strong negative image, Ken provided a persuasive message that the choir's response was definitely not what was required. The image was employed in a subtle manner, in that Ken did not actually state that the choir should not sound like a cat fight, but the implication was easily understood by the choir, as indicated by the laughter which followed the image. The appropriateness to singing and the strength of this image were what facilitated extra impact. The negativity of the image was compounded by Ken's vocal representation of cats fighting which followed it. Some of the subtlety of understanding between director and choir will have been built up over the 5-10 years Ken has directed that choir, but it is not uncommon in other situations. In example 10 the context was a one-off rehearsal with a collection of singers who had not sung with each other or the director previously. This is a negative image because the *face of a dead fish* is the undesirable response, rather than because the director asked the choir not to sing like that. The image was accompanied by a negative facial expression which had been at least partly generated by director DL's observation of the singers.

The first sentence of example 6, *death to the music*, is a negative image, an aspect of that image which was not examined earlier. Although it is part of a themed image, respondents were asked to explain their understanding of that sentence specifically; the difficulty of doing that is, however, acknowledged. Explanations by respondents 3, 4 and 7Ken demonstrated that there was no particular difficulty in understanding the image due to its negativity. The lack of forward movement of the phrase was noted by all three respondents, with 3 and 4Ken also elaborating on the result if the forward motion was not maintained. It is interesting to note also that all three respondents continued Ken's theme of *death* in their own descriptions; they have equated music and life, therefore, ceasing movement in one, stops the other. This is quite a subtle understanding and demonstrates that the meaning of the image in its current application, together with the response, was transferred from director to singers.

Table 4.1.2 [17]

Types of Imagery: Negative; Stock

No. / Dir.	**Example**	**Interpretation**
	Negative Images	
9 Ken	Some of you have got the idea. Some of you, it sounds like a cat fight!	
10 DL	Don't sing it with the face of a dead fish!	
6 Ken	If we get slower, it's death to the music.	It's just going to go right down, it's not keeping the forward motion, keeping the meaning. The music dies, it perhaps dips, you lose something, the impact. (3Ken)
		If you slow down too much, you lose the whole meaning, the whole pace of keeping the music going, the music's just going to fade away and die. (4Ken)
		Keep the music alive. (7Ken)
11 Ken	The temptation's to sing dead loud, so let's be quite subtle this time round.	
12 Rob	Don't just hammer it out, sing it more lyrically.	
13 Pete	The rhythms are slightly getting out of kilter (…) keep that toe tapping inside your shoe.	
	Stock Images	
14 Emma	We need to listen to her (...) so we need to be gentle.	
15 Emma	Just be really gentle at the beginning and listen to the solos.	

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[17] Table 4.1.1 contains the first three types of imagery. The tables are sub-divided simply for convenience.

Only two directors did not use negative imagery and of those who did, all but one generated amusing negative images, though it is difficult to state categorically which images are comical as this depends on the recipient's sense of humour. Many of the humorous negative images demonstrated not only the director's lively imagination but also his/her spontaneity. This type of image might be interpreted as hurtful or insulting if it was not presented in this manner, for example, Pete's "it was a bit of a stodgy start," (Pete, R1, 17:09), or Rob's "nice, but foggy" (Rob, R2, 35:30). The advantage of creating humorous negative images was that directors were able to criticise their singers' responses without sounding disparaging and in fact, although it may not have been a conscious strategy, the humour also motivated singers. When that occurs regularly it can be an approach which persuades singers to continue attending rehearsals, something which is always a concern with amateur choirs. Generating humour is individual to the director and context and would be unlikely in for example, the battle-themed imagery examined in Chapter 4.1. Through his frequent use of negative imagery, and by often using it in a humorous manner, Ken created a light-hearted atmosphere. Any tension built up by the demands he made and brisk pacing was dispelled by the frequent use of humour which pervaded both positive and negative imagery. Appendix N shows directors DL, Rob and Pete had comparable or higher percentages of negative images, and rehearsals with those directors were similarly congenial. Although this is an interesting connection, it is not possible to produce any statistical evidence which supports the idea; in fact 93% of Tim's singers said they enjoyed singing in his choir (see Appendix D, Q4), but he used no negative images at all so any correspondence between the two factors would need further investigation.

During the examination of examples 9 and 10 it was noted that directors accompanied the negative image with either a vocal demonstration or gesture which was also negative. Both strategies assisted in confirming the need to avoid whatever effect was under scrutiny, emphasising its prevention even further. Another method several directors used to highlight an incorrect response was juxtaposing a positive and negative image, for instance, numbers 11, 12 or 13. The contrasts these comparisons provided emphasised the dissimilarities between the two versions, helping any singers who were not discriminating aurally to ascertain the differences. As discussed in more detail in Chapter 5, when negative and positive vocal demonstrations were juxtaposed in this manner, they appeared in that order so the second version was the one which provided the correct response; although the same is true in examples 11 to 13, it is not the case for all positive and negative images. Most of the positive and negative pairings occurred within the same sentence, which firstly made the point succinctly, and secondly secured the pairing. It has not been investigated whether those same pairs recurred but they may be recollected as a pair, rather than as individual images, so the contrast would remain strong. In terms of the types of effects which were intended with negative imagery, the range varies with each director. There are no strong similarities between Rob and Ken, who used the most examples of negative imagery, though Ken is the only director whose examples spread across the whole range of effects (see Table 5.5). Other directors used so few examples that generalisations or evaluative comments are not useful.

During the earlier discussion of humour in negative imagery, there was an indication that it might cause resentment amongst choir members, as some examples could be interpreted as being offensive. When respondents were asked to recall imagery their directors had used previously, only one negative image was recalled out of 59 cited by Ken's choir (see Appendix E), and it was remembered by seven respondents. The image "running into a door" was recollected together with the response "to illustrate that we should sing through the whole phrase not anticipate the ending" (Appendix E, 41Ken). This had apparently been illustrated by Ken acting it out, resulting in laughter from the choir. No other respondents from any choir recalled any other negative images; there are several possible reasons why this might be the case. The one negative image which was recalled was consolidated by a humorous whole-body action, so the combination of those three methods prompted its recollection. Any possible detrimental effects of any other negative images have been cancelled out by being compared to positive ones so have been sufficiently unimportant as to be forgotten. It may be that the spontaneity and/or humour of negative images made them so specific to a particular context that, unless that exact context was re-encountered, the image was overlooked. It is not possible to verify any of these suggestions but, as negative imagery related to unwanted or inaccurate responses which were not intended to be remembered, it is advantageous that they have been forgotten.

4.3 Stock Images

Introduction

Chapter 4.3 provides a detailed examination of stock images. As data collection continued, it became apparent that some images were encountered repeatedly either within or across rehearsals; these are termed stock images. The repetitions were more or less frequent depending on the director; for example a director may have used a stock image repeatedly whilst rehearsing one piece of music but not on another, or alternatively it may have been utilised several times in one rehearsal but seldom in another. Directors used a particular stock image consistently to denote the same intention each time, such that the image became synonymous with the required response, for instance number 3 in Table 4.1.1 discussed previously. This implies that ultimately, the meaning and effects of stock images is consistent, as demonstrated in examples number 14 and 15, where Emma used the stock image *gentle* in both contexts to prompt singers to listen to each other. Stock images were also succinct, often simple images,[18] which enabled directors to use them without further explanation to the choir and are, therefore, useful tools in maximising available rehearsal time. They were usually distillations of previous, more extended explanations and through continued usage became brief emblems of what are often more complex ideas or concepts which both director and singers understood without the need for further explanation. Considering the relatively small number of images Emma and Tim used, the fact that over 40% and 30% of them respectively were stock images might be surprising, whereas those directors who utilised the most images, Rob and Ken, had 16% and 7% respectively (see Appendix N). This might be either an indication that some directors knew which stock images were reliable and used them frequently or that some directors used their imaginations more creatively in an attempt to match detailed explanations to the circumstance; without further investigation it is not possible to know which.

The questionnaires provided evidence that stock images were easily recalled (see Appendix E); for example an image, variously described as “stormy weather,” or “a storm brewing” (13 and 14Tim, Q8). The fact that both respondents labelled this image slightly differently indicated their understanding as well as their recall. Both respondents agreed on the required interpretation (13 and 14Tim, Q9), and both were also secure in equating the storm brewing image with a *crescendo*. Similar evidence was discovered with Ken’s choir, where explanations coincided with that of Ken, showing their understanding of the appropriate responses had been recalled in a later context. Stock images, therefore, become mnemonics for the full understanding of a concept, feature or idea and are recalled together with the appropriate response. The meaning can be constructed over several uses of the image, which enables directors both to consolidate the meaning and also to create additional aspects to it, producing a more comprehensive account of the image. Rather than rely on extensive explanations, directors are able to modify the image slightly which consequently modifies the meaning slightly. For example, Rob initially used the image *gong*, but then without further elaboration used *soft gong* and just a few seconds later *big gong* (Rob, R1, 38:53 to 39:10). As the stock image was already established, no further explanation was required. This is suggestive of a core effect for some stock images, a feature explored in Chapter 6.1, but has implications for newer members of a choir who have not been party to the original explanations.

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[18] The only stock image encountered which was a longer phrase was *the string on the top of a puppet’s head*, which occurred in Phase 1.4.

Stock images were employed not only by directors but became part of an internal language shared between a director and singers. It is a community language in the sense that it was created within that choir and belongs to those members because it is used by them. It is a language in the sense that it carries meaning from one party to another. There is evidence of the communal language being used by choir respondents, 1Emma for example (1Emma, Q8), or 12Tim, whose explanation for the *swell* image (12Tim, Q9) demonstrated she had not only understood and responded to the image during the rehearsal but could recall it and the response out of context. Similarly, other respondents used *swell* to mean an increase in dynamic even when explaining extracts where volume was not the focus (for example 11Tim p. 1, ex. 2 or 8Tim p. 4, ex. 4), demonstrating the stock images had become a regular part of their vocabulary, containing equivalent meaning.

Intra-Choir Stock Images

The images which are internal and specific to a particular choir and director are termed *intra-choir* stock images; the following example will illustrate this phenomena. Tim used the image *power* 10 times during the rehearsal (for example, Tim, R1, p. 5:1); of the 11 respondents in his choir, 8 used *power* or *powerful* a total of 48 times in their interviews, with three using it more than a dozen times each (for example 10Tim p. 5, ex. 4). It is precise vocabulary; for example there is a clear distinction in one respondent’s mind between *powerful* and *louder* (8Tim p. 2, ex. 2). The quantity of occurrences may not be persuasive, especially as the word *power* is in such common usage. However, if Table 4.2 is examined, apart from two respondents in Emma’s choir who used the word *over-powering* once each, there are no other occurrences of *power* or *powerful* in either of the other choirs, which might have been expected considering its prevalence generally.

Table 4.2

Tim's Stock Images

Images	**Number of Instances**		
	Emma	**Ken**	**Tim**
	6 respondents	9 respondents	11 respondents
Power	2 (over-power)	0	48
Swell	0	0	14
Harsh	1	0	6
Bite	0	0	12

Tim's use of *power* during rehearsals has been absorbed by his choir who employed it freely, whereas respondents in other choirs did not. There are more respondents in Tim's choir and they may have been following cues from the extracts they were reviewing, so frequency in itself is not convincing, but a similar pattern occurred with Tim's other stock images. Some respondents, referring to those same images, recalled Tim was "always saying that," (9Tim, p. 4, ex. 4), or "I think [that] is how he would put it" (10Tim, p. 1, ex. 2). They recognised Tim's discrete and distinct way of expressing himself, which they understood and were part of; it became a bond between them. Even if the intra-choir vocabulary was related to repertoire, it would confirm a sense of belonging, in the sense of *our songs* and *our language* in *our rehearsals.* The idea that intra-choir stock images might consolidate group identity is something which directors may be unaware of but appears to be a consequence of its use.

There is confirmatory evidence from Emma and Ken's rehearsals too of intra-choir stock images; Table 4.3 shows the frequency of each stock image within each choir:

Table 4.3

Intra-Choir Stock Images

Dir.	**Stock image**	**Emma** (no. of instances)	**Ken** (no. of instances)	**Tim** (no. of instances)
Emma	Light	9	0	0
	Smooth	5	0	0
	Deep	3	0	0
	Gentle	2	0	0
	Closer to teeth	2	0	0
Ken	Bright	0	4	0
	Strong	0	7	0
	Take a risk	0	4	0
	Energy	0	9	0
	(Put it) in the voice	0	4	0
	Challenge	0	6	0
Tim	Power	0	1	10
	Swell	0	0	8
	Harsh	0	0	2
	Bite	0	0	2

Except in the case of *power* which was shared once by Tim and Ken, no other stock image was shared with another director, revealing directors made repeated use of particular images which, presumably, they believed provided effective responses. They have created an internal vocabulary during rehearsals which their choir understands and responds to. Some respondents were aware of the regular usage of such images, for example “over all rehearsals he always talks a lot about (…) how important it is to put the energy into the breath,” (4K, p. 3, ex. 3), though as these comments were unsolicited, it is not possible to demonstrate any consistency with other respondents here. Other directors created a similar internal vocabulary (see Appendix O), showing that for some directors, it was a very distinct collection of imagery; for example, Rob included *yelping, spongy* and *glitter* which were not heard from any other director. As stated previously, repertoire may affect the range of images, but stock images, such as Rob’s *spongy* and *foggy* for example, were used in different pieces, and he used *glitter* and *epic*, for example, across rehearsals so there is no obvious correlation.

Inter-Choir Stock Images

In addition to the intra-choir stock images, a second type has also been encountered across several directors and choirs; these are termed *inter-choir* stock images. These are demonstrations of imagery's ability to be understood outside the original circumstance, and in this sense there are some parallels to standard Italian terms. Some reasons why these inter-choir stock images exist are easy to understand; for example, directors who have had previous vocal training or have sung in choirs are likely to have encountered imagery in that way. Director DW, for example, stated that if he heard someone else using imagery effectively, he would try it himself (DW, Int, p. 4:3). The seven inter-choir stock images encountered in this research are: *light, bright, bounce, energy (*or *energise, energetically), power (*or *powerful), crisp* and *punchy,* as seen in Table 4.3. If these images are indeed recognised across choirs, the data needs to be examined in context so their meaning can be established; this is only possible with the first five listed here so they form the basis of the discussion which follows, using Table 4.4.

Example 1: Light

Each time Pete used the image *light* it was in the sense of separating the sounds and keeping the rhythmic energy. The meaning of each appearance was clarified, either by another part of the explanation or an accompanying vocal demonstration (Pete, R2, 21:40). This left singers in little doubt as to Pete's intended response and as he used *light* consistently, each appearance consolidated their understanding (see Table 4.4 and Appendix O). Similarly in Emma's rehearsal, she consistently employed *light* with the same interpretation; however, this is where it differs from Pete's. Emma referred to tonal quality which four of her respondents clearly understood (for example 2Emma, p. 1, ex. 1). As with Pete, Emma clarified exactly what she intended with a vocal demonstration so there was no doubt as to the meaning.

Table 4.4

Exploring Inter-Choir Stock Images

Example 1: Light	**Respondent**
Keep it light and bouncy.	Pete
There’s quite a big difference between lighter sound of tenors and your [bass] sound.	Emma
A forward sound really, an outward, forward sound.	2Emma
Example 2: Bright	
Nice and bright [he raises eyebrows and gives very wide smile]	Rob
[To] see your faces brighten up.	Ken
Brighten the sound [so] it makes the building resonate.	Pete
Example 3: Bounce	
Make them [the quavers] slightly *staccato*.	Pete
Can we try and make this bounce a little bit more, let it dance.	Sam
Keep it light and bouncy.	Pete
Example 4: Energy	
[Sings negative demonstration first.] Long vowels, *legato* please; energetic words to make up for the lack of yelping.	Rob
That’s absolutely accurate, it’s fine but it’s like you haven’t got your amplifiers on, there’s no PA system, so can you give us a lot more energy.	Sam
[He counts them in *3, 4* very strongly; choir sings tentatively.] So *3, 4* suggests there should be a bit of energy.	Sam
Use less voice and more energy on the beginning of sounds. [models text]	Ken
Put more energy into that moment. [models rhythm]	Ken
Lots of energy on those *te te te te*. [syllables of text]	Ken
Example 5: Power	
You can only get that [power] when you’re singing from here [abdomen] not within your throat.	Tim
The biggest sound.	Ken

Whilst it is useful that each director is consistent within their own rehearsals, having two directors using the same term to mean two different things is problematic. As noted in Chapter 2, the possible variety of interpretations of imagery is one of the objections to its use in choral rehearsals. If the meanings and interpretations of imagery change from one director to another, directors would be well advised to avoid its use, even though this may be difficult to achieve in practice due to its regular place in ordinary language. Obviously, if singers were to transfer from one choir to the other, they would not only be confused by this inconsistency but would have to abandon one set of meanings whilst acquiring another. The situation would be compounded if, as is true for several of Emma's respondents, they belonged to two choirs simultaneously. This confusion assumes that singers would have heard and responded to a particular image sufficiently frequently to be conscious of its having developed an individual significance.

It is not possible at this stage to provide evidence for the justification for the difference in interpretations between Pete and Emma. There are many potential reasons, for example the difference in knowledge and experience of vocal technique between the directors, especially in terms of the imagery used by their previous vocal teachers. Another possibility is that because Emma's choir has only seven voices, the blend of tone colour between the singers is Emma's priority in all rehearsals. This is a more likely cause because all Emma's imagery, except *gentle,* relates to this category. Alternatively, it may be that the meaning of particular images tends to be culture or country specific. If this was the case, it would necessitate an examination of choral rehearsals across different cultural or national groups. Whatever the reason, this discrepancy may need further investigation or may indicate that the image belongs to the intra-choir type of stock images instead.

Example 2: Bright

A second example of inter-choir stock images has a connection to Emma's usage of the *light* image. All three directors who used *bright,* Rob, Ken and Pete, employed it to refer to a tonal quality which in vocal manuals, for example Vennard (1967, p. 121), was described as a forward tone. Both Rob and Ken encouraged choir members to smile, which guided them to create the sound by triggering the production of facial expressions which activated the facial resonators. In addition, by providing a negative vocal demonstration, Ken also generated smiles from choir members, which produced the required physical effect. Pete's invitation to "brighten the sound [so] it makes the building resonate" again demonstrated consistency in meaning, referring to head resonance; this effect gave the aural impression of a slightly sharper pitch, which Ken also intended. In contrast to the *light* imagery above, there was a dependable and constant definition generated by these three directors. Apart from the word *bright* itself, the directors did not use the same vocabulary as each other, which they might have done if they had learned a dictionary definition. They were inventing the exact wording at the time of speaking, whilst maintaining a solid conceptual understanding in their heads. Even if it had been possible to ask all three directors to discuss between themselves their understanding of *bright,* it is unlikely they would have found it easy to generate an indisputable definition. However, the degree of consensus in the meaning is obvious from the examples and context.

Example 3: Bouncy

Pete used *bouncy* to mean detached as was shown by the positive and negative vocal demonstrations which accompanied the image. He employed *bounce* with an identical meaning in the following week's rehearsal, and again provided a vocal model but also elaborated, asking for the quavers to be "slightly *staccato.*" In those examples, Pete's vocal models were integrated easily between repetitions of the image, and in the second example, the additional Italian term ensured there was no doubt of his meaning. Sam similarly accompanied his invitation, "Can we try and make this bounce a little bit more, let it dance," with a vocal demonstration of detached and separated notes. Pete and Sam did not confer with each other about the meanings they applied to the image *bounce*, nor did they listen to each other's demonstrations, but their intentions were identical. Both vocal models showed a light, detached phrase which confirmed the aims of the imagery. As with *bright* above, *bounce* is a simple image in the sense of being one word but it contains a variety of subtle meanings. The implication was of lively, energetic movement and also the separation of notes; not one detached sound but a series of them which emphasised the rhythmic nature of the phrase. In these two unconnected situations, the resemblances between the two instances are remarkable. There is, in addition, a consistency between Pete's two examples here and his "keep it light and bouncy" examined earlier; the level of agreement between the four examples is convincing.

As the interpretation of the image matched in all four situations, the necessity of the corresponding vocal models in three of them needs, therefore, to be questioned. With both directors, the demonstrations and imagery followed or preceded each other quickly. There was no time for thoughtful debate about whether Pete ought to sing or what type of sound Sam should provide. The connection between the *bouncy* image and the sung model was completely secure for both directors and probably sub-conscious. Both directors declared that they used imagery *very often* with their choirs and vocal demonstrations either *very often* or *sometimes* (Sam and Pete, Q5&6), so it likely that the association between the two strategies is cemented, especially as both have directed choirs for more than 20 years (Sam and Pete, Q1). As the imagery itself was so clearly defined in their own understanding, it may be that the vocal demonstrations were also stock vocal models which they regularly used to exemplify *staccato.* However, it is more likely that the idea of illustrating the imagery with a vocal model was a completely instinctive process which required no further consideration. In fact, Pete declared on his questionnaire that "the imagery clarifies the point," (Pete, Q9), rather than the other way round.

Example 4: Energy

Directors Rob, Sam and Ken all used the word *energy* during their rehearsals, with most examples provided by Ken. The word *energy* had several possible synonyms, all slightly deficient in their explanation of the word in its entirety. That is the essence of this stock image; *energy* is not simply effort, or volume, or life, or strength or drive, but is a combination of all these. This is where imagery is so crucial as it provides holistic conceptual understanding rather than a simple definition. Although directors could have said simply, louder or *più forte*, that does not capture all the essential features of *energy.* All three directors understood the complete meaning of *energy* in its most fully rounded, holistic conceptual sense. Each of the situations required the whole essence of the word rather than only more volume or more breath. The understanding of individual directors was secure but, as with *bright* above, was not expressed easily except with the image itself. The directors used *energy* because they wanted their singers to understand that completeness. There was an unspoken understanding across the directors, contexts and variations of experience or vocal skills. All three directors possessed that understanding without needing to consult each other. The fact that the understanding was unspoken and unsolicited demonstrated the advantage of this particular stock image and of stock images more generally.

Not only did all the directors share a conceptual understanding but they had common expectations too. All three directors used *energy* in relation to some aspect of breath management, though they also required something more simultaneously. Ken's focus was on using the breath to clarify articulation and create more rhythmic drive. Rob required the breath flow to be more consistent to create a smoother line. Sam expected greater volume with more powerful use of breath. Breath management was, therefore, at the core of *energy* for all three directors although none of them referred directly to it. This example has several important features; firstly, it generated a commonly held, holistic, conceptual understanding across those directors; secondly, there was a core effect (of the sort discussed in Chapter 6.1), which was also communal. Thirdly, the expectations of those directors when using the image were shared too, which in turn meant that singers would receive the collective understanding and be enabled to create the appropriate responses in relation to the given image, whichever director they sang with.

Example 5: Power

As with examples 2, 3 and 4 above, there was consistency within and between directors as to the meaning and interpretation of this image. Both directors employed *power* to mean loud with a strong, full tonal quality and what provided that power was, as Tim highlighted, correct breathing technique involving the diaphragm and abdominal area.

All of the examples of inter-choir stock images discussed so far were encountered within the data collected for this research; however, several have also been located in the wider literature. Appendix P provides a selection of nineteen examples of the same images encountered in different publications, some with a detailed explanation of how to achieve the desired effect, for example "spinning the tone" (Carrington, 2012, p. 289). There is also a smaller selection of published inter-choir stock images which coincide with some collected in this research. It is obviously not possible to trace the provenance of each of those examples, but it is important to note their existence in order to show this phenomenon exists outside the current research.

Summary

Stock images aid transmission of shared meaning between director and singers, which includes a collective understanding of the appropriate response; their mnemonic facility includes that response. Stock images are formed over a period of time, during which they acquire holistic conceptual meaning, without the need for constant repetition, making them time-efficient in rehearsal. Stock images acquire specific meaning within their context and are, therefore, associated with the same feature, attribute or effect each time they are employed, making them dependable communicators for the director's intentions.

The shared language of stock images creates the opportunity for consolidating the relationship between director and choir. Sometimes this is based on a distinctive and exclusive set of intra-choir images which prove to be reliable transmitters of the required responses. In addition, inter-choir stock images are found and understood across directors and choirs, and in some cases, outside of the current research. The ability of stock images to transfer contexts demonstrates a consistency of meaning which has some equivalency with more standard musical terminology.

4.4 Modes of Imagery

Introduction

In Chapter 4.4 the discussion moves to the modality of imagery. The original categories for imagery, examined in Chapter 3, included dividing imagery according to type: visual, aural, kinaesthetic, conceptual (with either musical or non-musical reference), textual, emotional and Italian terms. The textual and Italian/musical terms are not discussed here because, as noted in Chapter 3, they are not in fact modes of imagery. It is valuable, though, to investigate the imagery in more detail, referring to its modes, rather than types. Table 4.5 shows the final key to the modes, including any revisions discussed in Chapter 3.

Table 4.5

Final Key to Modes

Mode	**Visual**	**Aural**	**Kinaesthetic**	**Emotional**	**Conceptual: Musical**	**Conceptual: Non-musical**
Code	V	A	K	E	Cm	Cn

Several initial ideas for the modes were taken from poetic imagery and figurative language, where ideas, objects and actions are represented through the physical senses (literarydevices.net/imagery, 2013). Cuddon adds that feelings, thoughts, states of mind and any sensory or extra-sensory experiences may be denoted by imagery (1979, p. 322). These ideas widen the range of modes considerably and partly indicate why imagery is so widespread. The notion of drawing together apparently unrelated experience in an image is also evident in poetic imagery (Encyclopaedia Britannica, Poetic Imagery, 2015). In addition to these, Paivio and Begg include conceptual images and synesthetic experiences, in which a transposition of modalities exists (1981, p. 272). Examples of all these modes appear in Table

4.6. As has been shown in Chapter 2, multi-modal, or multi-sensory images abound (Douville, 2004, p. 36; Mountain, 2001, p. 278; Price & Byo, 2002, pp. 345, 347). The multi-sensory nature of images allows directors to access multiple learning styles (Durrant, 2003, pp. 23-6), and encourages the inclusion of the imagination (Williams, 2013, p. 146). Given the close interrelationship between different aspects of vocal technique in addition to interpretation, expression and accuracy, it is not surprising that multi-modal imagery is efficacious in affecting all these aspects. At Phase 1.1 the modes were being initially established through their categorisation, and at Phase 1.4 images were reported via questionnaires, so it is more useful to examine the modes at Phases 1.2 and 1.3 with directors Rob, Sam and Pete. Illustrative examples of these are provided in Table 4.6.

Table 4.6

Examples of Modes

Example	Director
1. Did you hear the S of dress? It was like a pipe bursting	Sam
2. It's fine but it's like you haven't got your amplifiers on, there's no PA system.	Sam
3. It's not got the Viennese glitter	Rob
4. Keep it light and bouncy	Pete
5. Cut yourself on these words	Rob
6. The word for this is 'nervous' do you remember?	Rob
7. Don't forget we chuckle there tenors and basses	Rob
8. Like a trumpet	Pete
9. You sound like you're being startled	Rob
10. Altos can you set the lilting scene a little bit more	Rob
11. Just sail through the long note	Rob
12. If you brighten the sound it makes the building resonate	Pete
13. It's piling on the splendour all the time	Rob

Examination of Modes

All three directors provided examples of modes which relate to the physical senses, for example numbers 1-8 in Table 4.6. A single sense is central to some of these, for example number 1 where the image is auditory. Others retain the physical focus but could also be interpreted as being multi-modal, for example number 8; in this example Pete does not refer to how the trumpet appears or how it might be played or what feelings the trumpet might evoke, but only to its sound, which the singers were being asked to imitate. However, it can be perceived that in order to sing like a trumpet, the singers would need a prior aural concept of that sound. There are several images which relate to emotion, for example numbers 6, 7 and 9, and all of these are multi-modal. Example 6 shows the interrelationship between singers' emotional understanding of what it is to feel nervous and their kinaesthetic response to that emotion. Example 10 requires a conceptual understanding of what *lilting* music might be; similarly example 3 combines a conceptual and visual imagining of how *Viennese glitter* might appear. These examples demonstrate the close interrelationship of the modes.

Some of the most striking examples are the synesthetic images, for example 5 and 11; in these the transposition from movement to sound or from feeling to articulating sounds is complete. Example 12 may also come under this category, but in addition it requires understanding of two different concepts, the first of a bright vocal sound and the second the idea of a building resonating due to that sound. Another view of this example is that it might not strictly be an image; if the choir's tonal quality was changed to be much brighter, depending on the acoustic, it may physically make the building resonate more which was what Pete requested. Example 7 has a similar level of complexity; the idea of *chuckling* immediately presents an emotional response, but Rob does not expect the singers literally to chuckle, rather to imagine what that would feel and sound like.

As has been demonstrated, categorising the modes is not straightforward and depends on the level of sophistication employed and the depth to which the categories and images are investigated. The difficulties might also simply demonstrate the fallibility of the categories themselves and their application early in the research. In addition, as examining the modes does not demonstrate any connection to the efficacy of imagery, the process appears peripheral to this research. Simply counting the number of occurrences of each mode is not beneficial, as some multi-modal images combined only two modes, whereas others combined three or four; see Table 4.7. (This explains the difference between, for example, Pete's 16 total imagery examples, but if each mode is added together, Pete's total number of modes is 25.) However, it is valuable to examine some aspects of Table 4.7; this provides percentages of the separate modes in relation to each director and, within those, the percentage of multi-modal images is given.

Table 4.7

Occurrences of Modes

Mode	**Rob**		**Sam**		**Pete**	
	% Total	% Multi	% Total	% Multi	% Total	% Multi
Visual	3.2	100	20	100	4	100
Aural	13.9	100	20	100	8	100
Kinaesthetic	8.6	100	13.3	100	28	100
Emotional	8.6	100	0	0	4	100
Conceptual: Musical	**16.1**	**86.8**	20	100	12	100
Conceptual: non-musical	**49.4**	**67.4**	26.6	100	**56**	**78.5**
Total no. of modes	93 (100%)		15 (100%)		25 (100%)	
Total no. of imagery examples	53		6		16	

Some differences between the three directors are immediately apparent, for example the total number of images used and the range over each mode. The natural occurrence of imagery as a feature of everyday language, as highlighted in Chapter 2, is confirmed by the evidence of its frequent use by Rob. The variety of modes Sam used is slightly more limited than either of the other two but includes a higher percentage relating to the physical (visual, aural and kinaesthetic) senses.

Table 4.7 shows the largest proportion of images for all directors to be conceptual, comprising 46.6% of those provided by Sam and more than 65% of each of Rob and Pete's images. Of those, the non-musical concepts outweigh the musical concepts though only slightly in the case of Sam. As discussed in Chapter 2, imagery is extremely useful for developing conceptual understanding, especially in relation to some of the inexpressible aspects of music. Some of the conceptual images in Table 4.6 are evidence of Zbikowski's idea that images capture concepts which might be blended through the imagination (2002, p. 111).

The high percentage of conceptual as opposed to other modes of imagery seems to indicate a more complex view of imagery than simply illustrating an idea with a single concrete example. If this were the case, more visual, aural and kinaesthetic modes might be expected. The connection between imagery and visualised images is strong, with several definitions in Chapter 2 including the notion of pictures in the mind. The small percentages of visual imagery provided by Rob and Pete might, therefore, appear unusual. It is also worth noting that amongst this data, none of the visual images related to envisaging the inner physiological processes of singing. Taking into consideration that the focus of the images is to illustrate music, it might have been predicted that more aural images would have been encountered but the heavy reliance on auditory imagery which Callaghan, Emmons and Popeil mention (2012, p.568) is not in evidence. Only Pete provided a larger proportion of kinaesthetic images than visual or aural. Singing requires physical movement, even if some is very slight, and music generally can be described in terms of how it moves, so a lack of kinaesthetic imagery is of interest. This may be due to Pete's individual creative ideas but might also indicate something more of the complexity of imagery. Despite the fact that music can relate to and release the emotions, it is remarkable to find such small percentages of imagery which provoked an emotional response. None of the directors used emotional imagery more than imagery related to the senses. There is no emerging pattern of which modes are most frequently used, and this may simply indicate conscious or sub-conscious personal preferences of individual directors.

As demonstrated in Table 4.7, only three cases of multi-modal images (those in bold) are different, demonstrating their preponderance within the choir contexts examined in the current study. With Rob for example, 3.2% of the total images are visual images and all of those visual images are multi-modal. This is also true for Rob's aural, kinaesthetic and emotional images. The same applies to all of Sam and Pete's physical and emotional imagery too, but it is with the conceptual imagery that this is not always the case.

All the single-mode images are conceptual, as demonstrated by number 13 in Table 4.6. The concept of *splendour* is not contextualised; it is not closely associated with a specific type of sound nor is a particular aural goal mentioned. The interpretation is open to anyone who understands the meaning of the word *splendour*. Conceptual images may be the most frequently encountered single-mode images because they already comprise such a richness of meaning; that richness is transferred to the type of sound and interpreted in a holistic way. This is a positive association as it benefits a holistic understanding of vocal sound.

The proportion of multi-modal images as opposed to single-mode images is overwhelming and may be partly explained by the large number of conceptual images. However, it is an important finding, as it demonstrates the holistic nature of imagery and the concomitant flexibility this provides in choral rehearsals, since it allows the responses to imagery to be multi-dimensional. With further evidence and more robust categorisation, the relative proportions of multi-modal and single-mode imagery might be worth investigating at a later stage, but it is marginal to the current study.

Summary

One of the advantages of the variety of modes and the number of multi-modal images is the opportunity to access the range of learning styles noted in Chapter 2. This versatility allows a director to create an image which can be understood and interpreted by a diverse group of singers simultaneously. This constitutes effective practice when rehearsal time is limited, especially if the choir is sizeable.

As has been noted above and in Chapter 3, a decision was taken not to investigate the various modes of imagery during Phase 2; however, some conclusions can be drawn from their examination with the Phase 1 directors (Rob, Sam and Pete): the modes are intricately interrelated which presents difficulties in separating the categories; any single-mode images were conceptual images and these may be particularly powerful; the vast majority of images were conceptual allowing for a comprehensive understanding of the concept illustrated; images were predominantly multi-modal which enabled holistic responses. The final two points here are most important as they are associated with the holistic nature of imagery in general and its ability to promote conceptual understanding of complex vocal responses.

The contexts, effects and functions of imagery are investigated in the following two chapters.

Chapter 5

Contexts of Imagery: Results, Analysis and Discussion

Introduction: Contrasting Contexts

This chapter demonstrates the relationship between imagery and the other rehearsal strategies observed, in order to contextualise the imagery. The strategies, SRS (stop, repeat segment [19]), vocal demonstrations, gestures, Italian terminology and technical terminology, are first examined individually; the strategies are then investigated in combination in Chapter 5.6.

The choir and director profiles (Appendix A) show some of the variations between choirs, for example the venue, size of choir and differences in vocal constituents between Emma's seven-voiced a cappella university choir and the large city choral society directed by Ken. These differences obviously had an effect on repertoire and types of performance but might also subtly affect both singers and directors. For example, the fixed choir stalls where Rob's choir rehearsed created physical barriers which were not present during performances, which might have created feelings of vulnerability and, therefore, lack of confidence during performance.

Each of the directors had their own individual style of rehearsing, some focussing almost exclusively on correcting musical detail, whilst others were keen to allow singers to sing extensive sections without stopping. Some directors incorporated strategies to develop singing techniques in general, whereas others dealt solely with learning the piece being rehearsed. These differences depended on many factors, including proximity to the performance. In terms of repertoire and function, most choirs in the research sang a range of western art music and standard choral repertoire, though one tended towards contemporary repertoire, two mainly gospel music, and two also sang at church services; there are three chamber choirs, and Emma's choir had one voice per part. In order to examine imagery within these varied contexts, it is necessary to investigate the range of strategies employed.

Choice of Strategies

Whilst gathering data on the functions and effects of imagery during choral rehearsals, it became obvious that it was not easy to locate examples of imagery in isolation.

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[19] See key terms.

The constant presence of four other rehearsal strategies (vocal demonstrations, technical explanations, gestures and the use of Italian terminology) would also impact on the research. The attempt to preserve the ecological validity of rehearsals resulted in information being gathered on those strategies as well because they usually appeared in close proximity to the imagery. In some cases the strategies occurred consecutively, sometimes simultaneously. In addition, directors frequently asked choirs to stop and repeat a segment of the music, in the manner of rote learning, to help singers to remember a particular phrase.

Several of the extracts chosen for the interviews were complex, consisting of several images or a variety of strategies, for example those in Table 5.8. That complexity was unavoidable even with the shortest of extracts; consequently, it is not necessarily possible to ascertain which strategy, or which part of the extract, affected the resulting change in sound. It may not be desirable to try to create competition between the strategies to establish which is the most successful, as every case is contextually individual. What is possible is to identify the types of strategies and attempt to explain their effects whilst still maintaining a focus on imagery.

5.1 Individual Strategies: Stop, Repeat Segment (SRS)

All directors asked their singers at some point to stop and repeat a section of music they had just sung (SRS); most of these were quite short, often one word or a couple phrases. This strategy allowed directors to highlight the example, adjust or correct it where necessary and enable singers to remember it more easily through the repetition. Tim's choir did not use notation so repeated sections more frequently than other choirs. Tim had a clear definition for this strategy:

> Sometimes [laughs] I keep going over and over and over, until I've got it [got what I wanted]. But then I will say, "that's it!" I call that the *memory moment* because if you know what you did, and took the memory of what you did at that moment, then you know how to repeat it again. So if it's a bad thing, then you take the memory moment of what's bad and what to avoid, but if it's good, you take the memory moment of what's good. (Tim, p. 6, fq)

Some of Tim's *memory moments* are used similarly to negative imagery, contrasting the correct and incorrect versions. SRS serves to fix the sound and to preserve it for future reference. It is noteworthy that Tim stopped the choir when they performed a phrase appropriately rather than only stopping when something needed adjusting, as was the case with Ken’s choir (4Ken, p. 5, fq).

Singers recognised SRS as a helpful strategy used deliberately by their directors and realised that the attention to detail resulted in an improvement of the sound (3Ken, p. 5, fq). Once the singers were stopped, directors used a variety of strategies to bring about their required improvement. SRS was useful as a way of remembering the response and this was the most common reason singers cited for the use of SRS; it helped “get it into the mind” (2Ken, p. 4, ex. 4). 5Ken gave a more detailed explanation:

> Preparedness is the main thing. Once you realise what’s got to happen in that semiquaver, or quaver of space, it’s knowing what you’ve got to do and how you’re going to deal with it. And once you’ve practised dealing with it, it becomes practicable, whereas the first time in, it might be a bit of a mess (5Ken, p, 3, ex. 3).

This goes some way to explaining the efficacy of SRS; the interruption draws singers’ attention to the phrase but the repetition allows singers to adjust it and remember the response when it is back in context.

As with imagery, an improvement can be produced in several aspects of the sound simultaneously; in this respect, SRS is an efficient strategy in terms of time. However, if the phrase was sung repeatedly, that expended rehearsal time; some respondents recognised the balance between these two factors when SRS was employed (3Ken, p. 7, fq). SRS was found to be tedious (2Ken, p. 5, fq), and some respondents preferred to sing through whole sections as that allowed them to get “in the mood for the song,” and “to get more of a feel for it” (3Tim, p.3, ex. 3). When learning a piece, singers need to gain a more holistic understanding of the piece, especially in terms of its structure and the role of their voice part. That might be even more important with Tim’s choir, as they were not able to see the overall picture via the score.

5.2 Individual Strategies: Vocal Demonstration

Introduction

Vocal demonstrations are an integral part of choral rehearsals. Durrant, for example, includes them in his model of an effective choral conductor (2003, p. 100), and in his model initial conducting course. He suggests that directors need,

> the ability to demonstrate accurately and musically, which will involve singing and/or playing at appropriate pitches and rhythms; also tonal quality and intonation for the singers to hear and emulate; it might also include demonstrating how not to do something. (Durrant, 2003, p. 101)

All the directors included vocal models to some extent, as was the case for all of the conductors videoed as part of Garnett's book (2009). The frequency of the demonstrations depended on the individuals; director DR provided the fewest and Ken provided the most; however, the frequency is less influential than their quality and appropriateness. As Tim's choir did not use notation, Tim taught all aspects of their repertoire through vocal or keyboard demonstrations and verbal instructions. This meant Tim's choir relied on his demonstrations for a greater amount and variety of information than any of the other choirs. For example, Tim provided not only pitches, rhythms, tonal colour and text but also structural detail and how a pattern in one voice part was reflected in another (Tim, R1, 3:1); this was an impressive amount of information transmitted in a most succinct manner.

Apart from pitches and tone quality, vocal demonstrations provide one aspect which no instrument can supply, that is the text. Durrant suggested (2003, p. 101) that demonstrations could be sung or played, but this does not take into account the formation of vowels and consonants, the articulation of words in their entirety, their pronunciation and the meaning of the text. Articulation is a core aspect of vocal production and was the focus for substantial sections of some rehearsals, especially in Ken's case. On occasion, words were articulated separately from the pitches in order to clarify not only how the rhythm and text related but also specific pronunciation and vowel shape. None of these could be determined by anything other than a voice hence it was essential they were expressed through this medium. Both types of demonstration are discussed in this section, that is, sung with pitches or verbalised without pitches, including sometimes only part words.

Choice of Model

Demonstrations on a piano or keyboard are not included in this section even though they are acoustic models of the music in the way that verbal explanations are not, but are not central to the discussion. Their purposes are worth recognising though, for example, changing the timbral settings of the keyboard to a sustained string sound which modelled the air-flow of a voice or providing starting pitches or demonstrating chord progressions with one voice part louder than another. There were other less advantageous models: "Ladies and gentlemen no, it's legato" [Rob plays first time all legato, second time plays staccato] (Rob, R1 5:19). Due to the action of a piano, with hammers hitting strings, this could never be an accurate model for a smooth vocal line, however skilled the player.

Forms of Vocal Demonstration

The vocal demonstrations employed by directors can be divided into four groups: direct instruction and correction, sung clarification, spoken clarification and negative demonstrations. As expected, Tim used vocal demonstrations throughout his rehearsals as direct instructions to singers, to model all aspects of their singing, for example, pitch, rhythm, text, structure, timbral quality, dynamic and speed. Choir members subsequently remembered the models, learning repertoire by rote. However, several other directors also used vocal demonstrations to provide direct instructions, particularly when an error had been detected, for example number 1 in Table 5.1. These supply the most succinct, correct version of the model to be emulated, rather than a longer verbal explanation or a director simply requesting that singers read the notation more accurately.

In addition to exemplifying *what* to sing, it is not surprising that vocal demonstrations were also used to provide clarification of *how* to sing a phrase (for example number 2 in Table 5.1). Here the director's voice provided a timbral model, in addition to demonstrating pitch or volume, which could not have been illustrated by any other means. Vocal demonstrations are completely integrated into the flow of the rehearsal as shown in several examples.

A number of demonstrations also clarified how a word was to be performed, but were spoken rather than being sung. This third group of demonstrations focuses on articulating words, syllables or letters and, therefore, rarely includes the demonstration of whole phrases.[20] A typical example is number 3 from Table 5.1 where the detail supplied by the vocal demonstration was not contained in the score, nor did the model require the pitches which might have obscured the focus on articulation.

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[20] This group is included within vocal demonstrations as the spoken version of the word or syllable functions in the same manner as a sung model, rather than an explanation in words.

Table 5.1

Examples of Vocal Demonstrations

	Example	Director
1	So you can [she sings] and you can take a breath. You can change a breath on the long note here.	Emma
2	When you go [he sings] make that really strong, you know, very bell-like [he sings] don't hold back.	Ken
3	*Puh,* a nice crisp *puh* sound.	Rob
4	We're going to go from [text] because what we're getting is [he sings loudly at the start] instead of [he starts quieter with crescendo] ok?	Tim
5	Did you hear the [letter] S of dress? It was like a pipe bursting, *dressss s.* Can we just have one S at the end?	Sam

Negative vocal demonstrations, that is, demonstrations of what should be avoided, were used by directors in all stages of the research. These provided precise models which singers could easily distinguish from the positive version as they were frequently given alongside each other, as in number 4 in Table 5.1. The negative demonstrations emphasised what may or may not have been in the score but in a much more obvious manner due to the two contrasting versions. It is interesting to note that the final version is the one directors wished their singers to imitate, the correct rendition serving to cancel out the negative one. A number of the negative models were spoken rather than sung, for example number 5 in the Table 5.1, combining features from two groups of demonstrations.

Function and Effectiveness of Vocal Demonstrations

The examples of vocal models in Table 5.1 also show some of their functions. They provide singers with the simplest, most concise and accurate illustration of what directors require. This is one of the attributes Decker and Kirk (1988, p. 108) advocate as one of their principles of choral rehearsals. Many such examples are easily recognised and replicable, for example number 1 in Table 5.1. Vocal models may supply precise detail concerning only one aspect of the sound, for example articulation, as in number 3 of Table 5.1. Alternatively, they can provide information about different attributes of the sound simultaneously, as in number 2 of the same table. Unlike with technical terminology, there is also evidence that vocal demonstrations affect the entire range of categories including interpretation and motivation (7Tim, p. 3, ex. 2). Demonstrations may be more efficient rehearsal strategies than the use of technical vocabulary because they have a wider range of effects.

Timbral models which would be impossible on another instrument can be provided vocally, and these can be used to identify the detail directors wish to hear, whether or not this is supplied by the notation. Another aspect which could not be modelled by anything other than a voice was mentioned by 2Tim (2Tim, p. 4, ex. 3), who used not only the voiced part of the model but also the physical appearance of it to guide her in terms of tone colour and mouth shape.

Vocal demonstrations can replace long and detailed verbal explanations and it may be that vocal demonstrations are always more accurate, simply because the required outcome is sung rather than spoken; singers can, therefore, relate closely to the sung model. In terms of efficiency, 90% of choir respondents thought vocal demonstrations were very effective, with respondents saying they found their director's vocal models more effective than any of the other strategies examined (see Appendix D, Q6). Eighty per cent of respondents who commented found that vocal demonstrations were very useful, particularly because of the accuracy of the model. There were a variety of reasons why this strategy was deemed to be effective: "to check understanding of verbal explanations" (5Emma, p. 3, fq); they are "less ambiguous than imagery and can affect a variety of categories" (4Emma, p 3, fq) and "quicker than verbal explanations" (11Tim, p. 1, ex, 1); can "consolidate understanding when listening to other voice sections" (9Tim, p. 4, ex. 3).

Although directors were not asked to state why they used vocal demonstrations, the fact that all the directors in the research did so to some extent, with around 85% utilising them very often, provides some indication they are deemed to be useful. Both Ken and Tim believed vocal models to be very effective in transmitting what they required to their choir, whereas Emma thought they were more successful when combined with imagery. Emma was also aware that the efficacy of vocal models might not be immediate (Emma, p. 2, ex. 2), though she was keen to stress that they were definitely helpful. Ken was more vehement, saying "I do feel very strongly that I should demonstrate vocally. I think that's the number one priority" (Ken, p. 7, fq).

It is not possible to deduce from the data whether directors used vocal demonstrations simply to add variety to a rehearsal. This is unlikely though, at least in Ken's case, as he provided many of the models subconsciously, only realising this when he saw rehearsal extracts in interview. It may be that directors used vocal demonstrations as a motivational tool in rehearsals. Directors L, Rob, Sam, Pete and Ken certainly provided humorous negative models which resulted in laughter from choir members and created an enjoyable atmosphere. Sam's "pipe bursting" (number 5 in Table 5.1) is a good illustration of this.

One respondent highlighted the quality of Emma's vocal models as being important for providing "a really good way of learning" (3Emma, p. 3, fq). The characteristics 3Emma heard would obviously have an influence on the way he responded to that model. All of Emma's singers commented positively on the effectiveness of her vocal models and how easy they were to follow. It is not clear, however, whether the effectiveness of the demonstrations was because of the excellence of Emma's vocal models or that Emma's choir were a small group of skilled singers and, therefore, were able to hear more distinctly and respond with that same level of detail.

Negative demonstrations were perceived to be precise and easy to interpret (9Ken, p. 3, ex. 3). Respondents were able to pay more attention to the difference in vowel shape, for example, by comparing two models, first the negative then the positive version. Similarly, number 4 in Table 5.1 contains two versions of the phrase. Number 5 in the same table has a brief explanation instead of a positive version, but this still serves as a contrast showing singers what to avoid in addition to how to sing the phrase. No cases of singers being unsure about how to respond to vocal demonstrations were negative models. It appears that negative demonstrations, like negative imagery, are just as simple to interpret as their positive counterparts and may even be more effective.

Accuracy and Imitation of Vocal Demonstrations

In order for vocal demonstrations to have the most effective results, there must be three components: an accurate model from the director, analytically attentive listening and appropriate vocal response from choir members. Ken believed that vocal demonstrations were essential, even with professional singers, because the director needed to show they understood what was required in the music (Ken, p. 7, fq). However, he regarded the accuracy of the model as fundamental and was quite critical of some of his own modelling (Ken, p. 6, ex, 4), especially when his choir were listening attentively enough to recognise precisely what Ken was demonstrating and imitated his errors. This may be one of the reasons why negative demonstrations are used as they highlight specific differences between the correct and incorrect versions and, therefore, make the analytical listening easier.

Despite the positive comments noted earlier, two of Emma's choir were not convinced that vocal models were always useful. There was some insecurity from 5Emma as to whether she would actually have the vocal skills to imitate her director (5Emma, p. 1, ex. 1), and 3Emma was also unsure whether the demonstrations helped (3Emma, p. 1, ex. 1), which rather contradicts his opinion expressed elsewhere (3Emma, p. 3, fq). Although 6Tim found vocal demonstrations really useful because they were "portraying exactly what he [Tim] wants," she also recognised that other choir members did not necessarily agree (6Tim, p. 4, ex. 3). These comments suggest that, in general, some vocal demonstrations are more useful than others.

As can be seen in Table 5.1, all except number 4 were accompanied by verbal clarifications. It is not clear whether directors were conscious of using this combination of strategies during their rehearsals, though both Emma and Ken noted it on the questionnaires (see Appendix F, Q11). Nor is it possible to know whether a director thought that the particular model they used, or vocal demonstrations in general, would be inadequate without verbal clarification. However, any gain from the additional detail supplied by the explanation results in a loss of brevity, which is one of the advantages of vocal models.

All examples of vocal demonstrations provided in the data were combined with other strategies, most frequently with verbal explanations. Although Ken regarded vocal modelling as a priority, he also acknowledged, "sometimes you have to explain it technically, if it's not going in" (Ken, p. 4, ex. 2). The implication here is that some choir members may not be able to recognise aurally what Ken intended them to hear and that even if his vocal models were accurate, he might sometimes have to indicate this verbally.

One question that emerged from 11Tim was whether in fact choir members *should* be trying to imitate their director's vocal demonstrations. In particular, she was keen to differentiate between modelling *what* should be performed and *how* the more expressive qualities should be determined, as she explained:

> With notes and things like that, it's fine (…) but I think you can be too reliant on him. You actually end up trying to copy him, and I don't think that's the way it should be. (…) That's not really the way gospel's work, cos every performance can be totally different, although you're singing the same song. (11Tim, p. 4, ex. 3)

Although she was focussing on interpretation and stylistic performance of a particular genre, the same notion is relevant to other choirs. It also raises questions about how far it is possible for anyone to imitate another singer exactly. Even in Emma's choir, where there were only a few singers with good vocal skills and accurate models, it was physically impossible for the timbre of any one singer to be the same as another. The most that could be hoped for was exceptional vocal blend amongst the singers, which Emma was striving for.

Vocal Demonstrations and Imagery

The discussion relating to different forms of vocal demonstrations has so far omitted demonstrations which refer to imagery; however, this was the case in examples 2, 3 and 5 from Table 5.1. In number 3 for example, Rob illustrated the crisp articulation he wanted. In the same way that directors had clear aims for imagery when employed separately, they knew exactly what they required when they illustrated an image vocally. Whether the image illustrated the model or vice versa is difficult to determine from the rehearsal context, but the combination of the two strategies allowed singers to understand the meaning.

Directors might have illustrated imagery vocally because they did not believe the imagery alone was able to fully convey the details of how they wanted their singers to respond. However, if this was true, the same would apply to all other vocal modelling where a demonstration illustrated a technical feature or clarified a verbal explanation. It is far more likely that directors used the strategies in combination simply because they were available to them as useful ways of transmitting their requirements. It is also likely that directors used these sub-consciously, as they did with the strategies separately.

Summary

One of the functions of vocal demonstrations is direct instruction, employed frequently by Tim but also by directors whose choirs had accurate information in the form of notated scores. A key feature of many guides to choral conducting, for example Durrant (2003, p. 93), is that of detecting errors, though Smith and Sataloff suggest that this needs to be accompanied by a "tool for adjustment" (2006, p. 212). That tool might easily be provided in the form of a vocal model. The model, therefore, can provide not only a correct version of *what* is required but also a clarification of the *manner* in which it can be performed. It also allows singers to check whether they have understood any verbal or notational instructions. The extent to which singers have the vocal ability to reproduce the required sound depends on individual singers and affects all strategies directors might employ. The nature of individual voices might also mean there may be different interpretations of vocal models across a choir, as 8Tim mentioned (8Tim, p. 2, ex. 2). Both of these points also apply to imagery.

In common with imagery, vocal demonstrations are succinct in terms of time and in the variety and complexity of the information they contain. Their brevity is an advantage when compared to a longer verbal explanation, though these are frequently provided together. Vocal models can communicate information concerning every category of the desired sound, whether pronunciation, intonation, breath management or interpretation of the text. Several of these could be supplied through instrumental models, but some cannot, typically the text and tone quality. Modelling on the piano or keyboard is, therefore, less useful. Singers are able to see how a vocal demonstration is produced, which can supply additional information about breathing and posture in particular. Although it is not possible to imitate exactly the director's vocal model because of differences in individual timbres, they do provide accurate guides, albeit that the accuracy depends on the vocal skills of the director and singers. This has implications for directors who either have no vocal training or who do not regard themselves as singers.

Directors used negative vocal models in the same manner in which they used negative imagery, that is, to highlight what singers should avoid. Their success depended largely on the attentiveness of singers in differentiating between the two demonstrations and then being able to produce the correct version. Although directors might be certain that choir members are actually listening to a particular demonstration, they cannot be aware of what singers are learning from that aural experience. This may be one of the reasons why vocal demonstrations were always accompanied by additional verbal explanations; the focus of the demonstration could be emphasised, helping the singer's aural analysis. This also applies when singers are listening to other voice sections in the choir.

During rehearsals, directors may not be conscious of when and how they use vocal models, especially when the rehearsal is proceeding fluently. Vocal models are such an integral part of rehearsals that it is unlikely they are planned by directors, especially in terms of their accuracy or frequency. The efficacy of vocal models depends on the quality and precision of director demonstrations and on singers who are able to apply focussed listening and suitable vocal skills to the responses.

5.3 Individual Strategies: Gesture

Introduction

Gestures are the only form of non-verbal communication dealt with in this research and are included solely because they are frequently integrated with imagery and other verbal forms. Included under this heading are aspects of body language, posture, gesture or facial expression, and physical signalling which does not provide the beat. Gestures are central strategies for choral rehearsals and Durrant suggests conductors should have “the ability to give clear intentions of tempo, dynamics, phrasing through appropriate gesture, including clear preparatory beats, cutoffs, as well as conducting gestures that indicate suitable expressive and stylistic considerations” (2003, p. 101). This list appears to divide neatly into the “didactic and musical gestures” outlined by Garnett, below (2009, p. 130). It is the expressive and stylistic gestures which are of most concern in this research as the others are dealt with extensively in choral conducting manuals, for example George (2003) or Kaplan (1985).

The various classifications of gesture are dealt with in full by Garnett (2009), who provides several models which are useful to this research. She suggests that McNeill’s (1992) version is the most useful as it includes: “Iconics (gestures that have a close formal relationship with their object), metaphorics (like iconics but representing an abstract idea), deictics (pointing) and beats (simple up-down or in-out gestures that mark particular words as important)” (Garnett, 2009, p. 53). It is also helpful to include the “pantomimic gestures (act out relationship with referent)” and the “symbolic gestures, or emblems (conventional, culture-bound gestures)” from Efron’s (1972) classification of gestures which Garnett also cites (2009, p. 52). In addition, Garnett provides distinctions between “didactic and musical gestures,” the former being used to “correct or instruct” and the latter to “evoke musical understanding” (2009, p. 130). Examples of all of these types of gesture are evidenced in the research, though there is a particular focus on those which fall into the metaphoric group.

The distinction between some of the classifications mentioned above (Garnett, 2009, p. 53), particularly the metaphoric and iconic groups, merits some further discussion. It is the sound, the vocal response from the singers, which becomes the object with which the gestures have a close formal relationship. A hand or arm gesture which slowly draws a flowing line in the air is likely to produce a *legato* sound on a single breath from the singers. The hand appears to outline the flow of the singer’s breath, almost as if the breath were visible. Smith and Sataloff talk specifically of a “breath gesture” which allows singers the time to “hear the pitch, imagine the vowel shape, and prepare the breathing mechanism” (2006, p. 126). This gesture, exemplified by Ken (Ken, p. 10, fq), might be iconic in the sense that its relationship with those preparatory activities, the objects, is direct, but it also might be interpreted as metaphoric in the sense that hearing the pitch in one’s head, for example, is imagining the pitch in the absence of its sound. The sound or breath is not an abstract idea but neither is it a visible or tangible object. The same is true for terms such as *support* or ways of describing vocal sound, as discussed more fully by Garnett (2009, p. 55). Emblematic gestures according to Price and Byo are “conducting gestures whose meanings were interpreted reliably by musicians,” (2002, p. 345), meaning they were consistently interpreted in the same way. An example would be a small movement growing larger to indicate *crescendo*. Again this could also have a metaphoric interpretation, as the dynamic might be imagined to be increasing in size, as a *crescendo* mark does in a score.

It is not within the scope of this research to classify all the gestures encountered during observations. However, the examples provided by directors and those quoted by singers from memory clearly substantiate Garnett’s statement: “ascribing a meaning to a gesture is much less problematic when the gesturer provides a simultaneous verbal statement as part of the same communicative act” (2009, p. 54). The link between gestures and their interpretation when accompanied by verbal communication is what merits exploration in this section.

Context of Gestures

One of the main differences between gestures and vocal demonstrations or verbal explanations is that gestures can be transferred directly to the performance. The modification of gestures from rehearsal to performance was mentioned by Ken when he raised the issue of conductors who use a baton only for a final rehearsal and performance (Ken, p. 10, fq). The change might affect the choir negatively, but he believed this could be mitigated to some extent; he advised, “You need to keep some of those important gestures, even if it is only a breath gesture” (Ken, p. 10, fq). It is obviously not physically possible for gestures with the right hand to be the same with and without a baton, but at least the most important markers can be preserved. Tim’s choir were learning the music by rote, including information about the structure; these were provided through emblems or didactic gestures and taught to the singers directly, which they recalled (11Tim, p. 7, fq), and modelled (1Tim, p. 7, fq). The use of such gestures meant Tim could change the structure of a piece during a concert (2&3Tim, p. 7, fq), depending on a particular context and without the need to say anything during the piece.

Effectiveness of Gestures

Gestures are deemed to be very effective by choir respondents (Appendix D, Q6c), though there are interesting differences between the three choirs. In Tim's choir, 90% of respondents found his gestures were very effective in contrast to only 33% of Emma's choir, though undoubtedly these were influenced by the different contexts of their rehearsals, as Emma performed with her singers. Both Ken and Tim highlighted gestures alone (as opposed to being in combination with another strategy) as being very effective (Appendix F, Q12). However, in rehearsals, neither of them used gestures without accompanying verbalisations so it is not possible to determine the effectiveness. The fact that they believed the gestures were effective perhaps signifies that the integration of strategies is subconscious. This was confirmed by Ken, when he reflected on this during his interview, admitting he "wasn't aware of it [the gesture], I just did it, so I suppose just sometimes it just suddenly comes into things I say, perhaps more than I think" (Ken, p. 7, ex. 4). Ken's response implied that the gestures were added to the words, though the speed at which this happened was almost instantaneous. When talking about gestures their directors made, several choir members (for example, 2Emma, p. 3, ex. 3) imitated their director's gesture sub-consciously. The spontaneity and sub-conscious nature of the use of gesture has parallels with the use of imagery.

Ken indicated that some of his gestures had been formed over a period of time working with the choir (Ken, p. 10, fq), which suggests he was aware which gestures were effective and, therefore, developed or repeated those; this has parallels to the way stock images are formed. Tim provided examples of pantomimic or symbolic gestures which were recalled by several singers (Appendix E). Such gestures might not fall into the category of being emblematic, because although they carry particular meanings which are transferable from one piece to another, they appear to be specific to his choir. These intra-choir gestures have similarities to the intra-choir stock images discussed in Chapter 4.

Gestures were variously described as "pictorial things" (11Tim, p. 1, ex. 2) or "visual clues" (2Tim, p. 6, fq) and respondents provided a variety of reasons why they thought gestures were helpful. For example, 3Ken recognised that Ken was "able to get those nuances over in the words" through the use of gesture (3Ken, p. 2, ex. 2), or gestures could clarify the response (4Emma, p. 2, ex. 3), or help concentration (3Ken, p. 2, ex. 2). There were also examples of groups of respondents agreeing the meaning of a particular gesture, demonstrating that it was easy to interpret (8&9Ken, p. 4, ex. 4). Ken suggested some gestures might "relate to the emotion of the word and the sound of the word" (Ken, p. 2, ex. 1) or, alternatively, "your gesture affects the way people react vocally"(Ken, p. 4, ex. 2). All of these reasons were also found with imagery (see Chapter 6), so functionally there are many parallels between the two strategies.

Recollection of Gestures

The visual impact of gestures is important in terms of making them memorable to singers, but all the gestures Emma, Ken and Tim used during rehearsals were also explained verbally. Whether singers remembered the intended meaning, though, is not so apparent as four of the nine respondents who recalled the fact that one gesture related to phrase ending did not report how the phrase should have finished (Appendix E, 4Ken). As is obvious from the number of gestures included in the data collected (Appendix E), choir respondents were able to remember gestures from previous rehearsals without prompting. What is not so obvious is whether the recall is because gestures are intrinsically easier to recollect or because they were originally accompanied by other strategies, for example technical explanation or vocal demonstration. If the latter is true, then the combination of strategies may allow different aspects of memory to be involved, for example, kinaesthetic, aural, verbal or visual, which increases the likelihood of recall. The recollection of gestures and subsequent vocal responses would need further investigation but is not central to this study.

Issues with Gestures

There are of course several issues related to the way in which gestures are used or perceived, for example in the same way that some singers may not hear a verbal image, singers may not notice a gesture. This is especially true when singers are learning a new piece from notation or rely heavily on notation during their rehearsals. This did not apply to Tim's choir, but Ken was evidently aware of this: "Gestures I think are important, providing you train them to watch you. Some are good at that, some don't take it in, they just hear it" (Ken, p. 9, fq). This is confirmed by 5Ken, who did not notice a gesture during the playback of an interview extract (5Ken, p. 2, ex. 2). If she did not detect it when her attention was being focussed in that direction, it is likely that other singers will have overlooked some gestures during rehearsals. It is quite possible to see and recall a gesture, but not remember the context or, more importantly, the response to which it related (4Ken, p. 5, fq).

Although the majority of singers found gestures helpful (Appendix D, Q6), there remain several who either found a gesture confusing or who did not know how to respond even when they understood what the gesture meant (Appendix E, 11Tim). As with imagery, there can be a variety of interpretations or responses across the choir, as noted by 11Tim (11Tim, p. 7, fq). Certainly some singers did not need gestures in addition to verbal explanations (4Ken, p. 2, ex. 2). When directors create gestures spontaneously, it is possible that the gesture is not suitable. Although Emma said her singers usually recognised what her gestures meant, when viewing the interview extracts herself she noted one gesture which she decided was wrong (Emma, p. 3, ex. 3), and in fact one of her singers misinterpreted it (6Emma, p. 3, ex. 3). The sub-conscious and spontaneous nature of both imagery and gestures, therefore, allows the possibility of inaccuracy or misinterpretation.

Summary

Several parallels between gestures and imagery have already emerged. These include their subconscious and spontaneous nature, the possibilities for confusion or a variety of interpretations or for being overlooked, their use as mnemonics and the fact that stock gestures and images both exist. Gesture may become separated from the vocal response which directors intended so that one might be recalled or be correct but not the other. This might apply to metaphoric gestures especially, as the metaphor rather than the vocal response is the focus of the gesture. There are, however, gestures, particularly facial and whole body gestures, which correlate directly to the response, for example those which relate to posture or vowel formation; these are more likely to be recalled together with the associated response.

There is a strong, interdependent relationship between gestures and verbal images. There are many instances where gestures were used to reinforce the image, for example Ken's *digging in* gesture, which he was not aware of, but of which he said, "It's the same thing [as the image] (…) it's only just a strengthening thing" (Ken, p. 2, ex. 1). The gestural emphasis enabled images to be understood more clearly, as two of Emma's choir also noted (for example, 5Emma, p. 3, ex. 3). Respondent 3Emma implied the connection between gesture and imagery was inextricable, because gesture essentially "acts as imagery" (3Emma, p. 3, fq). A comment by 4Ken supported this: "I don't think you realise how the words and gestures come together, I think it's so sub-conscious" (4Ken, p. 4, ex. 4). She was not stressing the fact that singers might be oblivious to their usage per se, but that singers may be unaware how closely connected gestures and imagery were.

Director G believed he reinforced imagery with his gestures which enabled him later to "make the gesture and hopefully it triggers [the image] in their mind" (DG, int, 2:50 and 4:25). Director P was similarly convinced he used gestures during a performance to remind singers of a previous image (DP, int, 29:30). This mitigates to a large extent the drawback of being unable to verbalise imagery during performances; the recall is provoked as a consequence of the gesture. Garnett stated that verbal descriptions can be "briefer and more readable" when accompanied by gestures (2009, p. 54), which would enable directors to access two modes of learning, aural and visual, and allow more opportunity for singers to easily determine the meaning. Accessing different learning styles is almost certainly the reason why all the gestures noted in this research were accompanied by another strategy, though sometimes this was a vocal demonstration rather than imagery.

One of the other similarities between the use of gesture and imagery was the occurrence of negative gestures, although these were not as frequent as negative images. For example, when focussing on an exaggerated smiling face, Pete gave a negative gesture with negative vocal demonstration, followed by positive versions of both (Pete R1, 56:30). As with negative vocal demonstrations (Chapter 5.2) the negative and positive gestures were placed consecutively, so a clear comparison could be made. Another feature which connects imagery and gestures is their ability to affect more than one category simultaneously, for example where the gesture involved the whole body and related to posture and breathing (Ken, p. 4, ex. 2); there are a similar range of examples quoted by singers (for example, 8Ken, p. 4, ex 4). This ability to combine categories is what ensures that gestures, like imagery, are succinct.

Gestures were always used in combination with other strategies (see Chapter 5.6), and Emma and Tim highlighted the combination of gesture and imagery as being very effective (Appendix F, Q12). This resonates with one of Garnett's conclusions:

> Gesture becomes the (…) term that mediates between music and language, while verbal discourse can mediate in turn between music and gesture. (…) Metaphors flow freely between the three domains, and all can enrich the others, in imagination and in praxis. (2009, p. 205)

5.4 Individual Strategies: Italian Terminology

Introduction

Italian terminology is used both when writing about music and understanding music notation to provide, for example, the character and tempo of the piece. Lists of the Italian terms and their meanings, for example the ABRSM theory workbooks (Taylor, 2008), provide basic definitions which are frequently one word translations. Through repeated use, those definitions and translations become standard use amongst amateur musicians and further explanations or deviations from them may be seldom heard; one respondent spoke of "the Italian terms" as "the sort of standard ways of putting things across" (4Ken, p. 4, fq). As a result, the standardised one word translations are commonly cited as being the meaning of the Italian term, with little further thought or any question of a deeper explanation or additional detail. There are advantages to this standardisation; for example, a Russian conductor can direct a French choir and be understood. Directors can rely on this prior understanding, ensuring they will not have to provide additional lengthy explanations.

However, as Ortony explained, "perfect translatability between languages [is] something that is widely believed to be impossible" (1975, p. 48). Some nuances of the original words are unavoidably lost in translation, which affects the response from the singers as they do not have to contemplate the meaning. Because they already understand the word, they are less likely to think about the details of how to respond. One implication is that when performance indications are in the language of the performers, they would have a fuller, more holistic comprehension of a term, simply because it is in the mother-tongue and so understand better what is required as a response. This would be especially true as singers come to acquire greater detail and flexibility of meaning through the "continuous nature of experience" (Ortony, 1975, p. 48). A further implication is that information supplied to performers in their own language, whether imagery or not, will inevitably present a fuller indication of the required response than a one word, fixed translation from Italian.

Understanding Italian Terminology

Directors in this research were generally aware of the level of familiarity their singers had with Italian terms and used them, or not, accordingly; this awareness was apparent in several choirs; for example, the director "acknowledges that we don't all learn musical expression – he would explain this" (6C4). Some directors used opportunities to enhance their choir's knowledge of the terminology without making it obvious they were doing so (Ken, R1, p. 10:2). It was clear that many singers understood the Italian terminology their directors used, which covered the most commonly occurring terms as evidenced through choir interviews. Some Italian terms are integrated into everyday speech, for example *tempo*; although a literal translation from Italian would be *time*, musically it is used to describe the speed or pace of a piece (for example Ken, R1, 13:1). These terms are unlikely to be misunderstood by singers due to their commonplace use within and outside of choral rehearsals.

The standardisation of the most commonly used terms is what makes them understandable and their relative simplicity helps them to be transferable from one situation to another; this is comparable with the use of stock images.

Italian Terms Combined with Imagery

Where Italian terms were used by directors, they were rarely used alone; Emma was the exception to this (Emma R1, p. 4:1), and she may have been more confident of the Italian terms rather than elaborating in English. In most cases, imagery was employed alongside an Italian term to elaborate or quantify the standard Italian meaning, implying the imagery helped to produce the most appropriate and accurate level of response. There were several instances of this across directors, for example, "make them slightly staccato" (Pete R2, 14:30). However, there were also more elaborate descriptions which were provided, not because directors thought their choir members would not understand the Italian term but because the term seemed insufficient alone. Where directors were keen to be precise about the responses they required from singers, the refining often took the form of imagery; for example, Rob distinguished between two types of *legato*, one of which was "glutinous," (Rob, R1, 44:19), whereas the other was "so the notes are glued together" (Rob, R1, 9:05). The refining of Italian terms through the addition of imagery was also seen amongst choir members (Appendix E, 42Ken). In these cases, the Italian terms were clearly understood, but in a specific context, the imagery provided more detail about how it was to be performed and, therefore, helped to contextualise it. Many singers were able to expand on the standard translations of the Italian terms (for example, 3Ken p. 5, ex. 4), with imagery adding further detail to the original. In cases where singers were secure in their understanding of an Italian term, they were able to distinguish even subtle differences between the term and a related image, for example, “it’s not true staccato but it’s just being consciously aware that you’re creating a space between [the notes]” (8Sam, Int, p. 1).

If the Italian terms have a regularly accepted meaning, they necessarily become less specific when in context. Therefore, if singers are to understand the type and level of response their directors require, the addition of further detail is useful. There were examples across choirs and directors which demonstrated supplementary information being provided through imagery accompanying Italian terms. Directors frequently blended the two, and this was absorbed by the singers. The implication from these examples is that the Italian terminology, even where a translation is known and clearly understood, appears to be somewhat inadequate when in context. In contrast, the inexpressible nature of imagery, used in conjunction with it, frequently counteracts that.

Italian Terms are Imagistic

It is interesting to consider a contrasting viewpoint here: that Italian terminology is also imagistic, however standardised the English translations are. For example, a commonly used translation of *Andante* is *walking pace*, yet this cannot be a definitive explanation of how to respond, as the pace set patently depends on the walker. The speed of a piece might change, therefore, not only from one singer or director to another, but also with the same director in different contexts. This must be a very strong argument against anyone who believes they are avoiding confusion or individual interpretation by relying wholly on the Italian terms. With the following terms, “giocoso joyful, merry” or “largo slow, stately,” (Taylor, 2008, p. 109), the imagistic nature of the translations can be clearly seen. Singers and directors need to interpret what *stately* means and how their performance was able to reflect this.

The notion that the Italian terms could be regarded as imagistic is strengthened by Chen who categorises “musical conceptual imagery” as a “verbal representation of [a] music idea or concept” and provides the example “sing as legato as you can” (2007, p. 86). The alternative category for Chen is “non-musical conceptual imagery,” for example, “let your voice travel” (2007, p. 86). Whether or not *legato* is translated as smooth is less important than the fact that it needs just as much attention to the interpretation and response as *letting the voice travel*. Although her idea of separating these two categories may not be useful in other research, she is in no doubt that they are both conceptual imagery.

In the current research, Italian terms originally resided under the heading of *types* of imagery, where it contrasted with aural or conceptual types (see Table 3.4). However, this was changed (Appendix C), as it was clear that, although easily recognisable because of the distinctive language, the Italian terms have the same functions and effects as other conceptual musical terms in English, for example the word *accented*. Performers understand terms such as *legato* as prompts for a response to a holistic understanding of that entire concept, not merely as single word translations. They trigger an exploration of the complete meaning of that concept. If singers are creating an imaginative response to the Italian terms, there may be a similar variety in responses as there is when imagery is used, rather than a fixed interpretation which does not change even from piece to piece. In contrast to the circumstances above, some singers incorporated the Italian terms into their descriptions of the imagery. The Italian terms were employed for exactly the same reason as imagery in other examples, to clarify the explanation and supply more detail.

Directors and choir members were mostly in agreement as to the interpretation of the Italian terms, as some examples from Ken's choir show (Table 5.2) when discussing the image *building blocks*. The ease with which the respondents incorporated the word *crescendo* into their explanations demonstrated their familiarity with and understanding of it. Ken actually seemed to regard the two terms as interchangeable.

There is a level of conceptual understanding of the Italian term here which goes beyond a mere translation into English. Even in Tim's choir, where Italian terms were not used in rehearsals, some respondents demonstrated a similar facility (for example, 14Tim, Q9). Where singers were familiar with the terminology, it was used in the same way as imagery, in the sense that it elaborated and refined meaning.

Table 5.2

Agreement Between Respondents' Interpretations

Response	**Respondent**
Well he wanted it louder the second time and even more crescendo the third time; three degrees of crescendo.	7Ken
The crescendo, where you're building up the sound, starting off quieter and building it up.	3Ken
I wanted a crescendo; building blocks, crescendo (...) I think they're understandable.	Ken

Issues with Italian Terminology

There are three further issues which need to be investigated in more detail. Firstly, in a few cases there was disagreement, not so much on the meaning of a particular term but as to its interpretation. Respondent 2Ken, for example, contradicted Ken's explanation of a *crescendo*:

> My impression of crescendo is of something getting louder, whereas it was not smoothly getting louder, it was sort of very staccato [in the way it got louder], so it was sort of *f*, double *f*, treble *f* at the end, one after the other. That wasn't a crescendo as in my understanding of music. (2Ken, p. 5, ex. 4)

This example signals a reluctance to broaden the meaning of the term from the basic English equivalent and might be applicable to singers with restricted performing experience,[21] who have not had the opportunity to gain the full conceptual understanding mentioned earlier. It also rules out any variations in performance that would naturally occur according to context. However, this was not the norm, since most singers were guided by their directors as to the type or degree of a particular term, as shown by the modifications to *crescendo* evidenced in Table 5.2. Any disagreements of this type are no different to those surrounding the interpretation of imagery. Performers may have a preconceived idea of the meaning of a word and interpret it accordingly and this might be particularly noticeable when choirs have guest directors or when singers join another choir.

Secondly, not all members of a choir may understand a particular term, as seen with Rob earlier (Rob, R1, 9:05 and 44:19), or know that different interpretations are available. Within any choir there will be different levels of understanding of the Italian terms, and although directors may explain a term the first time they use it, that does not guarantee all singers will understand it, perhaps due to changing membership, absence or inattention. Even when all singers hear the same explanation of a term, their understanding of it and subsequent response may be different. Although many of the terms are frequently heard, others may be confined to the context of one particular piece or style of music and become confusing to singers who have not encountered them previously, for example, "?No clue" (2C4), as a response to the meaning of *mezzo forte*.

Thirdly, if the director does not recognise their choir's level of familiarity with the Italian terms, the resulting disparity may be disconcerting or even annoying to choir members. In extreme cases this may result in singers leaving the choir (6C4) or being discouraged from ever taking part in choral activity in the future. Other respondents were equally negative or insecure about the Italian terms, for example, “no idea, I don’t read music” (3C4). A choir member who is unable to sing the next section of a piece because they have not understood the words *Da Capo*, for example, will be confused and may be discouraged. In cases where the Italian terminology is not commonly used or is not fully understood by singers, it can become a barrier to learning. In fact for those singers, the obstacle may simply be that the terminology is in a foreign language, rather than it being related to a particular term. As noted earlier, Tim did not use the Italian terms during his rehearsals, though he and several of his choir members did so in their interviews, demonstrating his prior evaluation of his choir’s level of knowledge. Although a lack of knowledge is not restricted to Italian vocabulary, singers in adult choirs should reasonably expect to be able to understand what their directors are asking for and respond accordingly without needing a dictionary at their side. It is less likely to be the case that singers are not able to understand their directors when speaking the same language. When directors provide imagery in the same language the singers are using, this fact alone may make it more approachable and consequently allows singers to respond appropriately.

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[21] In fact, 2K has sung in at least three choirs, for more than 10 years.

Summary

When Italian terminology was used on a regular basis, in all but a few cases there was agreed understanding of the meaning of the terms between directors and singers, particularly in relation to the accepted translations. The differences occurred when the intended response was examined. Here it was apparent that a variety of interpretations existed and that these were mostly context dependent. When used in context, the Italian terms seemed to lack the specificity which directors required and which singers were capable of providing. Frequently, this detail was supplied through the addition of imagery, which allowed singers to create the most appropriate responses. The imagistic nature of the Italian terminology requires an imaginative response, as the terms do not give specific directions for the vocal effect singers should produce. However, it may be true that the Italian terms produce less imaginative responses than imagery, simply because singers believe they already understand the meaning through the translation. Singers may feel they do not need to think so creatively with the Italian terms because of this. In contrast, where imagery is used and the meaning may not be so transparent initially, the inventive brain needs to start by working out a precise response.

The manner in which singers respond to either Italian terms or imagery is evident vocally, and this is more important than whether they know a standardised translation. If singers do not understand the Italian terminology, this may have negative effects, including confusion, frustration and possibly an adverse regard for choral singing. However, where the meaning of the terms is understood, they appear to be responded to in a similar manner to imagery, being neither more nor less precise or efficient in achieving the outcome.

5.5 Individual Strategies: Technical Terminology

Introduction

The title of this section needs clarification before any meaningful discussion can take place. The phrase technical terminology includes expressions and vocabulary which relate to two facets; these are vocal terminology and musical terminology. In order to avoid confusion and overlap, technical terminology does not include Italian vocabulary.

Musical terminology includes the descriptions and terms which reside under the theme of musical elements in the key to categories (Appendix C); for example, specific dynamic levels, or whether a note is a crotchet or quaver, are musical terminology; these were easy to locate in the data, for example 1 in Table 5.3. Many terms were direct instructions and frequently focussed on learning sections of music as the rehearsal progressed. This, therefore, includes all comments which relate to explaining or correcting what was sung, for example how to pronounce Latin words (Ken, R1, p. 14:1), where to breathe (Emma, R1, p. 1:1), or how sharp or flat a note was (Ken, R1, p. 12:1). As Tim’s choir did not use notated music, Tim inevitably used technical terms, alongside other strategies, to teach pitches, rhythms and other aspects of the sound by rote, for instance example 2 in Table 5.3.

Vocal terminology comprises all the language which, in the categories (Appendix C), relates to the theme of vocal production and technique. This includes all references to posture and breath management, for instance numbers 3 and 4 in Table 5.3. The sole reason why musical and vocal terminology are considered separately from the Italian terms is the possible perception that Italian terms are fixed.

Table 5.3

Examples of Technical Terminology

	Example	**Director**
1	[Ken] How many counts on that note? [Choir] 3 [Ken, correcting them] 2! *Charge*, 3, 4; it's compound time, the dotted beat's the beat.	Ken
2	I want you to hold it soft now, 2, 3 and [choir sings]. One more time 2, 3 and [choir sings] so just a little bit louder.	Tim
3	Do not take a breath on the middle of two bars (…) think about phrasing all the time.	Emma
4	You can only get that when you're singing from here [pointing to diaphragm area] not within your throat so you need the power from your diaphragm.	Tim

Each of the directors used both musical and vocal terminology (see Table 5.4), despite Tim declaring his lack of any vocal tuition. Although the quantity provides only partial information, Ken and Tim employed notably fewer vocal terms proportionately than Emma, which might be expected given her advanced level of vocal experience and expertise.

Table 5.4

Number of Technical Terms

Director	**Musical terminology**	**Vocal terminology**	**Expression / Motivation**
Emma	12	13	0
Ken	46	33	0
Tim	12	5	0

As with the Italian terms, directors were aware of the level of knowledge their choir members had of the terminology they used. If the percentage of choir members with vocal training is examined (Appendix D, Q12), the number of instances of the terminology appears to be related to the vocal tuition experience of each choir. If the types of terminology are examined, a more interesting picture emerges; Table 5.5 shows the categories to which the terms relate across directors.

Table 5.5

Types of Technical Terms

Vocal terminology	Breath	Tone	Voice Production	Posture	Articulation	Flow
Emma	✓ [22]	✓	✓			✓
Ken	✓	✓	✓	✓	✓	✓
Tim	✓	✓	✓		✓	

Musical Terminology	Dynamic	Rhythm	Pitch	Texture	Speed
Emma	✓	✓	✓	✓	
Ken	✓	✓	✓		✓
Tim	✓	✓	✓		✓

Although vocal terms obviously occur more frequently in singing lessons, Table 5.5 demonstrates that certain vocal technical terms are being encountered, and, therefore, possibly learned, during choral rehearsals. In particular, demands are being made from choir members in relation to breath management, tonal quality and voice production from all three directors. This might be surprising given the information about director's vocal training noted earlier (Appendix F, Q16). In fact, Ken provided examples of vocal terminology across all the categories, enabling his choir to experience a wide range of vocal terms which, over a period of time, will improve the vocal knowledge of his choir members. Consequently, even without a specific focus on vocal tuition, singers in all three choirs were gradually improving their vocal knowledge, albeit in a choral context.

With regard to musical terminology, there are again three categories in Table 5.5 which all three directors give attention to, dynamic, rhythm and pitch; this may not be surprising since the choirs were learning new repertoire. The small size of Emma's choir and consequent possibility of hearing the balance between individual voices may have allowed Emma to also focus more on the textures within the ensemble. Some examples of the range of terminology used by directors are given in Table 5.3.

There are also terms which are specific to choral rehearsals and might be regarded as solely *choral terminology*. One of those phrases, used by both Ken and Emma, was "stagger the breathing" (Ken, R1, 13:1). The second area, concerning choral blend, was focussed on by only Emma (Emma, R1, 2:3). During Emma's auditioning process, she listened to voices individually and in combination with each other, so it was predictably an area of attention during rehearsals.

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[22] These do not indicate number of times used.

The simplest and most reliable way to decide whether choir members understood their director's use of technical terms was to listen to the resulting sound after a particular term was used. However, as this was not the focus of the research, judging the extent to which choir members understood the terminology could only rely on their verbal explanations. Therefore, the same caveat concerning respondents' explanations needs to be applied here as for verbal explanations of imagery, that verbal explanations and sung responses are not necessarily correlated.

In parallel with the Italian terms, technical terminology was sometimes explained using imagery, including simple comparisons (Rob, R2, 30:28), with Tim and Emma providing the greatest number of instances. Due to the level of vocal knowledge in Tim's choir, he frequently used imagery in place of technical terms, particularly in relation to breath management and tone quality, and although he was aware of the terminology, he seldom used it with his choir. Tim was keen, though, to ensure that his singers understood the challenging technical concept of how the diaphragm is employed during singing, using a combination of imagery and technical terms (Tim, p. 3, ex. 2).

Technical Terms are Imagistic

As with Italian terms, some vocabulary which is frequently regarded as technical terminology is in fact imagistic. Expressions which refer to register or different timbral qualities, for example head or chest voice, are particularly prone to this, and descriptions in the literature are not always helpful; for example, Smith and Sataloff talk of three voices, head, middle and speaking tones (2006, p. 120). Different vocal registers do not engage different parts of anatomy but instead both have "vocal folds (…) colliding with the same vibratory pattern moving through them," (Williams, 2013, p. 92), so the terms head and chest register are probably more useful. Perhaps the most useful descriptions are those which explain that the imagination is required in order to fully comprehend the terms; De Brett makes this evident:

> When you are singing in the highest register of your voice you try to imagine that the sound is going, not forward, out of your mouth, but upwards, through the top of your head. This effort of imagination 'places' the voice in the head, and enables you to sing with a clear, ringing tone. (1996, p. 17)

Not only does she clarify that the difference between the two is due to the singers' imagination but also that this requires effort on the singer's behalf. Even though Liimola uses the word *metaphor,* he undoubtedly demonstrates that describing vocal registers is not as scientific as it first appears (2000, p. 153). The reliance on singers using their imaginative powers is just as important with technical terminology as it is in other areas. Respondents' experiences of vocal tuition is noted (Appendix D, Q12), and shows a substantial proportion of each of Ken and Tim's choirs without any formal tuition. Therefore, the only opportunity for those without vocal tuition to gain understanding of these terms is through their director's explanations, which can incorporate the imagination, imagery and vocal terminology.

The notion of using imaginative ideas, metaphors or imagery is not restricted to vocal terminology; in the category of musical terminology, intonation and correcting pitches, for example, are also susceptible to these types of descriptions. The words *sharp* and *flat* do not accurately describe the frequency of a pitch but are applied to it with such regularity that they appear to be technical terms, as used by both Emma (Emma, R1, p. 1:2) and Ken (Ken, R1, p. 2:2). As Zbikowski pointed out, not all cultures use the terms high and low to describe pitch (2002, p. 67).

One feature employed by a number of directors (Rob, Sam and Pete), was the use of instrument names to describe the type of sound required. These may be included as musical terminology because respondents needed to be familiar with the timbral quality of that instrument in order to make an appropriate response, for example, "Don't sing like a plonky organ" (Rob, R1, 10:25). However, as it is not physically possible, nor desirable, for a voice to sound like an organ, it appears that directors were using these comparisons in an imagistic sense. They expected singers to be able to imagine what the instrument sounded like in the absence of that sound, which is exactly the type of imagery that Godøy and Jørgenson refer to (2001, p. xi).

Issues with Technical Terminology

As noted earlier (Appendix D, Q12), a large proportion of Ken and Tim's choirs have had no vocal tuition and probably depend for their vocal knowledge on what they can accumulate from choral rehearsals. Some explanations may not have been as specific as they would have been in individual vocal lessons due to the varied levels of understanding of vocal technique across the choir, and directors were not able to differentiate for individuals. In Emma's choir, this was not the case, because of the small number of singers and the specificity which this allowed. In larger choirs, the accuracy of technical explanations given by the director is crucial to singers' understanding, especially where this refers to physiology which is not visible.

The amount of vocal training directors have had is given in Table 5.6 and shows that a third had less than one year's tuition, several none at all.

Table 5.6

Amount of Directors Vocal Training

Amount of vocal training	**None**	**Less than 1 year**	**1-5 years**	**5-10 years**	**10+ years**
Director [23]	D5, D6, D13 Tim	Sam	D4, D7	Pete, D9, D11 Emma, Ken	D8, D10, D12

Although the number of years is important, it does not necessarily have as much influence as the quality of that training. Ken decided to have singing lessons "purely for technical information," (Ken, Q17), stressing that vocal skills were "absolutely essential, no matter what the level [of directing]" (Ken, p. 10, fq).

Given this information, it might not be surprising that the majority of evidence of problems arising from understanding vocal technique was with Tim's choir. Some singers were easily able to comprehend what Tim required, (for example, 7Tim, p. 2, ex. 2); however, the understanding of vocal terminology was varied even with regard to specific singers, as the confusion over head and chest voice from that same respondent, 7Tim, demonstrates in Table 5.7. It may be that some misunderstanding of head or chest register in Tim's choir stemmed from the fact that all his vocal demonstrations to the soprano and alto sections were in falsetto; for the men in his choir, he used his natural range. This meant that Tim himself would feel a different sensation when he was singing in this register and may in fact have perceived it as a more pressurised feeling. The misunderstanding is illustrated in the extract in Table 5.7, where respondents were asked to comment specifically on their understanding of Tim's use of the term *head voice*; the table demonstrates some confusion amongst them, though some may have been influenced by the image *pressure* and his vocal demonstration.

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[23] DL, DR and Rob were not asked to complete a questionnaire.

There is complete contrast of understanding between 2Tim and 5Tim, and both 7Tim and 9Tim also expressed some insecurity as to whether their explanations were correct. Certainly some of these respondents, though not 8Tim, were unable to explain their ideas in language which might be described as technical terminology, perhaps because several have had no vocal training. However, they all heard the same explanation from Tim, and yet related it to so many different categories, including articulation, tone quality, register, breath control, resonance, dynamics and expression. Two respondents seem very confused as to the location of the sound, with respondent 11Tim mentioning the existence of *a throat voice*, though 1Tim's mistake is more understandable. These types of misunderstanding demonstrate that, as singers constantly need to decipher directors' explanations, the language is always open to interpretation, whether or not these include technical terminology.

Unlike the extract earlier, some confusion did stem from inappropriate or inaccurate use of vocabulary by the director. For example, respondent 5C8 remembered their director saying, "tenors need to be sharp" (5C8, Q4&5). The respondent explained it meant to be alert and ready for the next entry, rather than relating to pitch. The same word, *sharp,* was used by Tim with yet another connotation, when he said, "have like a bold tongue (…) well I call it a sting. It's a slightly sharper, it sort of cuts through the rhythm" (Tim, p. 4, ex. 4). Here Tim was referring to a focussed tonal quality which would allow it to be heard despite the complex rhythms. In another example, Tim used the term *soft* for two categories, dynamic and tone quality, and the terms *high* and *low* were used to describe volume rather than pitch (Tim, p. 1, ex. 1). These examples demonstrate that, where a word or phrase has a particular meaning in the context of choral rehearsals or in music in general, it needs to be adhered to, or directors run the risk of being misinterpreted.

Table 5.7

Responses to Head Voice

	Extract	**Director**
Amount of vocal training of respondent	So what we're doing is singing in that sort of head voice. [He demonstrates several times and the choir repeat.] I want you to feel the pressure all the way through that.	Tim
	Response	**Respondent**
None	Sing from the stomach not from the throat.	1Tim
None	I think it's just coming from here [head] rather than here. [abdomen; agreement from 3T]	2Tim
None	[It's] if you're singing a note that's a bit higher than you're comfortable with.	5Tim
Less than 1 year	I always find that difficult really to understand that but, head voice and throat, chest voice here. I try to understand it best I can but I'm sure it's something that's confusing a little bit.	7Tim
5-10 years	When I sing in head voice, you can feel the resonance here, and at the back of your head, going through your soft palate, at the top of your throat, all the way through.	8Tim
None	I think you're singing but not with a lot of depth or power, really, so when [in contrast] you're singing from your diaphragm you're getting a lot more power coming out, a lot more strength, and I think you're probably feeling it.	9Tim
10+ years	There is a voice where you can sing up here somewhere, but [in contrast] there's your throat voice. (…) A lot of the women find it difficult to produce the power, they're singing in their head voice most of the time.	11Tim

All of the problems regarding misunderstanding or confusion relate to vocal terminology. Respondents were not asked how long they had been learning music, whether they read music or what they understood by particular musical terms. Therefore, it is not possible to gauge their understanding of musical terminology or whether there were similar confusions relating to, for example, rhythmical values or intervals. At least 40% of singers in Emma, Ken and Tim's choirs also sang in other choirs (Appendix D, Q2), so individuals would be exposed to a variety of musical and vocal terms from those. That experience would have an effect on levels and types of comprehension of both musical and vocal terminology.

This might be particularly beneficial in mitigating any implication of disapproval of any particular director or choir in the section above.

Summary

There are some instances of technical vocabulary which have no possibility for different interpretations. Within musical terminology, an obvious example would be a specified metronome mark which has no need of individual interpretation from singers or directors. However, several aspects of musical vocabulary are not absolute, for example the dynamic of a particular phrase or how quickly an increase in tempo should be applied. Although the length of a crotchet relative to a quaver will remain constant, the actual length will depend on the speed of the phrase. The same is true of much vocal terminology; for example, contraction of the diaphragm muscle will result in inhalation but the amount of breath employed whilst singing a phrase will certainly be determined by individual singers, even when asked to match a specified dynamic level. The relevance of this is that some technical vocabulary and descriptions which appear initially to be factual, accurate or fixed may in fact require a comparable range of interpretations as some images.

A second point relates to the invisibility of some sections of the singing apparatus and the lack of direct physical control over part of it. It is true that when the cricothyroid muscle is contracted and lengthens the vocal folds, it creates a higher pitch (Williams, 2013, p. 203). However, some or all of this process may be unknown to singers, especially amateurs, or may be subconsciously performed. This signifies that in order to produce any influence over those aspects which are not under direct control, the imagination of the singer is required. Whether singers are imagining themselves growing taller or visualising the vocal folds lengthening for higher pitches is irrelevant to this issue. They need to employ their imaginative powers in order to create an appropriate response, irrespective of the technical vocabulary the director uses. Singers also need to be aware of sensations which affect some parts of the body during the singing process. It is not unexpected, therefore, that, whilst noting the caveat concerning the lack of musical terminology data, the majority of confusions or misunderstandings outlined earlier relate to vocal terminology.

During choral rehearsals, many singers come to learn and contextualise the meanings of technical terminology through their directors' usage. This assumes a high level of expertise on behalf of a director to explain these terms in a way which members of that particular choir understand. Directors need comprehensive conceptual understanding of the appropriate vocabulary, both musical and vocal, in relation to the type of repertoire they are using. Any incomplete understanding of associated terms is likely to have a detrimental effect on their singers. Whatever command of terminology directors possess, their ability to express this consistently and precisely determines the understanding gained by their singers. This applies as much to musical and vocal terminology as to imagery.

There is evidence that, even amongst members of the same choir, there are differences in singers' understanding of a particular term and some misunderstanding of certain terminology. This is despite the fact that singers and directors might expect this type of vocabulary to have precise and unequivocal meanings. This variance in understanding is not unlike that which occurs with interpreting imagery or Italian terminology. In order to develop a conceptual understanding of several aspects of musical and vocal terminology, it is necessary to engage the imaginative powers in order to gain the holistic interpretation which allows it to be applied in rehearsals. Respondents who objected to imagery being used in choral rehearsals on the grounds that its interpretations are too vague (Appendix D, Q10) might not have examined the technical vocabulary sufficiently meticulously to realise this.

The final point relates to Table 5.4 in the introduction to this discussion, which shows that none of the directors used technical vocabulary to affect expression or motivation. Although the number of categories (Appendix C) is smaller and might, therefore, influence the quantity of examples, it is nevertheless an issue worthy of note. Directors did not ask their choirs to sing the full four beats of a semibreve because, for example, it would create a more relaxing impression for a lullaby. Nor did they ask choir members to stand with a more erect posture because it would make them feel less tired during the last ten minutes of a rehearsal, for example. Directors did try to motivate their singers and did attempt to produce the most appropriate expression of the piece they were rehearsing, but they did not use technical terms to do so.

It may be that directors prefer to use vocabulary that has more opportunity for interpretation for those aspects of the music which appear to be less specific or quantifiable. As there are various ways of creating an expressive response to a phrase or piece, directors may use vocabulary which relies on a similar variety of interpretations. Alternatively, it may be that directors are under the impression that technical terms have secure and non-negotiable meanings which have fixed interpretations. Therefore, these would be unsuitable for the less precise facets of the rehearsal such as inspiring an emotional response in their singers. If that is the case, imagery may supply opportunities where this can occur.

5.6 Integrating and Combining Strategies

Introduction

Data gathered on the relative merits of the different strategies used relied on two main sources. The first was the questionnaires, which sought information about the effectiveness of each strategy individually. There was no opportunity on the choir questionnaires to indicate whether strategies might be effective in combination. The second source, the interviews, requested that same information but allowed interviewees to state which was more helpful, encountering strategies individually or integrated with each other. The data show that across and within each choir vocal demonstrations were deemed to be more effective than other strategies (Appendix D, Q6). However, vocal demonstrations and gestures were consistently accompanied by some type of verbalisation, whether imagery or other explanation. In the case of gestures, this is easy to rationalise as they can be performed simultaneously with any verbal form whereas vocal demonstrations cannot.

Although vocal models were employed at all stages of the research, directors were not in agreement with each other over the efficacy of each strategy, with clear differences between Ken and Emma in particular (Appendix F, Q12). Ken admitted he was not aware of which strategies he employed but illustrated how they might be interrelated:

> I should be able to communicate that [vocal technique] through demonstration cos I think that says more than any words you use, because they hear it [the demonstration], but sometimes you have to explain it technically, if it’s not going in (…) and the gesture came out of that. (Ken, p. 2, ex. 2)

The relationship here reflects Jansson’s enactment model of a conductor, in which he highlights “how these capabilities come into play as their roles and relevance fluctuate during the shared process of rehearsing and performing” (2014, p. 159). The choice and timing of strategies appear to be decisions which are not deliberately made. Even if there is no premeditated plan for the deployment of strategies, directors and choir members were sure that their application would change according to the context (2Emma, p. 3, fq). That might depend on the type of choir (Ken, p. 8, fq), or the piece (4Tim, p. 2, ex. 2), or the length of time singers had been working together (9Tim, p. 2, ex. 2). Directors also changed the strategy according to its success (Emma, p. 3, ex. 3), which indicated they were evaluating the effectiveness in a particular context.

Variation and Combination of Strategies

Respondents reacted positively to the variety of strategies their directors used, citing many reasons for their deployment, for example that it avoids boredom (3Ken, p. 6, fq). Most comments focussed on the fact that individuals would respond well to a range of diverse strategies (for example 4Ken, p. 2, ex. 2), an opinion expressed precisely here: "[Tim] tries so many different methods, so that we can each engage with whichever method gets the best out of us" (5Tim, p. 4, ex. 3). This resonates closely with Fleming's (1995) varied modes of perception, which are likely to exist within a choir. The more variety directors use to present their requirements, the more likely it is that a large number of the choir will understand and respond to their requests.

A number of respondents cited specific strategies as being co-dependent, for example: "I don't think you realise how the words and gestures come together, I think it's so sub-conscious" (4Ken, p, 4, ex. 4). Others made similar comments about gestures combined with vocal demonstrations (3Tim, p. 7, fq), or vocal demonstrations with imagery (6Emma, p. 3, fq), with 8Tim suggesting that the order of the strategies when integrated was also important: "[Tim] tends to explain something and then do it [sing it] (…) If he'd done it and then explained it, I don't think it'd be the same" (8Tim, p. 5, fq).

In addition, respondents from all three choirs were aware their director combined the strategies, either simultaneously or in quick succession, to explain the same idea. Several respondents said the mixture of presentations was helpful (1Emma, p. 4, fq), with respondent 1Ken suggesting that "they all build on each other" (1Ken, p. 4, fq). The combination of strategies can also be observed in all but one of the video examples in Garnett's book (2009), so is a widespread phenomenon. In fact two respondents, Ken and 3Emma, fostered the idea that there was no separation between strategies in the role they fulfilled: "I see them [gesture and imagery] as the same thing if I'm honest" (Ken, p. 3, ex. 2). The inability to separate the strategies on the grounds of their efficacy may be why some respondents say none are more helpful than any other (for example 1Emma, p. 3, fq). Table 5.8 shows how strategies are combined:

Table 5.8

Strategies in Combination

	Example (approximate duration)	**Strategy Order**	**Dir.**
1	This time do it from memory; don't look at your music, cos it's very hard to remember! [Choir sings.] Remember we're building, it's building blocks [gestures]; it must feel like there's a *crescendo*, even though we're already there. [He speaks it.] So that it grows from that sound. (0:20)	SRS; imagery & gesture simultaneously; Italian term; vocal demonstration; imagery.	Ken
2	Shall we go please from bar 27, so where we did it on the syllable *dah*. Because I'm just trying to make our singing smoother, [gestures and elongates *oo* vowel] smoother and more instrumental way, a little bit lighter, closer to the teeth, [gestures] rather than doing the deep, deep.[gestures deep, then gives vocal demonstration.] (0:36)	Technical description; gesture & vocal demonstration simultaneously; imagery; imagery, technical description & gesture simultaneously; imagery; imagery; imagery with gesture simultaneously; vocal demonstration.	Emma
3	Bear in mind it will yelp if you're not careful; [demonstrates *strains* and *rejoice* with short vowels] No! [then sings with long vowels] Long vowels, *legato* please. (0:20)	Negative imagery; negative then positive vocal demonstration; imagery; Italian term.	Rob

In example 1, Ken was aiming for an increase in volume across four exclamations of the same syllable, which all the strategies reinforced. However, the requirement was more precise than simply getting louder. This was the last phrase of the piece and Ken tried to place that particular *crescendo* into context; it was getting louder in steps, even when the choir was already singing at full volume. It appears that each of the strategies was used to supplement the previous one; the first image was insufficient without the Italian term; the type of *crescendo* needed to be demonstrated vocally and none of them was adequate without a final image. The multi-strategy approach was necessary because the requirements were complex. Ken depicted the required sound in a variety of ways to present the fullest conceptual understanding of the required response.

The complexity in example 2 (Table 5.8) is the number of strategies Emma incorporated into such a short extract. The gestures were able to be performed simultaneously with both of the verbal strategies, making it extremely concise. More importantly, the simultaneity allowed Emma to use gestures to emphasise and give meaning to both the imagery and technical description. She also used onomatopoeia for the image *smoother* allowing her to combine both imagery and vocal demonstration with gesture, accentuating the time-efficiency and completely merging the strategies.

The succinctness illustrated in example 2 is mirrored in example 3 (Table 5.8), even though the brevity may not have been consciously considered. The example has positive and negative instances of both imagery and vocal demonstrations and the fact that these were presented consecutively emphasised the differences between them, enabling singers to gain a more precise illustration of the requirements.

These examples were chosen to demonstrate the succinctness, complexity and integration of strategies rather than as being representative. The integration, especially considering the time-scales, implies a lack of pre-meditation which has been encountered with other examples. There appears to be no particular sequence the strategies follow, but there are examples of imagery before and after each of the others. There is no significance to the number of occurrences of each strategy since the focus of data collection was imagery and these, therefore, appear most numerous. However, the proximity of imagery to vocal demonstrations is something which is notable and may need further investigation.

Chapter 6

Functions and Usage of Imagery: Results, Analysis and Discussion

Introduction

This research has determined nine functions and effects of imagery which are examined in this chapter; they are:

1. Imagery is used to transmit clear objectives
2. Imagery is used effectively to achieve objectives
3. Imagery is used to change thinking
4. Imagery is used to create multiple-effects
5. Imagery is used as a mnemonic
6. Imagery is used to save rehearsal time
7. Imagery can replace technical terminology
8. Imagery is used to illustrate the text
9. Imagery is associated with a specified musical phrase

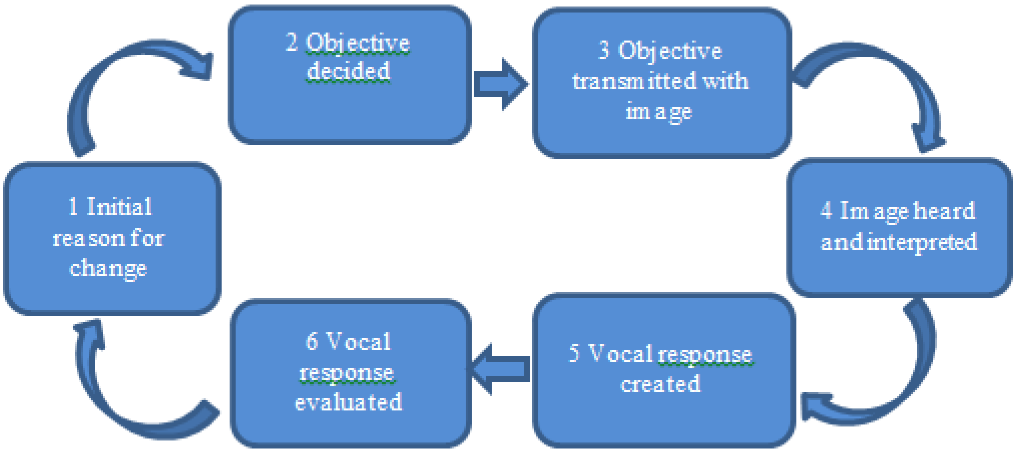
Imagery's effectiveness and the various ways in which imagery is utilised, understood and responded to are all discussed. The chapter begins with an examination of the process in which imagery is encountered in rehearsals.

6.1 The Process of Using Imagery

Evidence from the current research demonstrates that all the choral directors used verbal imagery in rehearsals (Appendix N), so the questions to be answered in this chapter are why, and what were the effects. Imagery has a valid and effective role in choral rehearsals not simply because its practice is widespread, but because it has specific functions. The scenario in which imagery is encountered is revealed as a flexible process, Table 6.1, which is adapted to suit the specific context. The flexibility may relate to those enacting the process, which resonates with Jansson's shared process of rehearsing (2014, p. 159). For example, choir members could be asked to identify the reason in step 1 or evaluate their own response in step 6. Many of the steps may be instantaneous and sub-conscious and the process could begin, for example, at step 5.

Table 6.1

The Process of Using Imagery


1 Initial reason for change
2 Objective decided
3 Objective transmitted with image
4 Image heard and interpreted
5 Vocal response created
6 Vocal response evaluated

The process can be initiated by a director hearing the choir sing a particular phrase, note or section that, when aurally analysed, does not meet the requirements, in whole or in part. Alternatively, a director may anticipate a problem, because the choir have worked on a section previously and an unwanted response occurred, or the director's experience suggests that an unwanted response is likely due to the nature of the music or the choir. Whatever the starting point, the director generates a clear objective for the singers and then employs imagery to transmit that objective to them; choir members hear the imagery and interpret its meaning, probably instantaneously, and create a response by thinking or acting in a way which creates the vocal response they believe is appropriate. If the phrase has been sung previously, they will change the way they sing when responding. The director then listens attentively to the response and may give feedback which confirms whether the correct sound had been achieved; s/he may elaborate their first image or try an alternative image or a different approach. The process mirrors what would happen if the director was using technical or Italian terms. Imagery's functions in this process are now examined.

1: Imagery is Used to Transmit Clear Objectives

Directors do not use imagery randomly or simply to make their rehearsals more entertaining. Directors have definite objectives for the responses required from imagery and can explain these without hesitation. However loosely or precisely directors prepare their rehearsals, it is improbable that they plan every image in advance but the intention behind those images which are used spontaneously during the course of the rehearsal are nevertheless precise and defined. When listening to examples pre-and-post imagery use (P&P) (see Chapter 6.2), each director was able to hear a difference between the two versions and state whether his/her intentions had been realised. If there were no clear goals, the second stage would not have been possible. This does not mean that directors necessarily had a static, aural image which the choir had to attain; this contrasts to singing a particular pitch, for example, where a pre-defined and easily identified pitch is either achieved or not. Rather, the directors had an achievable outcome for the type of sound they required, which the choir would then try to create. The use of imagery here resonates with Miller's *memory image* (1993, p. 359), mentioned in Chapter 2. Imagery, like metaphor, has its origins in oral language and is used as a cognitive tool, so although the imagery may seem nebulous, its function is distinct and definite. The way in which directors communicate with their choirs is seen as a key component of rehearsal technique. Patently, not all of this communication is verbal and not all verbal communication is imagery, but the following examples illustrate the detail of directors' objectives for the imagery.

Example 1a

In rehearsal Emma used the phrase "cut the sound down on the first beat" (Emma, R ex. 3); she later offered a lengthy but precise explanation of its meaning:

> It's the consonant [from the rest of the choir] which is falling on the first beat. Because it is a solo in the bass/baritone part and I just wanted to give him a little bit of freedom of interpretation and he's starting from the upbeat and we are waiting for him to start and then [we] put the final consonant on the first beat. (Emma p. 3, ex. 3)

Emma had a specific conception of passage which, in terms of the categories of effects (Appendix C), involved both rhythm and texture. There would be a very brief overlap between the sounds of choir and soloist rather than a gap. The use of the word *cut* implies precision, but it also shows when the choir should cut off to allow the soloist to be heard more distinctly. Emma listened to the sung phrase sufficiently carefully to analyse the problem and provide the solution, which she communicated using an image. Although this seems quite a small detail, it nevertheless demonstrates Emma's objectives were specific and clear.

Example 1b

The precision in Emma's example is not unusual and is also found in the following example from Ken, when referring to the relative length of quavers to dotted quavers on the three syllables of the word *Domine*. His rehearsal image "if we get slower, it's death to the music," (Ken p. 5, ex. 3), was explained in the interview as: "the point was that musically, little notes matter. At the same time, they mustn't drag, and often notes after a dotted note, do come out too slow, especially in slow music so that was my point really" (Ken p. 5, ex. 3). Ken did not use the imagery to teach a theoretical lesson about the relative lengths of the notes but to help the choir construct a more generic point about what he knew frequently happens in music with a slow tempo. He was aware that the choir did not need notational information but required guidance on how to perform it accurately in terms of both speed and rhythm; if the durations of each note relative to another were not accurate, the speed would decrease. Ken was referring to *little notes* in general, the implication being that he intended the choir to apply the same responses in the future and as that phrase recurred several times, there was ample opportunity for them to do so.

Example 1c

Ken provided a solution to the problem highlighted in example 1b by advising the choir to "breathe really energetically" (Ken, R ex. 3). In interview, his explanation was lengthy:

> Because in slow music, breathing, breaths between phrases tend to get slower, again it's all related to where you feel, it's slow music, everything's slower, your brain, and keeping the same energy level, in spite of it being slower, in spite of it being relatively soft, something like that. That's what I was aiming for, soft singing with lots of energy [laughs], in time. That's what I was aiming for. (Ken p. 5, ex. 3)

Here the function of the imagery is wide-ranging, referring to the tempo, dynamic and the manner of breathing. Ken also provided the rationale for his request; through prior experience of directing choirs for more than twenty years, he knew that when the tempo is slow, that speed tends to be imitated in other aspects. Ken required the breathing to take exactly the correct amount of time between the phrases, no more. He required the phrase to sound energetic, with a feeling of moving forward, despite its quiet dynamic, something which many amateur singers find hard to accomplish. To achieve this, Ken suggested that choir members contradict the predictably slow speed of processing the information in the brain.

The image has very precise requirements which are performed simultaneously. Near the end of the explanation (Ken p. 5, ex. 3), the tone and expression of Ken's laugh can be interpreted in two ways. The first is that soft singing and lots of energy might be opposite demands so his objectives seem to contradict each other; the second is that because these requirements are quite different, and Ken also required the phrase to be in time, his expectations are challenging, possibly too challenging for that choir. This corresponds with Ken's previous statement that slow music tends to lose energy, unless the director counteracts this. It also refers to one of Ken's remarks that not all singers in the choir were capable of producing the outcomes he would like (Ken, p. 11, fq). The repetition of *that's what I was aiming for* near the end of the quote, confirms that he knew the imagery had a definite aim and function.

In fact, the penultimate sentence in Ken's explanation (Ken p. 5, ex. 3) summarises what *breathe energetically* means and is nearly as succinct; it therefore poses the question why Ken used imagery. He noted that he was generally not aware when he used imagery (Ken, p. 7, fq), so presumably there was no particular intention to employ it in that instance. It may be that the image was more memorable than the ordinary phrase *soft, lots of energy, in time*.

2: Imagery is Used to Achieve Objectives

Directors did not hide the detail of their requirements from their choirs but used imagery to transmit that information, clarifying their objectives to their singers. They employed imagery to create the most useful, clear and comprehensible description they could provide. By doing this, directors demonstrated their belief that imagery enhanced their explanations; for example, DG found his conducting students "can comprehend it really well and they can take what you're trying to say and interpret that into the music" (DG Int, p. 1:1). The examples below also demonstrate there is no restriction on the categories to which the imagery relates.

Example 2a

Ken used the image "I want to feel that there's a real resistance at the beginning" to describe how he wanted the word *brow* to be sung (Ken R ex. 2). However, it was only during his interview that he realised he had not told the choir exactly what to sing: "It was the singing on the [letter] R. I didn't actually say that. I didn't actually say 'sing it,' I said something about resistance, didn't I, but I wanted them to sing the R in pitch" (Ken p.3, ex.

2). Ken used the image *resistance* in the choir rehearsal, rather than the precise description he provided in the interview. He expected the second consonant of the word to be pitched and judged the image to be clearer and more helpful to the choir in explaining that demand. The categories affected would be tonal quality, articulation and also voice production as the phonation of the vowel would be in a different place. One of Ken's choir highlighted the difficulty of this phonation and the requirement for the letter R to be pitched:

> Yeah, I think it's the transition between the [letter] B and R's a particularly difficult one to move from (...) so I think he's trying to get across the difficulty of that; the B provides the resistance, making it trickier to get into the rolled R. (4Ken p. 2 ex. 2)

Even though 4Ken did not hear Ken's explanation of the image *resistance*, she demonstrated her detailed understanding of Ken's request, appreciating the difficulty of rolling the R in this letter combination. 4Ken did not mention the pitch but had given an elaborate explanation of her understanding of resistance and how it applied to that example.

Example 2b

It is useful to examine one of Tim's stock images in relation to the detail it transmitted and the understanding it enabled. When asked what he meant by the *swell*, Tim explained:

> Well, to go from soft to loud, to make sure that it's, you're going in a softer kind of way and then the voice would actually, the volume would go up within the voice (...) just a gradual lift of the voice. (Tim p. 1, ex. 1)

This detailed explanation emphasised the gentle nature of the increase in sound, with the implication in the last phrase of some lightness. In addition, the swell should not happen suddenly but be implemented gradually; the categories affected were dynamic and tone quality. The gradual nature of the increase was understood by respondent 9Tim, who described the swell happening "a bit like a wave gains power" (9CTim p. 1, ex. 1). Respondent 9Tim extended Tim's imagery but understood the image not to be a crashing wave, but similar to a type of *crescendo*. There were other examples of Tim's choir using the words *swell* or *swelling* in this way: respondents 6 and 11Tim were not describing the example above but had taken sufficient ownership of the language employed by Tim to transfer it to their own explanations of other extracts (6Tim p. 3, ex. 3; 11Tim p.1, ex. 2). This demonstrates they understood the meaning of *swell* sufficiently clearly to be able to apply it in another context to mean exactly the same type of increase.

Tim’s explanation above (Tim p. 1, ex. 1) highlights a potential confusion, as he used the word *soft* with two different connotations, the first meaning quiet, the second referring to tonal quality. The explanation was provided during interview rather than a rehearsal and, therefore, may not have affected the singers but nevertheless there are some implications. If Tim did not distinguish here between the two effects, dynamic and tone quality, he may not do so during rehearsals, potentially passing on confusion to the choir. Alternatively, he may be trying to capture both effects in the same word, just as he had done with the image *swell*.

3: Imagery is Used to Change Thinking

When choir members hear imagery, conceptual understanding occurs in an instant, as the vocal response is being formulated and performed. Quotes from three respondents demonstrate this: when asked how she knew what to do in response to an image, 1Emma replied: “it’s really hard to describe when you’re asked (…) I think it changes your consciousness a little bit (…) you’ll take it a little bit differently and you’ll think about it a little bit differently” (1Emma p. 1, ex. 1). This response mirrors Ortony’s idea of inexpressibility (1975, p. 48). Ken wanted to make the point that directing did not rely so much on his actions, but “it’s more about making them think about what they need to know in order to make that sound” (Ken, p. 11, fq). There is a vagueness in these two quotes which matches the criticism that imagery is imprecise, yet both respondents realised that changing thinking was crucial as it enabled the sound to be altered. When Sam explained his use of the phrase “can we try to make this bounce a little bit more, let it dance,” he said, “I think a word like dance is good because it lifts it (…) into a different kind of sphere and gets [them] to think about the physicality and the dance-like nature of the rhythms” (Sam, p. 1, ex. 1). Sam suggested that imagery enabled the singers to transcend the reality of the rhythms and text by thinking differently. Therefore, Sam, Ken and 1Emma have located another fundamental function of imagery, that it can change cognitive understanding, which then allows a vocal response to be created or a change to be enacted.

The notion of requesting a change in the singers’ thinking may not appear to be of consequence during rehearsals, but the imagery plays this role without singers, and possibly directors, being conscious of it. As noted in Chapter 2, directors may not be aware they are employing imagery at a particular moment because it is a natural language tool used to transmit their requirements to the choir. As shown earlier, Ken was not aware that he had used it at some points (Ken p.3, ex. 2), but stated elsewhere that sometimes during preparation, images came into his mind (Ken p. 9, fq); DW reported the same experience (DW, p. 5:3). Emma and Tim realised imagery was a strategy they used, as shown in Appendix F (Q10). The choice of language used in images may be subconscious and effortless but is crucial to unlocking the appropriate response. The words stimulate singers to call to mind particular concepts, continually building and expanding their understanding of the concept and the related response; if singers' understanding is deeper, their responses can be more accurate. This may be particularly true of concepts which are abstract or which are not under the singer's direct control as is the case for much of vocal function.

4: Imagery is Used to Create Multiple Effects

In many cases directors are seeking to create several effects or make several changes to a sound simultaneously. The multi-purpose nature of images was noted in Chapter 2 (Jacobsen, 2013), and has already been demonstrated in example 1c, where tempo, dynamic and breath management were affected simultaneously. Even one-word images can affect multiple categories, as examples 1 and 2 in Table 6.2 demonstrate. (Letters in the Effects column relate to the categories: see Appendix C).

It is valuable for directors that a single word can have multiple effects on the sound, as this is efficient practice in terms of them being able to achieve their requirements with the minimum explanation. It is a particularly expedient function because the vocal sounds being created by the choir are not one-dimensional; they have pitch, length, tonal quality, vowel shape and other features which the director needs to be able to alter. Images can also have several dimensions so changes to the sound can be put into practice simultaneously, rather than having to alter each of the musical dimensions separately; this might be particularly true of conceptual images. Not all images are single words and some are quite extensive, so time-efficiency is not a consistent feature for every image. However, the multi-purpose nature of imagery is a key feature and is prevalent.

Table 6.2

Simultaneous Effects of Imagery

Director		Example	Effect
Sam	1	Keep it really punchy	R /A /B
Pete	2	It was a bit of stodgy start wasn't it?	R /T /A
Ken	3	The next one's the biggest challenge, listen to it [chord] on the piano.	M /Pi
	4	The greatest challenge for you is whether you can keep the interest in the note, when we go to the fast speed. The temptation might be to fade out cos you run out of breath. So if you run out of breath, take another one.	M /B /T
	5	Tenors and basses, you've got the greatest challenge, to see if you can do a *crescendo* on a ridiculously low note.	M /D
	6	Altos, you've got a challenge even more that's why the T's matter.	M /A
	7	[The] challenge is not with the music, it's how you do it.	M /EX
Rob	8	'P' a nice crisp *puh* sound.	A
	9	That crisper style is much more in style for Haydn.	A /EX
DR	10	The first entries in the fast bit could be just a little crisper.	A /R

In some examples, the meaning of the image itself influences the effect in a slightly more complex manner, as in Ken's *challenge* image, numbers 3-7 in Table 6.2, where its core effect is motivation. However, due to the nature of *challenges*, the image acts as a catalyst, permitting access to six other functions which vary according to context. The same application can be seen with the image *crisp* in numbers 8 to 10 in Table 6.2. Here the core effect is articulation, which exists as a single effect in example 8, but when in different contexts other categories are included. In example 9, even though Haydn's style is mentioned, *crisp* is also being applied to stylistic expression, whereas in number 10, *crisp* affects the rhythmic precision of the entries, enabled by the articulation. Imagery, therefore, can function as a facilitator to conceptual understanding which permits multi-category effects, varying with the context.

Another notion that arises from examining multi-effect imagery is that some images comprise a core effect to which other effects can be added without the primary effect losing its core. The core effect might be the one directors principally intend, with the corollary effects changing according to the context. Imagery needs interpretation by choir members, so it is useful to examine their explanations to substantiate this idea, though it is important to remember that the abilities to respond correctly and to describe accurately are not necessarily correlated. Tim's explanation of his *singing without fear* image shows he expected the effects to encompass multiple categories; see Table 6.3.

Table 6.3

Core Effects of Imagery

Resp.	**Example**: ***Singing without fear*** [24]	**Effect**[25]
Tim	A lot of people they hold back part of their voice within themselves because sometimes they don't think it sounds really nice. Now I don't mind if you can get some of the harshness in. (...) So I try and get people just to sing out (…) cos a lot of times people are think-singing all the time, instead of just singing, enjoying it and just letting go. Letting the emotion happen.	M / EX / B /F (V /T)
1Tim	Yeah, you can hear sometimes people holding back aren't they, they know the song, they've sang the same song for years but they still hold back.	M /B /F
3Tim	You've got to have soul!	EX
7Tim	He often says let it out whether it's right or wrong.	M /F /B
9Tim	It's feeling free with the song and then you bring the finer points afterwards.	M /EX
10Tim	Just to go for it to begin with, and then we can get it to sound better.	M /V

Motivation was the core effect, which was mainly achieved with breath management aiding the flow; Tim was using the image to inspire confidence in the choir to express themselves freely. He was aware that in order to produce the freedom of breath, the tone quality might be affected, but he was prepared to accept that, as a consequence of *letting go*. Choir respondents evidently understood the notion of motivating confidence and the resulting freedom of breath even though they did not use those terms. The expressive ideas of *feeling free* and *soul* were also transmitted, so the core and corollary effects have been understood by the group as a whole. The notion of multi-purpose images having a core effect may be particularly associated with stock images as these may contain central and corollary effects which can be adapted according to the context.

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[24] Choir members were responding to the image in the rehearsal, as they did not hear Tim's explanation.

[25] See Appendix C.

It is possible that examples exist where the core effect is not obvious, which may be due to several circumstances: the image itself may be nebulous and contain so many dimensions that the core is not recognisable; the image may be used in too many different contexts, so choir members are unsure of the central effect; the image itself may be unknown to some members of the choir so they cannot discern what response to make.[26] This last instance may be more likely where choir membership is very diverse or where the director is new to the choir. No examination has taken place to discover whether any of these problems would also apply to other strategies, for example gestures or any Italian terms, though this may be true.

5: Imagery is Used as a Mnemonic

The first evidence that imagery functions as a mnemonic was demonstrated through the data collection process. For instance, questionnaires at Phase 1.4 generated more than 40 examples of imagery which were recalled out of context; one director remembered images and responses from more than twenty years previously (DW Int, p. 6:2, 6:3). Additionally, respondents were interviewed at least a week after the initial deployment of imagery in the rehearsal but were able to recall what a particular image meant and in many cases what the appropriate response was. This recurred with each image and with each choir at Phase 2. Although respondents viewed the image during their interviews, which would have helped them to recall it, it would not reveal the meaning or intended response.

Example 5a

The following examples will illustrate the important mnemonic function of imagery. Rob addressed the bass section about a phrase they were just about to sing saying, “the word for this is ‘nervous’ do you remember?” (Rob, R1, 10:30). Rob deliberately recalled the image he used in a previous rehearsal but did not refer to the type of response required. Instead, he relied on the image to act as a mnemonic, enabling singers to recall the response. Emma did not use much imagery during her rehearsals, but it is obvious she had used a variety of images prior to this research, as respondents were able to recall these on their questionnaires. For example, 4Emma remembered the phrase “march-like qualities,” which he explained meant that the music needed “added vigour and rhythmical drive” (Appendix E, 4Emma). Other examples can be found in Appendix E, including six respondents who quote their director as having asked for “a needle and cotton through either cheek,” which when drawn up, would “brighten the sound, brighten the tone” (Appendix E, 16Ken). The image recalled here is a particularly vivid, kinaesthetic image of drawing the cheeks into a smile which would directly affect the tone quality. Similarly, Tim was aware that the stronger the images he provided, for example “put a sting into the sound,” the stronger the effect was on the singers (Tim p. 4, ex. 3). The vividness of imagery and its figurative rather than literal interpretations are discussed fully in Chapter 2. Sometimes recall of imagery occurred over a much more extensive time period. For example, when revising a piece learnt previously, 4Ken explained “I’ve found myself automatically remembering, even though I haven’t sung it for six years (…) because of things that he [Ken] must have said back then that lodged in the memory” **(**4Ken p.5, fq).

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[26] Ken used the example: “This makes me think of the *St Crispin’s speech*, you know what I mean, it’s that moment,” which several choir members were not familiar with.

Imagery’s function as a mnemonic is clear from the examples above. Most directors were cognisant of this function (Appendix F, Q14), as Tim demonstrated when describing his *memory moment*:

> If you know what you did, and took the memory of what you did at that moment, then you know how to repeat it again. So if it’s a bad thing, then you take the memory moment of what’s bad and what to avoid, but if it’s good, you take the memory moment of what’s good. So that’s why I call it the memory moment. (Tim p. 6, fq)

By using that expression, Tim deliberately made the choir aware of the link between the response and the fact that they should store it in their memories. The image, *memory moment*, established the correct response as something which choir members could return to later. The fact that imagery functions as a mnemonic is perhaps why stock images occur; as discussed in Chapter 4, they carry a fixed meaning which is recalled in a new context or future rehearsal. Recall of the image is useful and recollecting the meaning is more beneficial; of more value is the confirmation that singers recall the associated responses. This shows a convincing and robust relationship between the two as the bond between the image and its response can be exploited effectively during rehearsals.

Example 5b

Simply by deploying imagery, directors draw attention to a particular phrase, as 6Sam explained:

> We remember that that point is a really crucial part in the piece (…) so he says things like that to make us try and remember what he wants when it comes in the actual performance, so it's got associated imagery so it helps us remember which bits are the really, really vital bits for us. (6Sam, Int, ex. 3)

The additional emphasis which results from using imagery "makes you remember exactly what to do, how they want it," (1&5Sam, Int, ex. 3), because "it goes into my mind (…) so you can do more of it" (2Ken, p. 1, ex. 1). These quotes demonstrate the image and response are stored together in the memory. Gesture, vocal demonstration or repetition can be employed in the same way, to highlight a particular feature, with some respondents favouring a mix of strategies to help recall (for example 3Ken, p. 6, fq).

6: Imagery is Used to Save Rehearsal Time

One of the consequences of imagery's mnemonic function is that is can save rehearsal time, as directors do not need to repeat information as frequently. This was demonstrated earlier in Ken's *little notes matter* example (Ken p. 5, ex. 3), where a specific image was used to make a more general point which could be applied in future instances. For the same reason, stock images can also be time-efficient. Another function of imagery examined earlier in this section is its ability to affect changes in several categories simultaneously. Modifications do not need to be made to each category separately so avoiding repetition, which would also be demotivating. Saving time is also evidenced in Emma's earlier example "cut the sound down," (Emma p. 3, ex. 3), where the four words of the image are much more concise than the extended explanation she provided. This efficiency is especially true of one-word images (for example DG Int, p. 1:1), though it fluctuates with the director.

Cognisant of these advantages, it is surprising to note that less than 7% of choir respondents stated they believed imagery saved rehearsal time (Appendix D, Q7b), and two of Emma's choir disagreed as to whether imagery was more time-consuming or quicker (4Emma and 3Emma, p. 3, fq). However, the lack of awareness may be simply because they were not concerned with planning and organising rehearsals. More unexpected is the fact that only one director identified saving time as a reason for using imagery (Appendix F, Q14). This may be because, if their use of imagery is sub-conscious, any consequence of its use may also be unrecognised; alternatively, directors may be more concerned with devising the most elucidating explanations and less so with time schedules.[27] Considering that Chapter 2 showed productive use of time to be an essential ingredient in effective management of rehearsals, directors may wish to contemplate employing imagery more consciously and effectively in the future.

7: Imagery Can Replace Technical Terminology

Several examples have been provided in Chapter 5 where directors have substituted imagery for Italian terminology, for example Ken's "sliding sounds, *glissandi,*" (Ken, R1, p. 10:2), or "building blocks, *crescendo"* (Ken, R1, p. 16:2). Director DP employed the same type of substitutions, though he said it was more appropriate for amateurs rather than his professional choir (DP Int, p. 4:2). The widespread use of imagery as a substitute for technical terms has been fully discussed in Chapter 2, and Emma, Ken and Tim demonstrated and acknowledged this function, even if they also used technical terms at other points in their rehearsals. It is interesting to note that Emma, the most experienced and competent singer amongst the directors, still chose to use imagery in place of technical vocabulary. She was undoubtedly familiar with all the technical aspects of vocal production and was furthermore working with a choir most of whose members have between 1 and 5 years of individual vocal lessons. (This is as opposed to nearly 50% of Ken's choir and nearly 70% of Tim's who have had no vocal training at all; Appendix D, Q12). For example, when Emma was describing vowel formation she explained the *oo* vowel as being too deep (Emma p. 2, ex. 2). Her comprehensive technical knowledge combined with imagery provided detailed explanations for the types of response she required.

Ken was keen to keep technical explanations simple, especially with amateur singers (Ken p. 7, fq), though he did not say he always substituted imagery for these. He used little vocabulary which was specific to vocal function but did provide examples of musical terminology, for instance the relative length of notes in this example: "when you get long notes (...) make sure you come off, watch me, ok? (…) Just a bit sluggish moving to it and then coming off it so just be aware of that" (Ken, R1, p. 17:2). Here the imagery was used to point out the importance of how and when the note started and finished. The fact that it was a crotchet or quaver only provided partial information. The negative image *sluggish* highlighted that the speed of articulation of the consonants was the main change Ken wanted to achieve. He was capable of describing that in technical terms but did not do so.

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[27] This is in contrast to Gorelick (2001, p. 29), and Zielinski (2005, p. 44).

Despite his lack of vocal training, Tim was well aware of some technical terms and the effect they produced but supplanted these with imagery, which he found more logical. He was conscious of this substitution and the reason for it: “although in musical terms, people call it the chest voice, but I call it the grounded voice, cos I feel it from my feet upwards” (Tim p. 3, ex. 2). In another example, Tim demonstrated his vocal knowledge by explaining the image *sting*:

> I notice when I start singing like that (…) my diaphragm, it feels hard. Every time I take a breath, it comes back, really hard. It’s pushing backwards and forwards all the time. For me that’s the best way of using your diaphragm. (Tim, p. 4, ex. 3)

Tim understood something of the process involved in using the diaphragm but focused less on the physiology than the effect on the singing. In a separate example, he demonstrated his awareness of the possible problems of not breathing in this way:

> It’s explosive, it gives the power. (...) A lot of people, when I say sing powerfully, then they start singing in their throats, so I’m trying to make sure that they understand where it’s coming from or where it should come from. (Tim, p. 3, ex. 2)

The images of *power* and *explosive* were used to describe the type of sound he would expect from singers if they were using the diaphragm. Tim’s focus is undoubtedly the response and he may avoid using any technical terms to describe how to produce that response, because most of his choir have had little or no vocal training (Appendix D, Q12), so using technical terms will not be elucidating. Despite this, at least one respondent realised that Tim used imagery for voice control (Appendix E, 14Tim).

The examples above have demonstrated that directors use imagery to describe a variety of different vocal functions including articulation, breath management and phonation. Undoubtedly, though, the category for which imagery most frequently replaces technical terms is category T, which comprises tone quality, register and resonance. Examples include, “that’s a heavenly kind of voice,” (Tim, p. 3, ex. 2), or “make that really strong, you know, very bell-like,” (Ken, R1, p. 17:1), or “it’s quite difficult to make your singing light, in order to blend with the tenor part” (Emma, p. 1, ex. 1). The main reason for this may be the invisibility of the vocal mechanism which controls tonal variations, so any description is necessarily subjective, imaginative and, therefore, open to interpretation. That problem was confirmed by director DP and a solution provided for his professional choir: “you have to find images for them [singers] that they can do, because the important thing to remember is that the voice is the only instrument that exists, that you cannot see the mechanism” (DP Int, p. 1:2). Both Emma and DW, the most vocally experienced directors, chose *building vocal quality* as one reason they used imagery (Appendix F, Q14), with DW using imagery “specifically working on tone quality (…) independent of the piece, trying to build a choir, a choral sound” (DW Int, p. 8:2). Tone quality, therefore, may be regarded as the most difficult aspect of vocal technique to describe, a view which is substantiated by the amount of the literature devoted to its depiction.

Despite the evidence above, only director DW ticked *because explaining how the voice works is difficult* as a reason for using imagery (Appendix F, Q14). There are several possible causes for this. It may be that the question implied directors should be explaining how the voice works during choral rehearsals, but the respondents did not regard this as part of their role. Directors might have seen their role purely as learning and rehearsing the music rather than trying to provide voice lessons. Alternatively, they might have thought that teaching *how the voice works* was different from teaching their singers how to produce the particular sound they required. It is unlikely that Emma felt the technical aspects of vocal teaching were difficult to explain as she has sung at professional level, and although she does not teach singing currently, her rehearsals certainly showed evidence of her technical knowledge. If the choice on the questionnaire had been altered to, for example, ‘in order to simplify explaining how the voice works,’ the answers might have been different.

8: Imagery is Used to Illustrate the Text

Choral music, unlike instrumental music, operates in the realm of the text, so the opportunity to use the text and imagery in the rehearsal setting is obvious. There are two aspects to this possibility as imagery can be both generated from, and used to illustrate, the text. Some composers illustrate the text by creating music which closely corresponds with the words. This may be on a small scale as in word-painting, or composers may wish to create a more generalised perception of the text as a whole. The text, therefore, is a likely source of imagery for directors who wish to convey the literary ideas to the choir. Director DG emphasised that his choir “sing better when they have that image [of the text] in their head,” though he also suggested that instrumental directors might use imagery more because they lack the text (DG Int, p. 2:2, p. 4:2), not a view mentioned by other directors. The fact that directors at all stages of this research made the connection between imagery and the text highlights this function as noteworthy, as the examples below illustrate.

A straightforward example of word-painting which Pete exploited occurred when working on the word *surgamus* (*let us start)*, from Charpentier's *Canticum*. The text at this point is sung by those representing shepherds just about to start on their journey; Pete said, "we've got to get all these lazy shepherds out of their slumbers" (Pete, R2, 14:26). Here the imagery mirrored both the text and the rising melodic line, as it related to using the breath more energetically and moving the phrase on so reflecting the urgency at the beginning of the shepherd's journey.

Ken was also aware of using words or ideas from the text, as the extended example discussed in Chapter 4 illustrated (Ken, R1, p. 3:3). In that instance, Ken linked the text of two movements, *Hymn Before Action* and *Charge* from Jenkins' *The Armed Man* to the images he created of battle, war and soldiers. The inextricable connection between the text and the imagery which Ken created resulted in a complete blend of the two elements to produce a holistic conceptual construction. This enabled it to be memorable as it pervaded prolonged sections of the music. On hearing or seeing the text, the unity between text and image enabled respondents to recall and reproduce the diverse aspects of the sound.

Tim did not answer the question which asked directors why they used imagery (Appendix F, Q14), but it is clear from his rehearsals that he created images which illustrated the text, therefore, he simply may not have been conscious of doing so. There is also evidence from his choir respondents, two of whom independently recalled rehearsals prior to this current research where the text was related to stormy weather. Respondent 14Tim recalled when the choir sang "about a storm brewing, he [Tim] helps us interpret the storm;" Tim "wanted us to create a dynamic sound to create the feeling leading to a crescendo as the storm brews," (14Tim, Q8), a response which was clearly understood. Another respondent also remembered singing the piece, with Tim providing images of "stormy weather," and recollected the response was "emphasis before and after storm / crescendo" (13Tim, Q8). What is notable here is that both respondents not only remember the image but, more importantly, the type of response they were asked to make, upon which they were agreed.

Images of the sea were recalled by six respondents from Ken's choir from a previous concert featuring Vaughan Williams' *A Sea Symphony*: for example, "the power and moods of the sea," which were designed to "heighten feeling and emphasise the dynamics" (26Ken, Q8). Images of "the ebb and flow of waves" were used to affect "intensity and volume changes," according to another respondent (27Ken, Q8). One respondent connected the "imagery of waves swelling, growing in size" and the response "swell on the sounds" with the symbols < and > written on the questionnaire, which demonstrated the relationship between the *swell* and notational symbols for an increase and decrease in dynamic (28Ken, Q8). Some respondents also understood the mood and atmosphere to be created (15Ken, Q8), demonstrating the range of categories recognised by respondents was not limited.

The images of sea and waves were taken from the questionnaires, which were completed individually and with no reference to any music or prompts or with any other guidance. With Ken's choir, the fact that several respondents still remembered the images several months after the concert had been performed, demonstrates how vivid Ken had made them at the time. The text of the symphony is full of vibrant illustrations of the sea, so it could be suggested these would be likely to be remembered in any case. However, the fact that the responses were also remembered after a period of several months is more important, as it demonstrates the close association between the response and the imagery. The text and the image being a single entity is an ideal mnemonic, though it is not the text which dictates the response but the director's use of it during rehearsals.

The idea of the text being the image is investigated more thoroughly in the following example from Ken. The text was one word, *wrath* (*The seas are dark with wrath),* and instead of trying to explain what he required, Ken simply asked the choir to "put in the meaning." He reflected, "that's imagery isn't it, I suppose, is it? I don't know [whether it is imagery]. Put in the feeling of what the word means, as opposed to just sing it because it's a word" (Ken, p. 1, ex. 1). When asked what type of response he expected from the choir, he continued:

> I wanted them to create that feeling of anger and determination, everything that the word means, and translate it into sound so therefore, I know I suppose that's ambiguous isn't it. But quite often people understand what the word means, and they know how to react vocally to it. (Ken, p. 1, ex. 1)

Ken realised he did not have to provide a definition of the word *wrath*, in order for singers to respond to it. He simply highlighted the significance of the word and allowed singers to create their own portrayal, even where this might permit diverse interpretations. If singers understood the meaning of the word, they would use this to create a sound which demonstrated anger and determination, most probably and easily by changing the tone colour and using a stronger flow of breath. This links directly to Paivio's findings, noted in Chapter 2, that meaning is not tied to specific words (1971, pp. 459-60); Ken's reservations about ambiguity are, therefore, unfounded.

The fact that Ken suggested that singers should *translate it into sound* showed he was aware of the direct correlation between the text and the desired vocal sound, a correlation confirmed by two choir members independently:

> Building up to the battle, trying to create the sense of anger and the enormous nature of it all, so although I don't think he needed there to be explicit about what *wrath* meant, I think he just had to go so far as to remind us to put in the meaning. (4Ken, p. 1, ex. 1)
>
> *Wrath*, it's an angry word isn't it. Not necessarily sing it in an angry way but make it sound angry. (...) You interpret what he's [Ken] trying to elucidate (...) he's kind of relying on you to get what he's on about. (6Ken, p. 1, ex. 1)

Respondent 6Ken also understood the subtlety that the singing itself should not be angry. Ken's imagery *put in the meaning* was simply the cue that caused the correlation to take place in practice; the imagery was the cause and the singers' responses were the effect. The existence of the text in both choral and vocal settings establishes this function as distinct from any imagery usage by instrumental directors or in other contexts, so is an important and recognisable characteristic.

9: Imagery is Associated with a Specified Musical Phrase

In addition to the previous function, there is also evidence that imagery can be associated with a specified musical phrase. As with the text above, the image and the phrase become an integrated entity, so that when the phrase is encountered, the image too is recalled as a concept which also includes the response. This occurs whether or not there is text or notation and can apply to examples of different lengths. In these cases, parallels with imagery being used with instruments, or with movement, do exist. There are many instance of this, several of which are the simple or stock images referred to in Chapter 4. In one example Ken used ascending and descending scales to warm the voices up, singing to the syllables *ee* and *ah*. He asked the choir to "keep it nice and bright on the way down," (Ken, R1, p. 1:1), continuing the scales in other keys and reminding them of the *bright* tonal quality he required as they descended. As both the imagery and the exercises were repeated, connections between the descending part of the scale and the required tonal colour were established. There was no text so the association was necessarily made between the image, the descending part of the scale and the specified tonal quality. (It is not possible to verify exactly whether this recurred in the following rehearsal because, although the scales had a brighter tonal quality, the vowel shape was different and this affected the tone.)

The next example did have text *(Hush little baby, don't say a word),* though Emma did not refer directly to it, saying instead, "just be really gentle at the beginning" (Emma, R1, p. 4:1). An association was created between the word *gentle* and the quiet dynamic and calm mood of the opening phrase so that on its return in later verses, those two ideas could be linked in the minds of the singers to create a *gentle* response. There were obvious connections between the quiet dynamic, the text and the type of piece, but the image also affected the categories of flow and tone quality. In addition, it specifically related to the first phrase rather than the whole lullaby. Emma did not use accepted Italian terms, with which her choir were familiar; instead the image provided the singers with a fuller understanding of how to sing the phrase. This enabled the image to become specific to that phrase solely which resulted in a closer alliance between them.

Similarly, during the chorus of one song which used the text *Everything's gonna be alright*, Tim suggested, "let's work on the swell a little bit" (Tim, R1, p. 2:1). He did not use the word *crescendo,* though that is how he wanted the choir to respond, nor did he mention the text. In fact the text was not useful for generating a *crescendo* as it was calming and reassuring whereas the image required a gradual increase in volume and power. The word *swell* was linked to the first phrase of the chorus and particularly to the first syllable of *Everything*, as Tim asked them to rehearse only that word with the *swell*. He was actually substituting the word *swell* for *crescendo* and using it in exactly the same manner.

In the first and third examples above, the text had little or no influence, demonstrating the association of an image with a specified musical phrase or feature whether or not there was text. The implication here is that the image can be used when that melodic phrase is repeated (in line three of the first verse) and also when the same situation occurs in the subsequent verses of *Hush little baby*. The type of bonding found here is a more permanent conceptual bond and is one of the foundations of stock images as it allows the transfer and application of an image from one context to another. Director DW confirmed this: 'I might also try to apply [it] across a different piece, or a different place in a piece as well, if the situation arose" (DW, p. 4:2). As with some of the earlier findings, imagery and its musical response are not perceived as separate entities but become one concept.

One of the categories in the effects of imagery (Appendix C), is the *expression and interpretation* of music. This is a more general effect than relating only to the text as it includes the overall mood and atmosphere of the piece, and was recognised by around 80% of choir respondents as being a reason their directors used imagery (Appendix D, Q7). Two respondents stated that imagery enabled them to "feel the mood of the music," or "have meaning in our sound and to communicate feelings to [the] audience," (2 & 7Ken, Q9), with another noting Tim's very imaginative and creative use of images (10Tim, Q9). Both Ken and Emma realised interpretation was one of the purposes of using imagery (Appendix F, Q14), though director DW wanted to clarify the difference between musical imagination needed to interpret the score, and imagination required to invent imagery (DW Int, p. 5:3). The notion that imagery enables a connection to the inexpressible in music is illustrated convincingly by director DG:

> Every time we get to that certain section (…) that image or that story or whatever you've told them (…) you know they're connecting with the music through that. And when that happens to me, that's when music really starts to happen, because you know you and the student are at one, and you both understand what's going on with that piece of music, and so you can relate it so much better to the audience. (DG Int, p. 4:3)

The phrase *the music really starts to happen* refers to the aural results of the image DG has used which transcend the text and the notation. In order to "get to the true meaning of the music," he regards imagery as essential (DG Int, p. 5:2). The role of the imagination in interpreting music is also raised in the question director DP asked himself: "how am I going to capture their imagination at this moment?" (DP Int, p. 5:4). Emma, Ken and more than 70% of choir respondents recognised imagery's value in inspiring them (Appendix D, Q7; Appendix F, Q14), so it evidently fulfils this purpose. If question 14 (Appendix F), is examined, it is interesting to note that the three reasons which relate to interpretation and expression (inspiring the singers, illustrating the text and interpreting the music,) are chosen by most directors as reasons why they use imagery. Considering the earlier argument that the text is of paramount importance, it may be that directors do not view *the music* as being separate from the text but as an integrated whole, to which singers can relate if they are inspired.

Utilising Imagery

Evidence from the choir questionnaires (Appendix D) has already been incorporated during the discussions of individual strategies, for example Chapters 5.2, 5.3 and 5.5, but in this section, responses from choir members relate to the use of imagery. There is evidence of imagery being utilised across all the choirs in the current research. Its widespread deployment does not guarantee its ability to function effectively, though it suggests that a rationale exists. There is certainly evidence of imagery's usage with singers of varying degrees of experience, expertise and confidence; Appendix D, Q1, 6 & 7 and Appendix A demonstrate that variety, which occurs even within choirs. This indicates that when talking to the whole choir, directors are addressing singers with a range of experiences. The variety of experience, skill and perhaps confidence within a choir will be constantly changing over time, even when membership of the choir is fairly stable. Consequently, even if they wished to do so, directors could not correlate accurately the amount or type of images with the experience of their choir members. As noted earlier, some respondents realised that choral singing increased their vocal skills, but one of Tim's choir was keen to relate the choir's lack of confidence (6Tim, p. 1, ex. 2), an insecurity which was not evident during performances. Tim may have used imagery in an attempt to avoid technical terminology and so counteract the lack of choral and vocal experience of his choir (Appendix D, Q1 & 12). Ken conducted the widest variety of choirs in terms of their ability and experience and had been rehearsing and training choirs for more than twenty years, so it is useful to note some of his feedback. Having prefaced his answer with a strong predilection for vocal demonstrations, Ken stated that imagery helps the less experienced, or the less confident singer (Ken p. 7, fq), but continued that imagery also benefitted his more able chamber choir. Emma's choir was the most able in terms of individuals' vocal technique, and although she employed a large number of technical terms she still used imagery, for example when describing tonal quality (Emma p. 4, fq). She confirmed that she used both imagery and technical vocabulary with this choir, as she would with other experienced singers. Emma also believed that for both children's and beginner adult choirs, imagery is essential.

Table 6.4

Qualities of a Good Choir Director

Quality	Director[28]															
	Sam	Pete	4	5	6	7	8	9	11	12	13	Emma	Ken	DW	DG	DP
Good musical imagination / be inspiring / give choir ideas / musical sensitivity	✓	✓		✓		✓		✓		✓	✓			✓		✓
Sense of humour			✓		✓		✓			✓	✓	✓			✓	✓
Keep singers involved / motivated	✓		✓		✓	✓	✓		✓	✓			✓			
Conducting skills / beating				✓		✓	✓	✓		✓	✓	✓				
Knowledge of voice and can help vocally		✓		✓						✓		✓	✓			✓
Using rehearsal time / pacing			✓					✓		✓	✓		✓			✓
Know the music and its challenges	✓		✓	✓			✓	✓				✓				
Good communication skills / express demands clearly		✓			✓				✓	✓		✓		✓		
Patience /hard work / perseverance / tact	✓	✓						✓		✓	✓					
Positive attitude / engaging personality			✓						✓			✓	✓			
Know your aims for singers and how to achieve them							✓			✓						
Hard work / dedication														✓	✓	
Humility, ask singers if you don’t know								✓			✓					
Good teaching ability / organisational skills / people skills		✓								✓						
Regular re-appraisal of your methods							✓									
Consistency of approach										✓						
Mould into one choir														✓		
Expressive face / body / eye contact										✓						

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[28] Tim and Director 10 did not answer this question.

Half the directors who suggested essential qualities of a good choir director (see Table 6.4) indicated that humour was important. Patently, not every image is humorous but many of the negative ones are, for example Pete's "pouring custard downstairs" (Pete R1, 1:47). Humour lightens the atmosphere and helps motivate singers, as 6Ken mentioned (6Ken, p. 4, ex. 4), especially when used towards the end of a long rehearsal. DW also commented that humour makes images more memorable (DW Int, p. 3:3). The novelty value of such images enables respondents to "remember [them] because the image was very striking and funny!" (Appendix E, 43Ken). The memorability is evidenced by the 9% of respondents in Ken's choir who quoted the same amusing image spontaneously. Director DW raised an interesting point regarding the novelty aspect of imagery; he challenged himself by experimenting with new images but realised that he could not necessarily rely on them always being effective. He even stated, "I think if they were always effective, then perhaps, you might not be imaginative enough" (DW Int, p. 3:3). Subsequently he retained those which the choir "latched onto" and abandoned others (DW Int, p. 4: 3 & 3:4), a strategy which mirrors Ken's reflection, "I've found out what [image] works and I use what works (…) through experience" (Ken, p. 7, fq).

This may be an insight into the way stock images emerge with their meaning and purpose evolving over a period of usage. The fact that images can be developed over time might be the reason respondent 2Tim, who was new to the choir, was unable to explain Tim's *bite of the car clutch* examined earlier (2Tim, p. 5, ex. 4). According to director DP, he and his vocal coach assistant had worked together for many years, which enabled their "unique" working practice that "absolutely worked." This consisted of the director providing an image for the choir and the assistant translating it into precise "mechanical" and physiological terminology (DP Int, p. 2:3-3:1). Amateur choirs without the luxury of vocal coaches rely on their singers learning through a similar process, albeit maybe at a slower rate.

Step 6 of Table 6.1 refers to what occurs after the response has been produced. Director DW emphasised the importance of stating whether the required response had been achieved and frequently asked the choir to repeat a phrase when it was correct (DW Int, p. 7:3), similar to Tim's *memory moment*. Without the confirmatory feedback, singers may be unaware or confused as to whether they have achieved the director's goal. Choir respondents were asked how they knew whether their response was appropriate and many cited the director's facial expression, repetition if not correct and praise or direct verbal confirmation if it was. Interestingly, five respondents realised they could analyse the response themselves (for example, 2Emma, p. 3, fq); others said “it sounds what he expects of me,” (8Tim, p. 5, fq), or “you know yourself if you’ve done it right” (11Tim, p. 6, fq). These comments imply that not only had the respondents listened carefully but they understood the director’s intentions and knew whether they had been achieved. In circumstances where computer-aided analysis is unavailable to choral singers, feedback is an important part of the learning process, whether this comes from the director and includes imagery or not.

All the directors in the current research stated they used imagery to some extent (Appendices F and G), though many also understood it would sometimes not create the sound they wished. In these circumstances, it is worth noting Ken’s suggestion to “just let it go, move on and find another way of saying it” (Ken, p. 9, fq). If directors realised their image, or any other explanation, was not effective it would be unusual not to try to improve its efficacy. Two respondents suggested their directors had chosen the wrong word in the image (3Emma p. 2, ex. 3 and 3Ken, p. 2, ex. 2), though this triggers the question of how they knew it was wrong. Interestingly, both respondents disapproved of the director’s choice of vocabulary but understood the requirement, which actually demonstrates the effectiveness of the imagery, despite their criticism. Director DG was aware of using imagery which was on occasion outside his singers’ experience (DG Int, p. 3:3), a situation similar to Ken’s *St Crispin’s Speech*, noted earlier, and one of Tim’s choir could not relate to his *bite of the clutch* image, as she did not drive (1Tim, p. 6, ex. 4). Director DW stated that if an image did not achieve his intentions, it did not necessarily mean the image was ineffective but possibly that the choir as a whole or individuals within it were not capable of creating the intended goal (DW Int, p. 7:5-8:1). It has been shown that some singers were not able to explain an image clearly but were still able to create the correct response, so the opposite may also be true if singers have insufficient vocal ability.

Understanding Imagery

The degree to which imagery is used to effectively transmit the director’s intentions is captured through responses on the choir questionnaires (Appendix D, Q6 & 7); scrutiny of the answers to question 7 is revealing. The reason *to explain a point more clearly* is chosen by the highest percentage of respondents for each choir, more than 80% of the total. Imagery allows choir members to “understand what he [Tim] is trying to get across to us,” (10Tim, Q9), or “they [choir] do not employ their brains at practice so he needs to make it simple” (6Tim, Q7). Respondents are acknowledging that clarity and simplicity are fundamental attributes of imagery. They completed the questionnaires before the focus of imagery had been disclosed, and no indications of its roles or functions had been given, therefore, so many choosing that reason makes a persuasive argument for use of imagery as a key element in choral directing. There are unsurprisingly differences between the choirs in relation to question 7, with the following reasons scoring high percentages: building vocal quality (nearly 75%) and interpreting the music (80%). Emma herself highlighted *to explain a point more clearly* as one of the reasons she employed imagery, even though she used it less than Ken or Tim (Appendix F, Q14). Directors demonstrated they knew exactly what they required from the imagery and must, therefore, have believed imagery enhanced the transmission of that explanation as it was employed to generate the effect they required.

One problem which arose was the director's ability to find the right vocabulary to explain their requirements. In a few instances, the same term is used to mean different things in separate contexts, for example Tim's explanation of *soft* earlier, or *sharp* meaning cutting through the texture (Tim, p. 4, ex. 4). This is also seen in extract 3.2 on Garnett's video (2009), where the director used *sharp* in relation to tone quality. This implies the need for directors to be consistent in their usage of any terms. Several respondents stated their vocal skills had improved with increasing choral experience (for example 3Ken, p. 5, fq; 1&2&3Tim, p. 3, ex. 2), but inconsistent deployment of terms is likely to counteract this. All Emma's verbalisations were in her second language, which was noted as being a barrier by three of her choir (respondents 1, 4 & 5Emma), and might explain some of the confusions with imagery in Table 6.5. Examples were deemed to be confusing judged on choir respondents' explanations.

Table 6.5 [29]

Confused Examples of Imagery

Imagery examples	**Emma**	**Ken**	**Tim**
Total	12	97	12
Percentage misunderstood or confused	16.6%	1%	33.3%
Percentage of imagery examples explained with imagery	0%	4.1%	75% (66.6% multiple)

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[29] A fuller version of this Table is found in Appendix N.

The difference between directors in the percentage of images confused is worthy of scrutiny. Tim frequently explained an image by using themed or multiple images, for example the image *bite:*

> I almost liken it to a car, the engine. When you're learning to [drive] the clutch and everything, when you find the bite, then the engine will really go, with its full power, so that's what I mean by bite. You're finding where the whole power is and you're in control of that bite. (Tim, p. 5, ex. 4)

Tim's explanation was not offered during the rehearsal and, therefore, may not have affected singers' comprehension; however, where several images are being used consecutively, a misunderstanding in one may affect interpretation in others. Respondent 2Tim did not know what the *bite* was (2Tim, p. 5, ex. 4), though some of her co-interviewees who had been in the choir longer were able to explain (for example, 1Tim, p. 6, ex. 4); similarly the conversation between 5Tim and 7Tim demonstrated their conflicting interpretations (5&7Tim, p. 5, ex. 4). Simplifying explanations of any type is crucial to understanding as Ken pointed out (Ken, p. 8, fq), whether these are technical terms or imagery.

Different Responses to Imagery Across The Choir

It is important to return to a point made previously, but not explored: it may be considered problematic that some respondents recalled different aspects of their understanding of an image and their understanding may not be replicated across the choir. However, in a choir singers are not operating as individuals but as a group, so it is just as acceptable to combine their collective understanding of imagery as to accept the blend of their individual voices. Each voice has its distinct timbre and each singer his/her own vocal experience and ability. In a small choir like Emma's, the differences in these aspects was more obvious and she noted the disparities in tone quality particularly (Emma p. 1, ex. 1). In a larger choir such as Ken's, each voice may not always contribute to every aspect of the holistic sound. If some vocal timbres are outside the desired choral blend, it is the director's responsibility to either accept or modify the sound, depending on the circumstance. The same is true with imagery. Each person determines their own interpretation of the imagery and subsequent response; some will deduce only part of the intended meaning whereas others may grasp most or all of it; the director then decides whether the response meets his/her requirements. The total number in the choir influences the impact of individuals but it is the same situation whether referring to imagery or tonal quality.

Ken accepted he would not always obtain his intended response across the whole choir (Ken, p. 5, ex. 3), as 3Ken also noted (3Ken, p. 6, fq). To counteract this, Ken changed both the strategies and choice of language according to the context (Ken p. 8, fq). He did not specify that he changed the imagery but that he altered the language and adapted the explanations. Given the number of images he uses in his rehearsals, those adaptations would include imagery. He also acknowledged that the responses would become more accurate over time (Ken p. 3, ex. 2). The ability to change the explanations as appropriate demonstrates a flexibility of approach which Emma, Tim and others also exhibited and can be beneficial to the varied types of learning styles likely to exist within a choir. Verbal imagery relies on singers perceiving the information aurally, so it would be reasonable to suggest that imagery may be more useful to auditory learners. Therefore, those members of the choir who rely more heavily on kinaesthetic or visual learning styles may not always respond as positively or as quickly to verbal imagery. In any situation where a number of people are learning something together, they will perceive the ideas and react differently. There is nothing unusual, therefore, in the diversity of understandings or vocal responses to imagery.

Despite the fact that directors may be aware that not all the choir will produce the appropriate response, directors still use imagery so it is valuable to examine why. Five examples were found where singers either did not listen, did not hear or mis-heard what the director said (for example, 9Ken, p. 2, ex. 2 or 8Ken, p. 1, ex. 1). As accurate responses rely on hearing what the director said, it is unlikely that those singers would have been able to respond appropriately. However, the same could occur if the director was giving a general instruction about where in the score to start, or describing a technical aspect. Two further reasons were explored in Chapter 5: there were examples of singers not noticing a gesture, which would be problematic for the director, especially in relation to those choirs who rely more heavily on notation and may watch their director less; in other instances singers disagreed about how to interpret Italian terminology. Problems which occur with imagery, therefore, also materialise with other strategies at the director's disposal, revealing inconsistencies in them all, for which directors try to compensate by varying strategies.

Directors should understand that not all singers in a choir will, or have the ability to, respond in the way their directors would like. This may be particularly true of amateur choirs; although DP was not able to predict exactly how his professional singers would respond, he trusted their ability to do so (DP Int, p. 3:3). However, it is important to note that the variety in responses does not only apply to the use of imagery but equally to any verbalisations during the rehearsal. For example Ken was aware that some words are ambiguous (Ken, p. 1, ex. 1). If individual singers do not listen, do not watch or do not understand the Italian terms or any technical explanation, they are just as unlikely to respond accurately as they would when imagery is being used. This is an important point in counteracting the argument that imagery is imprecise or confusing.

Imagery is an Effective Rehearsal Strategy

Directors' frequent and consistent use of imagery (Appendix N) is evidence they think it is effective, at least to some extent. Directors can choose whether to use imagery from the range of strategies at their disposal, and Appendix F (Q12) shows that all directors are conscious of imagery's efficacy at least sometimes. There are of course differences between the directors and as no strategy was deemed to be ineffective, there is no overwhelming evidence for imagery in this respect. However, all directors believe imagery to be an effective approach which integrates well with vocal demonstrations, gestures and technical descriptions, particularly the first of these. Tim's choice of *imagery alone* as one of the very effective strategies (Appendix F, Q12), is interesting and may be partly because he was unable to gesture whilst accompanying and partly because he taught the songs through vocal repetition, so it may have been difficult for him to isolate other types of vocal demonstration. Directors probably accumulated experience in judging how effective the strategies are from the responses they received. Ken's comment cited previously, ("just let it go, move on," Ken p. 9, fq), implies he employed imagery knowing that at least it would do no harm. It is interesting to note that Ken did not identify imagery as being very effective, even when in combination with other strategies. Ken's heavy reliance on imagery in rehearsals is apparent (Appendix N), and is corroborated by 82% of his choir who stated he uses imagery very often in his rehearsals (Appendix D, Q5d). In these contradictions it is better to rely on data from the rehearsals.

Approximately 77% of choir respondents indicated imagery was a very effective strategy with almost 70% stating they did not find it confusing or ineffective (Appendix D, Q6 & 10). It is not always valid to rely totally on questionnaire answers, though, as around 4% of respondents provided reasons why their director did not use imagery, despite video evidence to the contrary; a more reliable evaluation of imagery efficacy is in Chapter 6.2. Nevertheless, across all choir respondents there is a convincingly positive reaction to imagery with a particularly compelling response from Tim’s choir, which partly counteracts some of the confusions outlined earlier.

6.2 Responses Prior to and Post Use of Imagery

Introduction

Chapter 6.2 explores the sung responses prior to and post use of imagery (P&P). Half of Tim’s extracts and all Ken’s were P&P, some of which are examined below. Both Tim and Ken confirmed they could hear differences between all the P&P versions, and though this may have been to reassure the researcher, that is improbable as each director could also substantiate their claims. None of Emma’s extracts were P&P examples so are not included here.

Examining P&P Examples

The most valuable method of determining imagery’s efficacy is to examine the rehearsals; in this context, *effective* means that the process outlined in Table 6.1 is used with positive results. The way success can be judged is by examining sections of the music before and after imagery has been employed and asking the director whether the singers had achieved their requirements (so starting at step 5 in the process). This is a subjective aural assessment, as noted in the methodology, but one which directors use constantly to make many other judgements, for example whether the speed is appropriate. In the current research the director’s judgement is established in two ways: firstly, the reaction of the director during the rehearsal immediately following the deployment of imagery. This demonstrated whether the director judged the choir’s response to be appropriate, either wholly or in part. The reaction is important as it was in the original context, was immediate, may have been sub-conscious and was also the reaction to the live sound in the rehearsal acoustic where it was possible to distinguish individual voices or choir sections. The second type of assessment which directors and choir respondents provided was during the interviews when being asked to compare the P&P extracts. This was a retrospective viewpoint and demanded a conscious examination of the response. Respondents had time to make a reasoned judgement and may have relied on either their memory of the original rehearsal or the reminder provided by the interview extract. They were also making the assessment based on a recording of the extract, rather than the original acoustic sound. Choir respondents’ opinions were taken into consideration, though some answers may have been influenced by loyalty to their director or by wishing to appear to be very musically perceptive.

P&P Example 1

Ken's *resistance/brow* example was introduced in Chapter 6.1, where his interview revealed that he wanted the choir to sing the letter R in pitch, rather than louder or clearer (Ken p.3, ex. 2). It is useful to examine the P&P sequence as it appeared in the rehearsal, as it is a complex example. It was preceded by the choir singing the whole phrase, ending on the word *brow*:

> It's almost impossible; will you sing "brow" and get into the R as well when you sing it. Brow, brrrrrrr, [on soprano pitch] get into the R, brow; [choir sings *brow*]. I want to feel that there's a real resistance at the beginning, [mimes drilling into a wall]. Brrrrr, yeah? [Choir sings *brow* again.] Now sing that phrase again and think about that moment. [Choir sings whole phrase].That's it [confirming it was correct]. (Ken, R ex. 2)

Ken's vocal demonstration on the soprano's pitch provided the key to the first response, affecting the phonation of the pitch and slightly elongating the second consonant. However, Ken did not then put the word back in the context of the phrase, implying it lacked something else. Instead, he provided imagery followed by a gesture which added the notion of strength or pressure and also of one object working against another, to affect the dynamic. The *resistance* image was vague in the sense that it did not relate to the text nor did it instruct precisely what the response should be. Table 6.6 provides respondents' interpretations of the image. Several respondents understood the resistance to apply specifically to the first two letters creating an emphasis, with respondent 2Ken also recognising a need for more strength or louder dynamic. Respondent 5Ken suggested how the resistance could be achieved but only 3Ken stated she could hear any improvement in dynamic from the original rendition. There were four renditions of the word or phrase sung by the choir and each came quickly after the previous one so it was quite difficult to differentiate subtleties between them. Ken's focus of the R sung in pitch was achieved by some respondents but only after the imagery and confirmatory gesture were employed. Although the vocal demonstration was correct, Ken's persistence in rehearsing implied that in fact he required more or different effects. He sounded energetic and confident when speaking about resistance, strengthening and emphasising the words *real resistance*, rather than struggling for a way of expressing his requirements. This indicated that although his choice of image may have been sub-conscious, it was purposeful rather than random. The collated choir responses relate to the categories of articulation, dynamic and rhythm, demonstrating understanding of Ken's requirements. Ken used three strategies in total to try to create the exact sound he wanted. The vocal demonstration was successful to some extent, but only emphasised one letter. The image and gesture of resistance were less specifically focussed but were more efficacious. Despite the fact that *resistance* may have appeared vague as an instruction to sing the word *brow,* it was more precise in creating a sense of the sound required, which respondents understood. Ken's confirmatory feedback at the end of the extract demonstrated his satisfaction with the result.

Table 6.6

Interpretation of the 'Resistance' Image

Respondent	**Interpretation**
1Ken	The B and the R rubbing against each other.
2Ken	Emphasised more; when R is the second letter in the word, get it in, to grrrrrowl it out, like a dog, really put some effort into it.
3Ken	You couldn't hear the R at all [at first]; an emphasis on the brr.
4Ken	The rolling of the R; it's the transition between the B and R's a particularly difficult one to move from, the B provides the resistance, making it trickier to get into the rolled R.
5Ken	To sing that first consonant before the beat, it's got to be vocalised fractionally before the beat.
Ken	I wanted them to sing the R in pitch, which some of them did and some in that choir will find it eventually.

P&P Example 2

In the next example, Tim's choir were learning the song, *When the battle's over,* by repeating the vocal lines he sang; the extract is directed at the sopranos who had just sung the first line. This is again a complex example involving vocal demonstration and repetition, a technical description and imagery.

> So now, you know what you're going to sing, [they sing again.] So what we're doing is singing in that sort of head voice. [He demonstrates several times and they repeat, with some inaccurate pitches.] I want you to feel the pressure all the way through that. [He demonstrates again and they imitate.] I want it every time, ok. (Tim, R ex. 3)

Tim's vocal demonstrations were in falsetto, slowing the melody line and modelling the tonal quality. In this context, respondents needed to gain all the information about pitches, rhythms, tonal quality and text from Tim's vocal models. It may be the case that some respondents were overwhelmed by this plethora of detail and were unable to distinguish some parts of it, for example the tone quality. In this case, the image of *pressure* may have been more noticeable simply due to it being said rather than sung. In the first part of the example, Tim provided not only the vocal model for the choir but also the technical description *head voice*, a term which he used a couple of times each rehearsal. The sopranos could hear the type of sound he required and were given many opportunities to imitate it, yet Tim was still unsatisfied with the result and at this point in the example, imagery was introduced. It is not clear whether the choice of words in the image was predetermined, though Tim may have been feeling the pressure physically himself when providing the vocal model in falsetto,[30] and this, therefore, became the prompt for the imagery. If this was the case, Tim used the physical sensation to provide a pertinent image for the singers. The phrase rose a sixth in pitch over six notes, so a more consistent breath flow (rather than pressure) would keep the last two notes in tune and feel less strained. If examined in isolation, the image *feel the pressure* relates initially to the categories of posture and breath management, both of which would affect the tone quality and intonation.

Although Tim used the term *head voice*, his vocal demonstrations would create a different physical sensation in him (because he was singing falsetto), than it would in the sopranos singing the same pitches (E*b* above middle C followed by F, A*b*, B*b*, C). He provided a fuller picture of what he understood of the differences between *head* and *chest* voice[31] as follows:

> I call it [chest] your grounded voice so although in musical terms, people call it the chest voice, but I call it the grounded voice, cos I feel it from my feet upwards, so I call it a grounded voice. And I can see, when they say head voice, that's a heavenly kind of voice. I want people to sing powerfully, or with their natural voice, sing at speech level [for chest voice] It's like if someone was calling someone from upstairs, they wouldn't do it in a light voice, they'd do it in a heavier kind of voice. (Tim p. 3, ex. 2

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[30] The singers should also have been feeling some abdominal pressure if using their voices correctly, though as they were seated, this is unlikely.

[31] It was not heard by choir respondents as this was in Tim's interview.

Tim revealed a partial or flawed understanding of vocal registers which meant any explanation he provided for the choir about the use of head voice or how to create that sensation and tonal quality would be similarly inadequate. The implication of this is that any technical description must be absolutely secure not only in the mind of the director but also in the manner in which it is transmitted to their choir members. Any omissions or misconceptions, however slight, create the potential to confuse or misinform the singers, a phenomenon which may increase when the choir rehearses with the same director over a period of time. This reiterates the point (from Chapter 5) that it is not only imagery which can be misinterpreted. The technical term Tim used in the example did not quite achieve the response he required as can be determined by the fact that he continued to work on the same phrase, by introducing the imagery.

Tim was asked whether he could hear differences prior to and after use of the image *feel the pressure*; his reply is extensive:

> Oh, most definitely, [can hear difference] yeah, yeah, yeah. It sounds, the sound is more present, means that, sometimes it's like having a glass half full, so when you don't sing and you don't breathe properly, you don't use your diaphragm properly, then you get air coming out of your mouth, and the voice isn't coming out with the air, so it gets lost, so I say it's like a cup half full. So when you start to sing with your diaphragm and singing out, and not sending just air out; there's a time for breathy singing, but this [isn't one], so you're singing with much more of a full voice. (Tim p. 4, ex. 3)

Tim's reply involved multiple and themed images which initially may give the impression he was unable to identify any differences P&P, however, the words *the sound is more present* are important. They summarised what he meant by the remainder of his explanation which related to the categories of breath management, phonation, tone quality and would also affect intonation. Therefore, although his explanation was replete with images, he also demonstrated his ability to link these to technical requirements. Many of the images related not to the text or an emotional response to the piece as a whole, but to the physical sensations when breathing using the diaphragm. This showed his understanding of this aspect of vocal technique, in contrast to his use of *head voice* earlier.

Tim demonstrated his ability to aurally distinguish the differences created in the final rendition; at the end of the extract he said, "I want it [like that] every time, ok," (Tim R ex. 3), confirming by his tone of voice that the last version of the phrase was closer to his intended sound than the first. Tim used three strategies in quick succession, demonstrating the ease with which they could be employed collectively. He did not employ each separately but integrated them to produce a combined effect, so although Tim's approval is important feedback for the choir, it is impossible to isolate any effect imagery achieved alone. Tim's vocal demonstrations are essential to this choir and are provided with ease and confidence, yet he still needed additional strategies in order to achieve the detailed response he expected. His imagery *feel the pressure* may be an image used by vocal teachers when explaining how the diaphragm affects the flow of air and the consequent consistently voiced sound. *Feel the pressure* might, therefore, be the cause of the effect which Tim required, both literally and figuratively.

P&P Example 3

The next example shows Tim's continued eagerness to persuade his choir to be more conscious of their breathing techniques in a different piece, after singing the short, accented phrase *Shout now!*

> Let's just hear the "shout now." [Choir sing it twice.] Ok, so what I want you to do is to just put your hand at your diaphragm, and when you say "shout now" I want you to feel the tension here, [indicating diaphragm area. He sings several times and choir imitate.] One more time, a bit more power. [Choir sings again.] Ok, so I want you to start remembering what happens there, because what we're going for is, [he demonstrates the whole phrase]. So it's all tense but you can only get that when you're singing from here [pointing to diaphragm area] not within your throat, so you need the power from your diaphragm [choir sings phrase]. And that's what I want, every single time. Do you get what I mean? Cos I always come back to that point where you kind of forget the power, ok. (Tim, R ex. 2)

This is a complex example which involves vocal demonstrations, kinaesthetic modelling and two images, *feel the tension* and *a bit more power,* so it is useful to examine all of those strategies. As with example two earlier, Tim's vocal demonstrations provided only part of the information, so he supplemented this, firstly with movement. Although it is not actually possible to feel or see what the diaphragm is doing, Tim used the actions to create kinaesthetic awareness of what might be felt externally if the diaphragm was working appropriately. Tim was deliberately fixing the connection between the physical placing of the hand, the text *Shout now!* and the *tense* tone quality he wanted. The action was not to be re-created during performance but the objective was that singers would remember the type of sound required, as the image, the text and the physical action would be inextricably linked in the singers' minds; this is the same usage of imagery as in sport and movement (as discussed in Chapter 2). The three strategies combine and affect mainly the category of breath management.

It might seem, therefore, that the second image, *a bit more power,* was superfluous. Tim's vocal demonstration was precise in tonal quality, attack, strength and volume, so singers had plentiful guidance. However, nearly 70% of Tim's choir have had no vocal training (Appendix D, Q12), so although the model was correct, respondents may not have the aural or vocal capacity to replicate it. One of Tim's choir said, "I didn't know [previously] where my diaphragm was to be honest!" (1Tim, p. 3, ex. 2), so whilst Tim's description would build and support their learning of vocal techniques, there may still have been some respondents with insufficient understanding to create the desired sound. After the first three strategies had been deployed and the choir had repeated his model twice more, Tim was obviously not completely satisfied with the result. It was at this stage that the *power* image was introduced to reinforce another vocal demonstration, highlighting the stronger tone quality and dynamic he required. This final combination of strategies fulfilled Tim's requirements as his feedback shows. The remainder of the example (Tim, R ex. 2) consists of a summary of the previous ideas but with an emphasis on remembering the detail; the whole is then consolidated into the *power* image which becomes a mnemonic for all the categories of breath management, tone quality and dynamic. As the *Shout now*! phrase was repeated many times during the piece, it was important that Tim established the correct effects initially.

When asked whether he thought the final version was different to the first, Tim provided comprehensive affirmation:

> Oh, most definitely, it was less choral type singing, cos I was trying to get the phrases to be punctuated, get them, a powerful phrase (…) that also is something that people don't normally do [sing powerfully] in the song, so I'm trying to get people to really sing with a force and to use the diaphragm. (Tim p.2, ex. 2)

Tim was convinced firstly that there were audible differences between the first and final versions, as indicated by his initial reaction. He also confirmed that the choir eventually reacted in the manner he intended and provided a variety of evidence for this. The main changes that could be heard P&P were the louder volume and more declamatory delivery, both of which were achieved by breath management which also enabled a more focussed tone. The articulation of the first consonants was quicker so the words were more detached, with the first word having more impact. These features are summarised at the beginning, in his answer *less choral type singing*, and demonstrated his well-defined notion of the multi-effect sound he demanded.

Nowhere in this example did Tim actually refer to the text, despite the fact that *Shout now*! would be an obvious prompt for establishing the required sound. Instead, he used the text as inspiration for his second image, *power*. The assumption is that a shout is powerful, therefore, Tim did not need to explain the significance of the image. The interpretation of the text was apparent in both the final renditions of the phrase and later when the whole song was rehearsed. In addition, as muscular tension in the diaphragm and the resulting energetic breathing cannot be seen and furthermore notation was not used, two different aspects of invisibility have been addressed in this example. Both the inexpressibility and invisibility to which Ortony refers (1975, p. 48) are evidenced in a practical way in this example. Although vocal demonstrations and kinaesthetic imagery have been involved, it is important to note that verbal imagery has enabled considerable changes to be created.

6.3 Coincidences in Response to Imagery

Chapter 6.3 examines responses to imagery and whether there are coincidences between one respondent and another in those responses.

Examining Coincidences in Response

One of the main criticisms of imagery as used in choral rehearsals is variety of explanations and interpretations and the subsequent confusion this might cause both between the director and choir and amongst choir members themselves. It is easy to generate evidence for this; the questionnaires distributed at Phase 1.4 contained imagery gathered from the previous three stages which respondents were asked to explain. Of these, some respondents used exactly the same vocabulary as each other whereas others did not. However, the images were taken out of context so would be unreliable. It is more valuable to examine examples within the rehearsal setting, for instance Table 6.7.1. Choir respondents used the words *power, confidence, force, tone quality, stronger, more direct, not breathy, crucial, laser, confident, sustain* and *pitch it* to explain the image.[32]

Table 6.7.1

Coincidence Example: 1

Respondent	**Example**	**Effect**
Sam: image	I want the windows to crack when you sing that E. All the glasses in the bar are going to go. [Directed to alto section.]	
Sam: explanation	*I'm trying to get power out of them; not to sing feebly; more volume and more tone as well; they can go for it with their necks back and reach up or they can alight from on top.*	D, T (Po, B, Tx, M)
1Sam	More power	D, T
2Sam	I think the whole glasses breaking is that sort of image of a Viking woman with the wine glass singing, and the confidence and the sort of force behind it, it's going to make it crack. I think he wants sort of tone quality. Stronger sound or more direct, more direct sound	M, D, T, (B)
5Sam	Not breathy	T, B
6Sam	That point is a really crucial part in the piece	TX
8Sam	I get the imagery of a laser you know that's spot on and therefore it makes its mark.	T
9Sam	I also think it's being confident, cos it's a high note and to sustain it, pitch it, sustain it is quite hard [agreement and laughter] but once we get there and we're sitting on it, we're like 'hey, we can do this.'	M, Pi

There were no coincidences within this group and only two of those words, *power* and *tone,* were mentioned by Sam in his explanation. Table 6.7.2 shows more agreement; some of the words Tim employed were also used by choir respondents and there were also some coincidences between choir respondents. However, as demonstrated in Chapter 2, when imagery is used it is the meaning and conceptual understanding which are recalled rather than the exact words themselves. There is not necessarily any correlation between coincidences of verbal explanations of the imagery and coincidences of vocal response. As demonstrated in Chapter 4, conceptual modes of imagery were the most frequently occurring. By their very nature, these cannot always be explained simply in one or two words, so the vocabulary respondents choose to describe an image may not necessarily correspond. Imagery functions to evoke a particular response, therefore, it is much more valuable to examine those responses in relation to the categories.

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[32] It should be remembered that Sam was interviewed separately to the group of choir respondents and this happened after the rehearsal, not immediately after the image had been used.

Table 6.7.2

Coincidence Example: 2

Respondent	**Example**	**Effect**
Tim: image	What I'm trying to do is to first of all, get us to sing a little harsher, and then step back into it. What I want to do, I'm calling it 'singing without fear.'	
Tim: explanation	*If you've got a slight edge to the voice it cuts through. You can get some of the harshness in, because then you'll know what you have to control. Let's explore the voice, see what it does, then we can rein it in, we can control it and harness the voice. Just singing, enjoying it and just letting go, letting the emotion happen.*	M, T, EX
1, 2, 3Tim (group)	1 [If] we're out of tune, doesn't matter, sing it and then you rectify it; sometimes you're holding back, but he doesn't want that, he wants power. [Don't] hold back; feel it. [agreement]	M, EX, Pi, T/D
	2 It's about the style of singing. [agreement]	EX
	3 You've got to move with it, you've got to have soul! [agreement]	F, EX
5, 6, 7Tim (group)	7 Let it out whether it's right or wrong; sing it anyway and if it's wrong, we can sort it out; just let it out.	M, T, B
	6 Power. [agreement]	D/T
	5 More confidence. [agreement]	M
8Tim	More striking, [not] really nice about it; sing without fear; wants us to bring [the lyrics] across in the singing.	T, EX
9Tim	It's harsher in the sense, sing without fear, feeling free with the song then you bring the finer points afterwards, rather than starting off with the refinements and then altering the volume or whatever; sing and enjoy it, concentrating on your singing.	T, M
10Tim	Go for it to begin with and then get it to sound better.	M
11Tim	To sing as if they were all individual singers [soloists] and put as much power into it as they would as an individual; don't hold back.	M, D/T, F

Coincidence Example 1

The image in Table 6.7.1 can be re-examined in terms of the effects intended by the director and those determined from the descriptions provided by choir respondents. According to Sam, the categories to be affected were dynamic, tone quality and the posture and breath management needed to produce their alteration. The word *powe*r is a combination of a loud dynamic and a focussed tone quality which would cut through the texture. If the wider context is also taken into account, more details of the effects are obvious. Sam explained his awareness that the note E is at the top of the altos range so the tone would be thinner and that it clashed with F# in the sopranos; therefore, he was trying to motivate the altos to create a stronger, louder sound (Sam, Int, p.3:2). Apart from the posture required to produce that sound, all the other effects Sam referred to were evident from the respondents as a group, though some effects were only mentioned by a single respondent. The least obvious categories, of breath management, texture, pitch and motivation were all noticed by respondents. The image itself contains no reference to the type of sound required or how to produce it, yet the power, tone and confidence particularly have been transmitted through the imagery. The director's intentions have been understood, even though some were only implied rather than stated.

It might be argued that the wider range of effects ought not to be considered as these did not emanate from the image itself; if they are discounted, only two of the six respondents understood Sam's reference to changes in both dynamic and tone quality. However, the data was gathered in a group interview, so it is not clear whether some respondents simply added information not previously mentioned by other respondents.

Coincidence Example 2

The multiple image in Table 6.7.2 can be examined in a similar manner. The categories of expression, tone quality and motivation denoted by Tim's explanation were understood by respondents, particularly tone quality and motivation which were mentioned by five and six respondents respectively. The combination of a focussed tone and loud dynamic into the image *power* was mentioned by three respondents, even though Tim did not use this word. Where respondents have been interviewed individually, the holistic understanding (mentioned in Chapter 6.1) of the image is particularly evident. As example 2 has multiple images, it might be supposed this is the reason for the holistic understanding, so it is worth examining one of the images separately, *singing without fear.* If a comparison is made between Tim and respondents 1, 7, 9 and 10Tim's explanations, it is clear these are very similar in meaning with regards to the idea of freely singing without attending to the resulting sound as it could be refined later.

This is an idea that has three distinct elements of which all four respondents were cognisant. This indicates that for at least four respondents interviewed individually, their comprehension extended beyond what could be assigned to the different categories. They understood that if they were more confident, freedom of breath would result, even though they did not make the direct link between the two. Respondent 9Tim understood those elements, even though much of her response does not fit easily into one of the categories. This may indicate a problem with the categories devised, but it also signals that classifying the responses or the images into discrete components may not necessarily capture the complexity of what imagery can encompass. It indicates the intricacy of conceptual understanding which would be difficult to verbalise succinctly, except perhaps through imagery.

Coincidence Example 3

As example two was not P&P, it is not possible to judge whether Tim or any of his respondents noticed any effect of the imagery on the vocal response. The image in Table 6.7.3 was a P&P example so it is possible to analyse any differences respondents noticed in the sound, in addition to comparing the descriptions they provided and the categories which were affected. In combination with the image of building blocks, Ken also used an Italian term and provided a vocal demonstration. His criticism of his demonstration, that it showed inappropriate tonal quality, was not available to choir respondents so their comments related to that category are disregarded here as they were influenced by Ken's vocal demonstration.

The most obvious category affected in example 3 was the dynamics, to which the Italian term also related. All respondents commented on the dynamics and there was clear understanding that these should increase. However, respondents 2Ken and 4Ken both differentiated between a *crescendo*, which was gradual, and the building blocks, in which the increase in volume occurred step by step. Ken also gestured whilst providing the image, outlining different levels which emphasised the step-wise nature of the building blocks; the gesture compounded the verbal image. Respondent 4Ken was precise in saying that the image of building blocks added detail of how the *crescendo* should be executed, indicating the specificity which the gesture and imagery provided. In addition to explaining the dynamic changes, 2Ken realised that in order to alter the volume, more energy was required. It is interesting to note that he used the same word to describe managing the breath as did Ken. Although, as noted above, coincidences of vocabulary are unreliable, here it refers to the process of effecting the change rather than explaining the image and is, therefore, noteworthy.

Table 6.7.3

Coincidence Example: 3

Respondent	**Example**	**Effect**
Ken: image	Last three notes and a shout [choir sings]. Remember we're building, it's building blocks; it must feel like there's a crescendo, even though we're already there [vocal demonstration]. So that it grows from that sound [choir sings].	
Ken: explanation	*I should have demonstrated that better because I was shouting all of it and I should have sung it and gone into the shout. I wanted crescendo; trying to make it into something that's worthy of an ending, I'm encouraging them to work their energy levels so it feels like a finish, as opposed to something that just finishes.*	(T) D, M, B, EX
1Ken	Each time you're stepping up the volume and intensity of the word and the sound.	D, A/T
2Ken	Put more energy into it, get louder and louder; you're building on the words, you then go for the Te at the end [of the piece]. [It was] very staccato [in the way it got louder]; it was *f, ff, fff* at the end.	B, D, EX R
3Ken	[It was] building up and hopefully it won't be as shouty at the end. Starting quieter and building up the sound.	D, T
4Ken	We were trying a little bit too hard at the end, overdoing it slightly. I picture children's building blocks, and going up steps. The building blocks adds to [it]; crescendo is very gradual, whereas building blocks is more steps. So one louder step at a time, rather than a very gradual crescendo because it's individual notes with a rest in between.	EX, D, R
7Ken	Step by step, a clear approach on the [last] time; less wishy washy. [tone]	D, R, T,
8&9Ken (group)	9 We've got to build it up and get there in the end, rather than at the beginning. 8 A bit louder at the end, a big flourish, but we must start a bit quieter to get that. [Agreement]	D D, EX

Ken was conscious of the context of the short phrase in example 3 (the four final sounds of the entire work), so his intention that it should make an impact is understandable. Choir respondents recognised that context, if only from the score, but explanations from 2, 4 and 8Ken also acknowledged appropriate expression due to that context. They understood the interpretation of the impressive climax Ken was trying to convey. One category not mentioned by Ken in his explanation is rhythm, specifically the timing of the entries and their *staccato* articulation. Respondents 2, 4 and 7Ken commented on hearing the entries being timed together more accurately and/or the silences between each sound. The difference between the stepped idea of separate building blocks and a gradual increase of a *crescendo* is discussed more fully in Chapter 5; however, it is important that these differences were aurally apparent as they have been generated by the imagery and were heard by respondents whose attention was not being drawn to that rhythmic separation. In example 3 there are coincidences between Ken and choir respondents and amongst choir respondents, in the categories of dynamic, rhythm and expression. In comparison with the other respondents, 2Ken and 4Ken provided more detail in their explanations, so it might be assumed that they have either more vocal knowledge or have been in the choir longer than others and can, therefore, understand Ken's imagery more fully. This is not the case however, as reference to Appendix D (Q1, 3, 12), shows there is no correlation between these. Where images are combined with other strategies it is difficult to ascertain exactly how much of the change in response is due to each. In example 3 it has been possible to isolate the imagery to some extent from the vocal demonstration and the Italian term but the gesture is too closely interlinked to separate them. Perhaps it is more important to note the employment of imagery in these examples alongside the other strategies. It contributes detail to and clarification for the response, which singers are able to exploit in order to create the director's intentions.

6.4 Consequences for Choral Directors

Introduction

Chapter 6.4 considers the findings from the earlier parts of Chapter 6 and generates the consequent implications for choral directors. Previous research on the role of the director has already been completed by Durrant (2003), Jansson (2014) and others, so reiteration is not necessary. What is more important is to discover where the director's role and this current research coincide; that connection is identifying the implications for directors of using verbal imagery in their rehearsals. Table 6.4 collates information from this research about qualities of an effective director and found, unsurprisingly, there were many overlaps with previous investigations. Characteristics such as a positive, enthusiastic and hard-working personality were commonly cited, as were aural and musicianship skills, combined with good knowledge of the music. Directors often used their aural skills for error detection but they need to be similarly attentive to subtle variations between phrases when they ask singers to implement any modifications. Alterations can be exemplified vocally or through gestures or language, including imagery.

Directors and Imagery: A Critical Evaluation

Six directors cited good communication skills amongst directors' qualities (Table 6.4), which suggests incorporation of a range of strategies, including verbalisations. More specifically, Pete suggested the importance of "good teaching ability" and the "ability to express what is demanded very clearly" (Table 6.4). Imagery is a normal and accepted part of ordinary language, especially in an educational context such as a rehearsal; respondents in this research have also recognised its usefulness in clarifying explanations (Appendix D, Q7), so it has a valid role. If directors are aurally alert to the small changes in sound their explanations have created, they can evaluate what language has been used to cause those changes. Vocabulary and expressions are tried, tested and refined during rehearsals as Emma realised: "I am still finding more and more ways to explain (…) to describe" (Emma, p. 4, fq). By this approach, she and other directors were able to judge whether the imagery they used was successful in transmitting their intended objectives.

Tim was similarly receptive to "learning as I go along," as opposed to "saying the same things all the time," especially when he realised a singer did not understand (Tim, p. 6, fq). He took a critical stance towards his use of imagery, assessing both his verbal prompts and the responses they elicited. Therefore, although directors expect to listen carefully to their singers, if they apply the same levels of perceptive aural analysis to their own vocabulary and the consequent responses, they may find singers respond more accurately and quickly, possibly even with more subtlety in terms of the appropriateness of the sound. This applies to any verbalisations but particularly if directors are prepared to search for the most efficacious explanations possible, which may include imagery. Cognisant of the fact that many exemplars are provided sub-consciously and instantaneously, directors' creativity can enable the invention of imagery which might fulfil several objectives simultaneously. As directors become familiar with the norms of a particular choir, they may hear the nuances and inflections of the sound more clearly and become successively more demanding; consequently the quality and style of their performances improve over a more extensive period. Conversely, directors may become inured to their choirs' responses, be less discerning and come to accept a norm which falls short of the potential level of achievement. In either case, directors need to balance the elusiveness of invention with clearly expressed demands, both of which have been found in imagery.

Director D9 suggested directors should ask choir members for their evaluations of the responses (Table 6.4), which emphasises the bi-directional nature of communication and relates to both Durrant's (2005, p. 95) and Jansson's (2014, pp. 150-1) notion of a shared role between director and choir. Asking choir members for feedback regarding their understanding takes a level of self-confidence beginners may lack but, considering the high percentage of singers who recognised imagery's potential to explain ideas clearly, (Appendix D, Q7), it might not be such a daunting prospect. It would also provide directors with a choice of which images to retain in future, thereby building a shared vocabulary and strengthening the relationship between them and the choir.

What Ken found fascinating about directing choirs was "influencing the large dynamic (…) of a mixture of abilities, and yet pulling the strengths out and bringing along those who are less confident" (Ken, p. 9, fq). Tim tried to enable his singers to let the passion out and touch the next person with their singing (Tim, p. 6, ex. 4). Both directors were referring to drawing something from their singers which lay beyond the text or notation and which could be fostered with imagery. The relationship between director and singers influences that between performers and the audience; therefore, if directors are able to exploit the indefinable aspects of the sounds through imagery, singers can express them so the confidence and passion Ken and Tim sought can be transmitted to the audience.

Five of the seven directors who answered the question about director's vocal knowledge said it was valuable (or essential) as it enabled them to explain to their choirs how to create the desired sounds (Appendices F, Q20, 21 and G, Q13). Two directors particularly mentioned being aware of their aims and of knowing how to achieve them; verbal explanations would necessarily be included in the strategies employed for this. The same percentage of directors had some level of vocal training, the majority of whose vocal teachers used imagery. Those directors who experienced imagery during their vocal lessons should appreciate that its most frequent purpose, to explain the invisible vocal apparatus, is applicable in their choral rehearsals, so they should deploy it confidently, knowing it has an established rationale. Considering that imagery is so widespread in vocal teaching, directors might be fully cognisant of this fact and utilise imagery not as an inadequate substitute for factual information, but in the knowledge that it has a valuable role in transmitting their requests, particularly in relation to tone quality. Emma was aware, though, that vocal techniques and tone quality would vary according to the repertoire (Emma, p. 5, fq), so the ability to alter explanations for diverse circumstances would be advantageous.

Two directors, conscious of the advanced vocal skills of their choirs, stated they were not *singers*, meaning not at the same level as their singers. They used imagery to supplement their "instrumental type" of vocal demonstrations, which were often without text (for example, DG, Int, p. 1:2; p. 2:3). Imagery's purpose here was to clarify the vocal demonstrations, and for those directors who may not be able to provide precise models, this is a useful approach as it allows directors to strengthen a perceived inadequacy. Director DW proposed that for the most highly skilled vocalists it was not essential that their director had good vocal skills (DW, Int, p. 9:1); Ken's answer concurred with this (Appendix F, Q9). If singers are vocally proficient, they only require to understand their director's intentions, which may be supplied in various ways, including imagery. If directors have had vocal training, DW suggested this might be advantageous also in enabling them to be more specific in their verbalisations, but he stated that experience of vocal training did not necessarily guarantee clear communication (DW, Int, p. 8:3; p. 9:1). Although this obviously also relates to technical descriptions, it does not exclude imagery and, provided directors aurally analyse the results of all strategies, their singers will progress.

It is important for directors to remember that it is not the image alone which creates an effect or modifies a sound but the manner in which directors employ imagery; this applies whether directors are vocally experienced or not. In isolation, an image such as *a damp squib* may be confusing and ineffectual, but in its context, "the first word is always a bit of a damp squib, isn't it," (Ken, R1, p. 8:3), the lack of precise rhythmical attack and clear articulation of the first word were emphasised. The image was related to specific effects within a musical phrase which Ken wanted to transmit and which singers were able to create.

Once directors know a particular image is effective, they are able to employ it more consciously. Director DG, for example, realised when learning to conduct that he needed to generate the same types of stories or images his professor used, in order to illustrate his own ideas (DG, Int, p. 2:2). This indicates DG's recognition that imagery and anecdotes were an essential part of the rehearsal process. The images need to be decipherable by the choir in question, perhaps based on shared experiences, otherwise their value will be lost. This emphasises the importance of the relationship between directors and their choirs and can even enhance it. All directors in this research used a range of strategies including imagery (Appendices F and G), and Emma, Ken and Tim stated they varied the strategies according to the circumstances (for example, Tim, p. 6, fq). If this applies to directors more generally, the realisation that imagery can be included as a defensible strategy across various contexts may encourage directors to include imagery more strategically in their rehearsals. Director D8 recommended regular re-appraisal of rehearsal methods and techniques (Table 6.4), in order to develop directing skills. If directors were more aware of the benefits of imagery, it might be incorporated more regularly and purposefully within the normal range of their strategies, especially if directors were aware that imagery can be applied across diverse circumstances, as in this research.

Restrictive rehearsal schedules may mean that learning repertoire takes priority, especially with choirs who do not read notation proficiently or when performances are frequent. Ken, however, suggested a longer term aim, stating that 80% of the director's role is training, whereas directing was needed towards the end [of a series of rehearsals] (Ken, p. 11, fq). Although Ken sometimes did not conduct final performances, which would have influenced this answer, his concern over the progress singers make over a more prolonged period is a fundamental consideration. One implication is that the ability to transfer skills and knowledge from one context to another is as essential as learning how to sing a particular piece. Remembering the skills or information, therefore, is crucial to that process, and recall and application in different contexts have been demonstrated to be aided by imagery.

Directors, Singers and Imagery in Choral Rehearsals

Maintaining singers' interest, motivation and involvement during rehearsals was seen as beneficial by half the directors (Table 6.4), and there are several approaches which can ensure this. The use of humour was frequently mentioned as motivating singers, keeping them alert, and was also appreciated by choir respondents (for example 6Ken, p. 4, ex. 4), especially the use of humorous negative images: for example, "now all we need to get rid of is the hoover sound at the beginning and we're nearly there" (Ken, R1, p. 3:2). Four directors mentioned inspiration or musical imagination as being an important directing skill. This may be interpreted as varying the repertoire, devising different methods of rehearsing similar things, or changing strategies within a rehearsal, but it can also be applied to devising imaginative and innovative imagery. Novel imagery, together with images which are known to be within the experience of most choir members, serves to make rehearsals more personal and meaningful to singers. The relationship between singers and directors is strengthened, which can affect attendance at subsequent rehearsals. In fact, all choir respondents demonstrated a positive attitude and willingness to work for their director, for example "he does inspire you," (3Tim, p. 6, ex.4), or "I'm hugely motivated by him and I suppose I'm willing to put the work in because I can see the benefit all the way along" (3Ken, p. 7 fq). This implies the motivational tactics were successful, whether consciously deployed or not. This is not evidence that motivation is a consequence of the director's use of imagery, but imagery can be a facilitator for many aspects of the rehearsal process, including motivation.

Singers were not asked directly to highlight the qualities of their directors though many included such insights in their accounts. Respondents aimed to achieve their director's intentions (for example 1Ken, p. 3, ex. 3), showed respect for their director's musical abilities (for example 3Emma, p. 3, fq), or their confidence in the director (for example 9Tim, p. 2, ex. 2). The balance of demands and rewards was particularly appreciated in Ken's choir (for example 1Ken, p. 5, fq), knowing they had earned the praise he gave (for example, 4Ken, p. 5, ex. 4). Although none of these was directly a consequence of imagery, it is useful to note that several respondents appreciated the range of strategies their director used (for example 4Tim, p. 2, ex. 2), or were aware that "in a performance, everything he said has gone in," (3Ken, p. 6, fq), which indicated that verbalisations in rehearsals, including imagery, were successful.

Two further comments are worthy of particular note: "definitely one of his strengths [is] that he is able to get those nuances over in the words" (3Ken, p. 2, ex. 2). The detailed refinements and subtleties suggested by this can only occur with vocabulary which allows for a measure of vagueness and intangibility, of which imagery is capable. Similarly, when referring to a specified image, 11Tim said, "I know what he's [Tim] getting at and I understand what he means when says things like that" (11Tim, p. 6 fq). This reveals the respondent's awareness of the underlying understanding which imagery provides, as opposed to a simpler and more superficial translation of vocabulary. Not only did this respondent understand the image referred to, but her comprehension extended to *when he says things like that*, presumably meaning other instances of imagery.

Maintaining singers' involvement in rehearsals was proposed above as one of the qualities of a good choral director, and although it is frequently executed physically or vocally, that is not necessarily inevitable. Singers may be participating in rehearsals if they are actively listening, reflecting on what they hear and learning from that:

> When you're listening to somebody else (…) you're hearing how he [Tim] wants them to sing as well, so it's nice to pay attention to what he's doing with the other sections as well, to make sure that (…) we probably get it right more first time! (9Tim, p. 4, ex. 3)

Respondent 9Tim was also aware that the learning process produced positive results. Participation may be undertaken too by thinking and activating the brain in deciphering the meanings of whatever strategies are being applied. This notion of sense-making, to which Janssen refers, involves both singers and directors (2014, pp. 150-1), though it may not be a conscious process unless attention is drawn to it. Developing interpretation of meaning in rehearsals is vital to sustainable progress of choirs and the individuals within them. Understanding, particularly in relation to abstract concepts, is facilitated by imagery, therefore, its use has two functions here: to enable singers to change the vocal effect they are creating and to promote active engagement and development of their comprehension in respect of those effects. An extensive quote from Ken emphasises this point:

> Sometimes I do get some singers (…) who say "what are you going to do at that point?" you know! And I say, "oh I'll show it you in the concert" and I do! But I sometimes deliberately *don't,* to make a point that it's not just all about what I do technically with my hands to create time or to create volume or whatever. It's more about making them *think* about what they need to know in order to make that sound, and then we can communicate it better through them doing it. (Ken, p. 11, fq)

If directors are to learn anything from this quote it should be that they do not need to rely on constantly telling singers what to do, or even how to do it. If approached appropriately, directors might benefit more from exploiting imagery to prompt their singers to think more about the sounds they produce and to aurally analyse the results. In this way, the performance and communication of the music to the audience can be influenced. This is certainly an achievable and desirable aim.

Chapter 7

Conclusions and Implications for the Future

This research has foundations in several examples of prior research but has advanced some topics, explored others and has produced original findings and research methods; Chapter 7 summarises these findings.

7.1 Conclusions and Implications for Directors

Conclusions: Originality of the Research

The originality of this study is that it examines a wide range of strategies, though imagery in the choral context is the central concern. The area of study necessitated a design which would allow a breadth of data to be gathered; observations, videos, questionnaires, interviews and interpretations were collected over five years from 15 choirs and 21 directors, which is a larger and more varied group than previous studies. The research design was sufficiently flexible to accommodate examination of strategies other than imagery once it was apparent that they were influential.

Rehearsals were at the centre of data collection, allowing respondents and the researcher to provide interpretations of both the words and more importantly the choral sounds, and to judge whether and how these had been altered by imagery, and the director's intentions realised. Studying the contexts of imagery was also essential and it became evident that some previously unconsidered factors were influential, for example the relationship between director and singers. Maintaining the director as reviewer enabled an evaluative process which mirrored the situation in rehearsals, where the director's immediate aural analysis is fundamental. Though there are some similarities with Chen's (2007) research questions, she dealt only with individual voices rather than the choral context; Grimland (2001) focussed only on modelling rather than the variety of strategies examined here. Funk (1982) and Jacobsen (2004) both dealt with imagery in choral rehearsals but limited their examination of the outcomes to expressive content and vocal function as opposed to the full range of outcomes collated in this research.

One of the innovative ideas of this research was to include examination of the sung responses to imagery; this allowed scrutiny of a breadth of outcomes through the comprehensive categorisation of effects. As the choral sounds were the principal concern, it was important to include investigation of these, otherwise it would have been impossible to examine the effect of the imagery. Evaluating the impact of imagery on the sound enabled innovation in terms of identifying types of imagery, particularly negative, themed and stock imagery. These phenomena had not previously been identified or examined, nor their functions ascertained. In addition, the generation and recording of imagery's varied functions constitutes a unique contribution to choral pedagogy, the first study of its kind in the UK.

Conclusions: Imagery in Choral Rehearsals

The main purpose of imagery in choral rehearsals is to affect singers' vocal responses. Imagery causes singers to think differently and so alter the sound which directors then aurally analyse and judge for suitability. Directors try to ensure the singers' understanding through a variety of strategies. Directors' ability to do this depends on their knowledge of vocal technique, which will include imagery, their imagination and their ability to provide clear explanations. This is a complex process due to the numbers of singers and diverse abilities in a choir and the levels of conceptual understanding of choir members.

The existence of imagery in choral rehearsals has not previously been in doubt, but this research has enabled directors to recognise and rationalise the expressions they use, however ingrained, natural or frequently repeated they are. The clarification this research has provided will particularly heighten directors' awareness of the functions and effects imagery can provide in rehearsals, allowing directors to reflect on the efficacy of their practice. One of Funk's most important conclusions about the efficacy of his research was a recognition that "verbal imagery is among language choices available to the choral director in rehearsal [which] may aid him or her in becoming a more creative, expressive and effective choral conductor" (1982, p. 13). Jacobsen too noted that although the language of imagery was familiar to directors, "the ears of the profession are not as clearly attuned to this phenomenon as they might be. When the awareness has been established, the profession can begin to engage in reflective practice" (2004, p. 89). The current research has completed that reflection and produced findings which are adaptable to and can be integrated with directors' practice.

The choice to use imagery, or not, and the types and modes of imagery evidenced during rehearsals are entirely dependent on the director. The director's imagination, sense of humour, attitude to the choir and repertoire, vocal and choral experience and many of his/her personality traits inevitably influence every explanation provided, including whether s/he uses imagery. Different types of imagery have been evidenced, with some images belonging to more than one type. Simple images were common, though as many of them were also conceptual they were not necessarily simple in meaning; they can create multiple effects and be understood by respondents. Thematically linked images can influence not only particular phrases in the music but whole sections of it, sometimes during extensive periods of a rehearsal; in addition to their musical effects, they may enable singers to become more involved in the music in terms of its interpretation. This resonates easily with Plunket Greene's assertion that treating a song "as a whole is the secret of interpretation" (1912, p. 13). Negative images were identified, often characterised by humour leading to motivation, and by being located alongside negative demonstrations or gestures. Sometimes they were contrasted with a positive image relating to the same outcome in order to highlight the undesirable effect of the negative image. They were understood by respondents and, once their purpose was achieved, the unwanted sound along with the negative image was frequently forgotten. Different types of images were sometimes combined and these, along with multiple images, had the potential to elaborate the image and its effect or to confuse respondents.

Stock images were frequently also simple images, sometimes with a core effect where other effects could be modified around it depending on context. Two types of stock image were identified: intra-choir stock images, sometimes very distinctive, became part of the shared rehearsal language and could positively influence the relationships between director and singers. Inter-choir stock images were evidenced, and in most cases their meaning was common across contexts, even where that context was outside the current research. The sharing of language and meaning of stock images may prove useful to directors in their endeavour to communicate succinctly with their choirs. Most images were multi-faceted conceptual images which enabled multi-effect responses and so were advantageous in rehearsals.

Imagery's Relationship to Other Rehearsal Strategies

There were clear differences between the characteristics of the strategies directors used. Any verbal forms, including imagery, could be used simultaneously with gesture, and gestures could be deployed during concerts, unlike verbal forms. Vocal demonstrations were favoured by directors as being the most efficient model but were accompanied by verbal information, frequently imagery, implying they were nevertheless incomplete models. Technical descriptions, unlike imagery, were not used to illustrate expression or motivation, so had some limitations in their deployment.

In practice, however, directors used a selection of strategies in combination which created an inter-dependency between them, with the strongest relationship being between vocal demonstrations and imagery. This implied that either each strategy was insufficient alone, or more likely, the requirements themselves were complex, so a mixture of approaches was more appropriate. Each individual strategy could affect several categories of the sound simultaneously and as the responses directors required were rarely one-dimensional, integration enabled the maximum information to be transmitted to choir members. The composite nature of this combination allowed detail, precision and brevity, despite any lack of premeditation on the part of directors.

Combining the strategies also provided diverse modes of perception, so enabling comprehensive understanding across a range of singers. This might mitigate for any differences in interpretation across choirs, a characteristic which was noted when examining strategies individually. However, understanding the requirement and being able to respond to it are discrete processes, between which there may be some discrepancies. Confused or incorrect responses were encountered across the strategies and were not limited to imagery. It emerged that negative versions of gestures, vocal demonstrations and imagery were frequent and effective approaches and were consistently deployed alongside their positive counterparts, emphasising the appropriate response and often providing humour. Negative and positive versions of the strategies were blended spontaneously, highlighting the contrasts between them so making them extremely efficacious.

All of the strategies, whether alone or in combination, required the use of the singer’s imagination for both the interpretation and response. The data suggested that singers believed the major source for confusion with imagery was that it left too much to the imagination which produced insecurity regarding the correctness of the response. However, this also applies to a lesser extent to all the other strategies, with the exception of SRS (Stop, repeat section), as singers still needed to use their powers of interpretation in order to create their vocal response. The concerns which emerged with imagery were also evident within the other strategies which have been discussed, especially when examined individually. It was difficult to separate the strategies in practice without affecting the validity of the examples. What was easier to determine was that imagery was nevertheless one of the essential components within this fusion.

Conclusions: Functions and Effects of Imagery

The circumstances of imagery's usage and its functions and effects have been examined. Several findings were predictable based on previous research; for example, the fact that imagery permitted multiple effects simultaneously was a recurring and important feature confirmed by this research. Both music and images are multi-faceted, therefore, the fusion of the two creates efficient practice which enables a holistic response. The core effect of some images, which can remain stable across contexts if directors use it consistently, still allows for corollary effects. The notion of core and corollary effects has not been encountered in previous research. The time efficiency which resulted from multi-effect images was also prevalent but not always a priority for directors.

Imagery's ability to facilitate conceptual understanding and its conscious and sub-conscious usage were expected findings, though the additional evidence of conceptual understanding provided by this research makes the case for imagery's employment in choral rehearsals more compelling. One of the findings in this research is that imagery affects both understanding and response. Once understanding has been achieved, the appropriate vocal response can be attempted; in the absence of understanding, the correct response cannot be evoked, but without the response the cognition is purposeless. Examination of the sung responses has demonstrated the interdependence between the two.

Directors shared meaning with their choirs through imagery irrespective of whether there was exact repetition of vocabulary when explaining intentions, therefore, clear and precise objectives could be transmitted. The novelty and individuality of imagery allowed directors to access a variety of ways in which singers perceived the requirements and, since imagery was frequently combined with other strategies, enabled the majority of singers to respond appropriately. Original images often provided humour, particularly when negative images were encountered, and served to motivate singers.

The assumption that imagery functioned to interpret and express music was evidenced within this research and, additionally, it was demonstrated that imagery could be associated with a specific phrase or feature in the music to which it became bonded, so the recurrence of the musical phrase included recall of the imagery. A strong alliance between imagery and text was also substantiated, where the text functioned as both a mnemonic and a source of imagery. However, it was the director's application of imagery in a particular context which determined the response, rather than the text itself, a point which is valuable to directors. This is a novel finding.

Although it had been previously recognised that imagery's ability to change cognitive understanding was particularly useful for abstract concepts (Petrie & Oshlag, 1993), this research demonstrated recurrence of its deployment to explain one category of vocal function in particular, that of tone quality. Technical terminology was frequently supplanted by imagery when attempts were made to counteract the problems of invisibility in creating resonance, register and tonal differences. This may have been due to imagistic terms from previous decades still being reproduced by generations of directors and vocal teachers. However, the same images were also evident amongst respondents who had no prior vocal teaching and who may, therefore, have been less aware of their existence.

One of the persistent objections to imagery in vocal and choral contexts was the possibility of it being interpreted differently by individuals within a choir and, therefore, its unreliability as a way of determining an intended outcome. The two rejoinders to this are firstly, that identical language and identical conceptual understanding are not necessarily correlated, a factor which the researcher had not anticipated. Duplication of vocabulary in explanations does not guarantee equivalent responses, whether related to imagery or other verbalisations, and it is the vocal response which directors wish to influence, hence the examination of vocal responses in this research. Secondly, the communal nature of the choral context, especially in amateur settings, almost guarantees differences in perception and vocal output. Directors who appreciate that will not expect identical sounds from individuals with different vocal instruments, experiences and abilities or diverse perceptual understanding; instead they will regard moulding those sounds as essential to their role.

The mnemonic capability of imagery has long been recognised and has now been substantiated by this research in the choral context. The more valuable and recurring evidence is of the recall of the vocal responses associated with the imagery. The connection between the two is robust, which enables imagery to be more dependable in producing the director's objectives. The image and response become integrated, remaining so even after a period of time, which enables effective utilisation by directors.

Scrutiny of P&P (pre and post imagery) examples suggests that imagery was always employed in combination with other strategies; this was revelatory to the researcher and has two conflicting implications. The first is that imagery is not sufficiently effective to be applied alone. Evidence for this argument was not convincing as imagery was combined with vocal demonstration and gesture, or vocal demonstration and technical terms; apparently all three strategies were equally vulnerable to that criticism. Both technical descriptions and vocal demonstrations need to be accurate and detailed but, more importantly, require the ability to be applied by singers, as does imagery. The alternative implication of imagery being consistently combined with other strategies is that it makes sufficient contribution to the whole to justify its position among them. Directors and choir respondents could aurally detect differences P&P, however, it was not always clear to what extent those differences have been achieved by imagery, due to the complex circumstances of its use. It is evident though that imagery alone was responsible for some of the effects noted, perhaps some of the most inexpressible or vague to define, but effects which were nevertheless apparent aurally.

Imagery’s mnemonic ability was also evident when directors had drawn attention to that purpose, but particularly when images were employed to encapsulate a number of effects, even if those effects were originally caused by other strategies. These indications, together with the aural evidence verified by directors, may be why respondents were convinced of imagery’s efficacy.

Imagery’s Effects are Aurally Apparent

It was important to examine imagery and the response in context rather than investigating isolated words in abstract. Imagery was provided by a particular director to his/her choir for an identifiable purpose when rehearsing a specified section of the music, where the purpose was to affect the sound in some way, so it is inappropriate to consider imagery outside that environment. Within that setting, singers understood their director’s intentions for the imagery, even when those were only implied or quite subtle. Singers acquired comprehensive understanding of images, which affected sounds across categories and, in some cases, beyond the boundaries of the categories. Imagery frequently occurred in combination with other strategies, which created complexity when attempting to assess its effects. However, singers confirmed that imagery added detail and specificity to the responses their directors expected, especially where images were intricate or affected several categories.

One of the most important results was that the changes generated by imagery were aurally apparent, to singers and directors. The coincidences in their reporting related to their understanding of the imagery as well as its aural effects. That shared understanding was sometimes evidenced by comparing vocabulary but was better indicated when assessing the vocal responses. The extent of the understanding and responses depended on the size and constituents of the choir. In some cases a holistic change in the choir's response may have been heard even if every individual was not making that modification; this outcome could also be true with changes that were not reliant on imagery, for example pitch accuracy.

Despite the researcher's original conviction to the contrary, coincidences of vocabulary in explanations of imagery were not on their own convincing. However, there were also disagreements over some technical and Italian terms, so allowing differing descriptions of imagery was acceptable, provided the understanding and responses were consistent. It was useful to examine imagery which recurred across a choir[33] to ascertain conceptual understanding. The fact that respondents were able to explain in their own words the meaning and effect of an image, rather than simply repeating the director's vocabulary, demonstrated the image had transformed into a concept which was known and recognised across the choir.

Implications for Choral Directors

The circumstances in which imagery operates have been determined and a process revealed and defined. Imagery has an important place in choral rehearsals as both a pedagogical tool and as a facilitator for creating and changing vocalised effects. The purpose of any empirical research is surely to affect practice, or at least to change practitioners' thoughts and reflections.

Directing choirs is not a process replete with factual information which can be proven, because it comprises making music, creating and refining sounds and involves people; all three are prone to be flexible and indescribable. In performance, directors are not creating the sounds themselves, so those who wish to improve their ability to help their singers create the music will take advantage of all strategies which can aid a process which is essentially about transmitting ideas. Using verbal imagery is not guaranteed to transform rehearsals overnight;

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[33] For example, Ken's choir were asked to provide an example of any images Ken had used previously, nine respondents (16, 18, 21 and 32 - 37Ken), offered the same image but used different vocabulary, including 36Ken, who recalled "the 'needle and thread' method of ensuring the correct mouth shape," (Appendix E).

as with any other strategy at the director's disposal, it can assist directors, but only if they know this is possible. This research has demonstrated that verbal imagery can be influential in a number of ways, including several which are quite subtle.

Directors are constantly striving to explain their requirements to singers, in order that their vision for the music might be achieved. Respondents in this research have recognised imagery's ability to clarify explanations, though the effect is reduced if directors use images which are outside the experiences of their singers. When listening to their singers' responses, directors might also aurally evaluate their own words, including the images they invent, so both sides of the communication process are assessed and can, therefore, be improved. Those directors who wish to make nuanced adjustments to the sounds can influence changes by using imagery, which allows for those intangible features, difficult to describe with more precise language. In this regard, directors need not be tentative about using their imaginations and creativity in their vocabulary, just as they exercise their musical imagination, as imagery has the capacity to fulfil several objectives simultaneously. Idiosyncratic and unusual expressions often have the supplementary benefit of adding humour, interest and motivation to rehearsals, something which most directors highlighted as essential.

Directors who have had vocal training are likely to be familiar with imagery's role in explaining the invisible aspects of vocal technique. They should be reassured that this is a valuable function for imagery, especially regarding changes in tone quality. Directors who are not confident in their vocal demonstrations may be encouraged to learn that verbal imagery is very frequently combined with such models to enhance their efficacy. Imagery is rarely used alone; neither are other rehearsal strategies. The variety of combinations proves effective in allowing diverse perceptions and styles of learning to take place, which is advantageous when working with groups rather than individuals.

A high percentage of singers understand imagery and are able to make appropriate responses to it. Directors can, therefore, incorporate imagery spontaneously into their rehearsals, cognisant of both its efficacy and its ability to be applied in a variety of contexts. It is difficult to plan appropriate images in advance but, provided directors have clear objectives for the sounds they wish to generate, imagery can be used to transmit those objectives to the singers. As imagery is devised to address specific aspects of the sound, its originality enables it to be easier to recall than more standard terms. This is particularly useful when the image relates to abstract concepts, understanding or skills which can be transferable from one piece or section of music to another. Developing holistic understanding of ideas, for example the semi-abstract concept of managing the breathing mechanisms, can only be helpful in long term choral development. If used consistently, some images acquire sufficient distinct characteristics as to be identifiable across contexts; directors might be alert to these stock images in order to deploy them advantageously.

Rehearsal schedules are finite and, although it may not be a director's priority, imagery's succinctness has the advantage of being time-efficient. Directors may wish to maintain the concentration of choir members by asking them to analyse and evaluate any differences in sung responses. Although this does not relate solely to imagery, regular practice of this approach can develop not only singers' aural perception but also the inexpressible and intangible features of the music which imagery is proficient in promoting; these can subsequently be communicated to the audience. One of the consequences of using imagery is a strengthening of the relationship between director and choir. This can occur through the development of a shared vocabulary and understanding with stock images and by using imagery to maintain singers' motivation and enjoyment in rehearsals or to achieve joint objectives for a sound or phrase. This is a positive, if unforeseen, outcome.

Directors who have many years of positive experience of directing choirs may have learnt a way of explaining a specific effect which is consistently successful; where this is the case, it can be repeated. When a director's first explanation does not produce the required outcome, changing vocabulary or expression or taking a different approach is more likely to be considered; this applies to any strategy including imagery. Directors can be reassured, therefore, that if one image does not create the change they sought, they have the ability to change the image or change the strategy until successful. Images, in common with other types of explanation, are flexible so can be altered and expanded. If after several unsuccessful attempts the choir continue to produce an inappropriate outcome, the director might either examine whether they have a clearly defined objective or whether the choir are in fact capable of achieving it. Directors in this current research were open to learning new ideas and new ways of transmitting those to their singers, even if they had years of vocal, choral and directing experience.

Directors who rehearse regularly with their choir (as opposed to solitary rehearsals) will realise that, although the repertoire changes, their consistent aim is to enable their singers to create the best performances of which they are capable. This is a comprehensive aim which transcends the small details of rehearsal strategies and techniques. It has been demonstrated in this research that imagery can be influential in many ways, the most important of which are developing singers' understanding of the concepts involved and in enabling singers to create and modify vocal sounds in response to their director's requests. Accomplishing these would be an achievement indeed.

7.2 Implications and Applications for the Future

Implications for Future Research

The most immediately obvious future research would be a similar study without the limitations outlined previously; broader and longer in scope, it could gather evidence of any replications or differences in outcomes. Another possibility would be to extend the scope of Grimland's work on modelling (2001), to discover any similarities between vocal demonstrations and imagery. Considering the resemblances between vocal teaching and choral rehearsals, corresponding research might be performed with vocal teachers and their students, or extend it to instrumental ensembles. It may also be productive to identify parallels and contradictions with Garnett's study on gesture (2009), which would inform both research and practice. There remain several areas of the research which have not yet been fully explored, for example the notion of core effects of imagery or the proliferation of stock images or the extent to which imagery is effective with more accomplished or experienced choirs. It was the researcher's original intention to produce a practice guide for directors and, although this may still be valuable, the indications that individual contexts are so influential on imagery's efficacy have ramifications for any generalised practical advice.

Applications in the Future

The results of this research could be incorporated into training courses, advice and manuals for choral directors, or in vocal settings or even wider educational practice. This could take a systematic and progressive approach, helping directors understand how and why imagery is effective. For those who hold neutral or sceptical opinions on imagery's value, the research would at least be informative and may even change practice, knowing imagery's functions and effects have been substantiated. Further attention in training courses and advice might be given to the more subtle aspects of choral directing which Price sought (2006), and which imagery can provide, rather than a continuation of emphasis on the baton and other technical aspects. Recent quantitative analysis by Pfordresher, Halpern and Greenspon has shown that “the multi-modal nature of imagery can be informative in understanding activities that integrate perception and action, such as singing” (2015, p. 251). This validates the emphasis on meaning and understanding leading to a response which was central to the current research and may prove beneficial in future study. Real-time visual feedback has been comprehensively researched (for example, Hoppe, Sadakata, & Desain, 2006; Ternström, Jers, & Nix, 2012; Welch, Howard, Himonides, & Brereton, 2005), though this has not yet been explored in choral work. Although it may not be practicable to provide all the singers in a choir with such immediate and valuable feedback, it would certainly be possible for the director to receive such information. If this was completed, it could provide scientific proof of imagery’s capabilities and transform future practice by allowing directors to modify the choir’s sound instantaneously through imagery.

Results from this research will supply confirmation to those directors who already employ imagery efficiently and who, having been provided with a rationale and record of imagery’s effects, can be confident in their convictions. The final reassurance could, therefore, be directed to all the directors who now have evidence of the legitimacy of their effective practice. This research has scrutinised choral practice and heightened awareness, making the reasons for and functions of imagery more apparent to directors and demonstrating its indispensable role in choral rehearsals.

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Appendices

Appendix A

Director and Choir Profiles

Director and Choir profiles are presented in chronological order of their contribution to the research.

Phase 1.1

<table>
<tr><th>Director</th><th>Type</th><th>Voicing</th><th>Number of singers</th></tr>
<tr><td>DL</td><td>Volunteer choir</td><td>SATB</td><td>~80</td></tr>
<tr><td colspan="4">Director: guest professional working with several choirs, one of which is a national youth choir; national and international reputation; led similar one-day workshop and performance in previous year.
Choir: volunteers, some from established choirs in area, some unable to read notation; forming for this single occasion.
Repertoire: 1 Zadok the Priest - Handel; 2 Wayfarin’ Stranger - Arr. R Unterseher; 3 Erosion – E Daly; 4 Take Flight – S Milloy; pieces 2 – 4 from ‘SongStream 2’ (pub. OUP.)
Venue/Layout: tiered seating on stage of main concert hall; very good visibility to/from DL; microphone for DL though he hardly used it once rehearsal had started; DL often moves directly in front of row/section when doing smaller scale practice; accompanist at grand piano on left of DL half facing choir; 2’30” rehearsal with break.</td></tr>
<tr><td>DR</td><td>Auditioned choral society</td><td>SATB</td><td>~100</td></tr>
<tr><td colspan="4">Director: guest, nationally and internationally known composer; has worked with this choir previously; final rehearsal before the evening concert; has taken one rehearsal the previous evening, regular choir director has prepared choir until then.
Choir: auditioned choir allied to professional orchestra; long established with national and international performances.
Repertoire: 1 <i>Feel the Spirit</i> – Rutter; 2 <i>Chichester Psalms</i> – Bernstein.
Venue/Layout: tiered seating behind orchestra in main concert hall, their regular performing space; 1’20” rehearsal.</td></tr>
</table>

Phase 1.2

<table>
<tr><th>Choir</th><th>Director</th><th>Type</th><th>Voicing</th><th>Number of singers</th></tr>
<tr><td>C Rob</td><td>Rob</td><td>Community choir</td><td>SATB</td><td>35</td></tr>
<tr><td colspan="5">Director: regular conductor who is also cathedral organist; prepares choir for concerts but usually does not conduct concerts; Rob seated at the piano most of the rehearsal, sometimes stands to conduct without playing.
Choir: amateur choir attached to cathedral; ‘resident’ choir for cathedral concert series; well-established choir in regular rehearsal. One choir member had sung in the researcher’s choir previously.
Repertoire: 1 <i>The Creation</i> – Haydn, previously performed by choir; 2 <i>Mass</i> – J. Moseley, new repertoire.
Venue/Layout: regular rehearsal venue; tiered choir stalls at right-angles to piano/Rob with tenors and sopranos on Rob’s left and basses and altos on right; choir room of cathedral; 2 hour rehearsal with break.</td></tr>
</table>

Phase 1.3

<table>
<tr><th>Choir</th><th>Director</th><th>Type</th><th>Voicing</th><th>Number of singers</th></tr>
<tr><td>C Sam</td><td>Sam</td><td>University choir</td><td>SATB</td><td>45</td></tr>
<tr><td colspan="5">Director: regular director who is university music lecturer; has conducted this choir for 20+ years, though membership changes each year; has performed this piece several times previously with this and other choirs; second lecturer takes sectional rehearsals with Sam. Sam was known to the researcher prior to data collection in a professional capacity.
Choir: non-auditioned; most are music students, some not; some are non-music staff, others from community, many of whom have belonged to this choir previously; approximately 40-60% can sight read; less than 10% have had vocal training; regular rehearsal two weeks prior to performance. Several choir members had previously sung in the researcher’s choir.
Repertoire: <i>The Creation</i> – Haydn.
Venue/Layout: small hall in university, choir in straight rows facing Sam who is on high stool; accompanist on Sam’s right; 2 hour rehearsal including 30 minute sectional rehearsal.</td></tr>
<tr><td>C Pete</td><td>Pete</td><td>Auditioned university chamber choir</td><td>SATB</td><td>22</td></tr>
<tr><td colspan="5">Director: regular director with 20+ years’ experience; university music lecturer; has conducted this choir for 5+ years, though membership changes each year; ex-director of cathedral choir. Pete was known to the researcher prior to data collection in a professional capacity.
Choir: auditioned, university chamber choir; approximately 90% can sight read; approximately 60-90% have had vocal training; regular rehearsal three weeks prior to performance. A couple of choir members had previously sung in the researcher’s choir.
Repertoire: <i>Ode on St Cecilia’s Day</i> - Purcell; <i>Rejoice in the Lord Alway</i> - Purcell; <i>Canticum in Nativitatem Domini</i> - Charpentier; <i>Messe de Minuit</i> – Charpentier.
Venue/Layout: regular rehearsal venue; small hall in university, choir in semi-circular rows around Pete; Pete standing or on high stool; accompanist on Pete’s right; 2 hour rehearsal with short break.</td></tr>
</table>

Phase 1.4

Director	**No. of years directing (vocal training)**	**Choir**	**Type**	**Voicing**	**Approximate % who can sight sing**	**Approximate % with vocal training**
D4	20+ (1-5)	C4	Student /community	SATB	10-40%	10-40%
D5	5-10 (none)	C5	Student/ community	SATB	Less than 10%	Less than 10%
D6	5-10 (none)	C6	Student	SATB	40-60%	Less than 10%
D7	20+ (1-5)	C7	Student	SATB	10-30%	10-20%
D8	20+ (10+)	C8	Student	SATB	10-40%	10-40%
D9	20+ (5-10)	C9	Auditioned student	SATB	40-60%	60-90%
D10	10-20 (10+)	C10	Auditioned student	S A	90-100%	40-90%
D11	5-10 (5-10)	C11	Student/ community	SATB	60-90%	10-40%
D12	20+ (10+)	C12	Auditioned student	SATB	10-40%	40-60%
D13	20+ (none)	C13	Auditioned student	SATB	90-100%	60-90%

Directors: regular directors of their choirs; lecturers at universities across England; most were known to the researcher through the choir festival.

Choirs: based in universities across England, gathered to participate in a choir festival; some based in music departments, others are open-access; 128 respondents on questionnaires, some singers chose not to respond.

NB As no data was gathered via observations, no other contextual information is available.

Phase 2. Additional data is found in choir questionnaires, Q1-3.

Director	No. of years directing (vocal training)	Choir	Type of choir (number)	Voicing	Approximate % who can sight sing	Approximate % with vocal training
Emma	10-20 (5-10)	CEmma	Double-auditioned student (7)	S/S A/A/T Bar/B	100%	100%

Director: regular director for approximately three years; was a professional singer and choir director in her country of origin; Emma also sings alto 1, sometimes sitting with singers. Emma was known to researcher as she had guest-directed the researcher's choir on occasion.

Choir: a cappella choir established approximately three years ago; all studying music at university; modelled on *The Kings Singers*, described as the elite of six choirs in the university; more than 80% sing in other choirs; regular rehearsal two weeks prior to concert which will be without music so some singers don't use score much; 3Emma has just started his own female voice choir and takes the males for the sectional rehearsal; the small number of singes allows them to ask questions or for Emma to rehearse with individuals. A couple of choir members had previously sung in the researcher's choir.100% of choir interviewed.

Repertoire: arrangements by *The Kings Singers* of *Hush little baby; Swing low, sweet chariot; Autumn leaves; The long day closes; Danny boy*; all a cappella; this is similar to their regular repertoire.

Venue/Layout: regular rehearsal venue; small lecture room with piano on left of Emma; Emma is sometimes seated at piano which she uses to give starting notes, vocal lines or harmonic progressions; choir is seated in a semi-circle throughout rehearsal; 2 hour rehearsal including 45 minute male/female sectional rehearsal.

Director	No. of years directing (vocal training)	Choir	Type of choir (number)	Voicing	Approximate % who can sight sing	Approximate % with vocal training
Ken	20+ (5-10)	CKen	Auditioned community (110)	SATB	60-90%	10-40%

Director: regular director for between 5-10 years, he also directs several other choirs of varied sizes, abilities and contexts including a youth choir and a chamber choir; he leads conducting and singing workshops nationally and chose to take vocal lessons for technical information; Ken prepares the choir but does not always conduct the performance.

Choir: long-established, auditioned SATB city choral society with around 110 members who regularly perform with the local professional orchestra and a variety of professional conductors; more than half the choir have been members for 10 years or more; over a third also sing in other choirs; regular rehearsal approximately four weeks prior to concert with guest conductor. One choir member regularly sings in the researcher's choir but did not volunteer to be interviewed. 9% of choir interviewed, though approximately 75% volunteered.

Repertoire: Karl Jenkins – *The Armed Man* and *Te Deum*, a commission by the choir; this is similar to their regular, varied repertoire.

Venue/Layout: regular rehearsal venue; large tiered lecture theatre in a university; sopranos to left, altos to right, behind them tenors to left and basses to right; the accompanist is to Ken's right; 2 hour rehearsal with a break.

Director	**No. of years directing (vocal training)**	**Choir**	**Type of choir (number)**	**Voicing**	**Approximate % who can sight sing**	**Approximate % with vocal training**
Tim	20+ (none)	CTim	Community gospel, open access (45)	SAT	N/A	Less than 10%

Director: regular director for18 years, since the choir's inception; Tim directs at least three other choirs, all gospel choirs, two outside the UK; he often takes on role of solo singer in *call and response* songs during rehearsals and sometimes during concerts; Tim stands and directs from the keyboard, accompanying by ear and changing the settings according to the piece.

Choir: open access community gospel choir; nearly half the choir have been members since the choir began, others have joined very recently; nearly 40% also sing in other choirs; choir moves and gestures together during performances; regular rehearsal approximately four weeks prior to concert. One choir member had previously sung in the researcher's choir. 25% of choir interviewed though many more volunteered.

Repertoire: *Hold on just a little while longer; Shout now;* (gospel arrangements) neither Tim nor the choir use notation so music is learned by rote; this is within their regular repertoire some of which Tim arranges or composes.

Venue/Layout: regular rehearsal venue; small hall with singers seated in a semi-circle, sopranos at left, tenors in the middle, altos at right; there is no accompanist but Tim stands and directs from the keyboard; 2 hour rehearsal with break.

Director	**No. of years directing (vocal training)**	**Type of choir**	**Approximate % of choir who can sight sing**	**Approximate % of choir with vocal training**
DW	10-20 (10+)	Church /Student	90-100%	40-60%
DW is based in a UK university and specialises in choral music.				
DP	20+ (blank)	Professional	100%	100%
DP is a world-renowned choral director based in the USA, who commissions choral works from composers in the USA and UK for his elite, 32 voiced, professional choir.				
DG	20+ (5-10)	Church/ Community/Student	90-100%	90-100%
DG is a university choral director in the USA, who conducted instrumentalists originally but is currently researching for a book on choral directing. His choirs perform a wide range of repertoires and perform, locally, nationally and internationally.				

Appendix B

Reference Codes for Respondents and Materials

Type of data	**Identifying information**	**Sample Code**
Examples from rehearsals	Respondent code, rehearsal number, time	(Pete, R2, 14:26)
Transcriptions of rehearsals	Respondent code, rehearsal number, page number, section	(Ken, R1, p. 13:1)
Interviews: Phase 1	Respondent code, type of data, page number	(8Sam, Int, p. 1) or (8&9 Sam, Int, p. 1) for group interviews
Interviews: Phase 2	Respondent code, page number, extract or question	(Tim, p. 9, ex.2) or (8&9Sam, p. 6, ex. 3) for group interviews.
Rehearsal extracts used in interviews	Respondent code, number of rehearsal extract	(Emma, R ex. 3)
Questionnaires	Respondent code, question number	(Emma, Q13) or (6Sam, Q 6 & 8)

Appendix C

Final Key for Categorising Effects

Main Theme	**Effect**	**Code**
Voice production and technique	Breath management /control, support, respiration, energy	**B**
	Tone quality, register, tone colour, resonance, vibrato	**T**
	Voice production, projection, how or where sound is created, larynx and phonation	**V**
	Posture, stance, body position/alignment, facial expression, mouth shape	**Po**
	Articulation consonants, vowel shape or formation, diction, pronunciation (including glottal stops)	**A**
	Flow of piece/phrase; line, shape of phrase, phrasing, how phrase moves, urgency (but not where this is related to text, for example, commas and not flow of breath)	**F**
Expression /Interpretation	Interpretation, expression, imagination, may or may not refer to text	**EX**
Motivation	Motivation, enthusiasm, readiness, concentration, confidence, alertness, use of humour to motivate	**M**
Musical elements	Dynamic, volume, emphasis, accent, stress	**D**
	Rhythm, rhythmic reading and accuracy, detached, staccato, timing, entries together, ensemble	**R**
	Pitch, intonation, range, melodic reading and accuracy	**Pi**
	Texture, balance of voices, parts interweaving, one voice part standing out	**TX**
	Speed, tempo, metronomic pulse keeping NB connection to rhythm above	**S**

Appendix D

Choir Questionnaire Data

Q1. For how many years have you been singing in choirs?

Years	Emma	Ken	Tim	Total
Less than 1 year	0.00%	1.00%	6.98%	2.68%
1-3 years	0.00%	3.00%	9.30%	4.70%
3-5 years	33.33%	4.00%	4.65%	5.37%
5-10 years	16.67%	8.00%	25.58%	13.42%
10+ years	50.00%	84.00%	53.49%	73.83%
(blank)	0.00%	0.00%	0.00%	0.00%
Total	100.00%	100.00%	100.00%	100.00%

Q2. What types of choir have you sung with during this time?

Choir Type	Emma	Ken	Tim	Total
Children	50.00%	32.00%	16.28%	28.19%
Mixed Voice	100.00%	88.00%	60.47%	80.54%
Male Voices	50.00%	8.00%	6.98%	9.40%
Female Voices	33.33%	26.00%	23.26%	25.50%
Professional	66.67%	7.00%	4.65%	8.72%
Amateur	83.33%	63.00%	30.23%	54.36%
Auditioned	83.33%	66.00%	13.95%	51.68%
University/College	100.00%	30.00%	11.63%	27.52%
Church	50.00%	58.00%	39.53%	52.35%
Community	33.33%	16.00%	39.53%	23.49%
School	66.67%	48.00%	16.28%	39.60%
Other	16.67%	8.00%	20.93%	12.08%

Q3. For how many years have you been singing with this choir?

Years	Emma	Ken	Tim	Total
Less than 1 year	33.33%	8.00%	9.30%	9.40%
1-3 years	66.67%	12.00%	13.95%	14.77%
3-5 years	0.00%	7.00%	2.33%	5.37%
5-10 years	0.00%	16.00%	30.23%	19.46%
10+ years	0.00%	53.00%	44.19%	48.32%
(blank)	0.00%	4.00%	0.00%	2.68%
Total	100.00%	100.00%	100.00%	100.00%

Q4. Do you enjoy singing with this choir?

Frequency	Emma	Ken	Tim	Total
Always	50.00%	64.00%	93.02%	71.81%
Mostly	33.33%	28.00%	6.98%	22.15%
Sometimes	16.67%	0.00%	0.00%	0.67%
Never	0.00%	0.00%	0.00%	0.00%
(blank)	0.00%	8.00%	0.00%	5.37%
Total	100.00%	100.00%	100.00%	100.00%

Q5. Which of the following strategies does your choir director use with your choir?

Q5a. Demonstrating Vocally

Frequency	Emma	Ken	Tim	Total
Never	0.00%	0.00%	0.00%	0.00%
Rarely	0.00%	1.00%	0.00%	0.67%
Sometimes	33.33%	5.00%	0.00%	4.70%
Very often	66.67%	92.00%	100.00%	93.29%
(blank)	0.00%	2.00%	0.00%	1.34%
Total	100.00%	100.00%	100.00%	100.00%

Q5b. Technical/vocal description in words

Frequency	Emma	Ken	Tim	Total
Never	0.00%	0.00%	0.00%	0.00%
Rarely	0.00%	1.00%	0.00%	0.67%
Sometimes	16.67%	16.00%	9.30%	14.09%
Very often	83.33%	79.00%	86.05%	81.21%
(blank)	0.00%	4.00%	4.65%	4.03%
Total	100.00%	100.00%	100.00%	100.00%

Q5c. Gesture (i.e. not just beating time)

Frequency	Emma	Ken	Tim	Total
Never	0.00%	0.00%	0.00%	0.00%
Rarely	16.67%	1.00%	0.00%	1.34%
Sometimes	33.33%	6.00%	9.30%	8.05%
Very often	50.00%	91.00%	86.05%	87.92%
(blank)	0.00%	2.00%	4.65%	2.68%
Total	100.00%	100.00%	100.00%	100.00%

Q5d. Imagery (e.g. Can you make it bouncy?)

Frequency	Emma	Ken	Tim	Total
Never	16.67%	0.00%	0.00%	0.67%
Rarely	33.33%	2.00%	2.33%	3.36%
Sometimes	16.67%	14.00%	16.28%	14.77%
Very often	33.33%	82.00%	76.74%	78.52%
(blank)	0.00%	2.00%	4.65%	2.68%
Total	100.00%	100.00%	100.00%	100.00%

Q6. How effective do you think your choir director is in using the following for transmitting how s/he wants you to sing?

Q6a. Demonstrating Vocally

Effectiveness	Emma	Ken	Tim	Total
Not Effective	0.00%	0.00%	0.00%	0.00%
Sometimes	16.67%	12.00%	2.33%	9.40%
Very effective	83.33%	87.00%	97.67%	89.93%
(blank)	0.00%	1.00%	0.00%	0.67%
Total	100.00%	100.00%	100.00%	100.00%

Q6b. Technical/vocal description in words

Effectiveness	Emma	Ken	Tim	Total
Not Effective	0.00%	0.00%	0.00%	0.00%
Sometimes	33.33%	19.00%	9.30%	16.78%
Very effective	66.67%	76.00%	86.05%	78.52%
(blank)	0.00%	5.00%	4.65%	4.70%
Total	100.00%	100.00%	100.00%	100.00%

Q6c. Gesture (i.e. not just beating time)

Effectiveness	Emma	Ken	Tim	Total
Not effective	16.67%	0.00%	0.00%	0.67%
Sometimes	50.00%	14.00%	6.98%	13.42%
Very effective	33.33%	81.00%	90.70%	81.88%
(blank)	0.00%	5.00%	2.33%	4.03%
Total	100.00%	100.00%	100.00%	100.00%

Q6d. Imagery (e.g. Can you make it bouncy?)

Effectiveness	Emma	Ken	Tim	Total
Not effective	33.33%	1.00%	2.33%	2.68%
Sometimes	33.33%	20.00%	9.30%	17.45%
Very effective	33.33%	76.00%	86.05%	77.18%
(blank)	0.00%	3.00%	2.33%	2.68%
Total	100.00%	100.00%	100.00%	100.00%

Q7. If your choir director does use imagery, why do you think s/he does this?				
Reasons	**Emma**	**Ken**	**Tim**	**All Groups**
As a memory aid/ mnemonic/reminder	16.67%	60.00%	69.77%	61.07%
To affect several aspects of the sound at the same time	16.67%	40.00%	60.47%	44.97%
Because explaining how the voice works is difficult	0.00%	23.00%	48.84%	29.53%
To explain a point more clearly	66.67%	86.00%	81.40%	83.89%
To build vocal quality	66.67%	72.00%	81.40%	74.50%
In place of technical vocabulary	16.67%	18.00%	18.60%	18.12%
To save time	0.00%	8.00%	4.65%	6.71%
To inspire the singers	33.33%	73.00%	72.09%	71.14%
To illustrate the text	16.67%	70.00%	39.53%	59.06%
To interpret the music	66.67%	86.00%	67.44%	79.87%
Other (because choir do not employ their brains at practice so he needs to make it simple 6Tim)	0	0	1	
Other (to create a visual image to receive an emotive response 13Ken)	0	1	0	

Results for questions 8 & 9 are in Appendix E.

Q10. If you have ever found your choir director's use of imagery not effective or confusing, why was this?				
Reasons	**Emma**	**Ken**	**Tim**	**All Groups**
I don't find it confusing or ineffective	30.00%	64.00%	83.72%	69.13%
I have good vocal knowledge and don't need imagery	0.00%	6.00%	4.65%	5.37%
Italian terms (e.g. legato) are more precise and well known	0.00%	6.00%	0.00%	4.03%
Everyone interprets imagery a little differently and I don't know if I've got the right interpretation	20.00%	11.00%	4.65%	10.07%
Imagery leaves too much to the imagination	0.00%	3.00%	2.33%	2.68%
Imagery isn't specific enough	10.00%	3.00%	2.33%	3.36%

Q11. If your choir director doesn't use imagery with your choir why do you think this is?[34]				
Reasons	**Emma**	**Ken**	**Tim**	**All Groups**
Imagery too vague/confusing	0	1	0	1
Need solid technique first	1	0	0	1
Would use for interpretation only	0	1	0	1
Italian terms more precise	1	0	0	1
Technical explanations more precise	1	1	0	2
To save time	0	0	0	0
Not useful/required for this piece	0	0	0	0
Other (language barrier 3Emma)	1			

Q12. Do you currently have, or have ever had, vocal training?				
Years	**Emma**	**Ken**	**Tim**	**Total**
None	0.00%	47.00%	67.44%	51.01%
Less than 1 year	16.67%	11.00%	6.98%	10.07%
1-5 years	66.67%	12.00%	0.00%	10.74%
5-10 years	16.67%	5.00%	11.63%	7.38%
10+ years	0.00%	7.00%	2.33%	5.37%
(blank)	0.00%	18.00%	11.63%	15.44%
Total	100.00%	100.00%	100.00%	100.00%

Q13. Does/did your vocal teacher ever use images to transmit how s/he wanted you to sing?				
Imagery Used	**Emma**	**Ken**	**Tim**	**Total**
No	0.00%	38.89%	20.00%	30.77%
Yes	100.00%	61.11%	80.00%	69.23%
Total	100.00%	100.00%	100.00%	100.00%

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[34] All directors do in fact use imagery. 146 responses were blank, so percentages not used.

Q14. Why do you think your vocal teacher uses/used imagery in this way?				
Reasons	**Emma**	**Ken**	**Tim**	**All Groups**
To explain a point more clearly	83.33%	17.00%	13.95%	18.79%
To build vocal quality	83.33%	17.00%	13.95%	18.79%
To affect several aspects of the sound at the same time	33.33%	5.00%	6.98%	6.71%
As a memory aid/mnemonic/reminder	0.00%	10.00%	4.65%	8.05%
Because explaining how the voice works is difficult	16.67%	6.00%	11.63%	8.05%
To illustrate the text	50.00%	10.00%	2.33%	9.40%
To interpret the music	50.00%	16.00%	6.98%	14.77%
In place of technical vocabulary	16.67%	3.00%	4.65%	4.03%
To save time	0.00%	1.00%	2.33%	1.34%
To inspire the singer	50.00%	16.00%	9.30%	15.44%
Other (Technique 3Emma)	1			
Other (To connect emotionally with the words and the music 10Ken)		1		

Q15. How effective do you think you vocal teacher's use of imagery is/was for you?				
Effectiveness	**Emma**	**Ken**	**Tim**	**Total**
Very effective	66.67%	77.27%	50.00%	69.44%
Sometimes effective	33.33%	22.73%	50.00%	30.56%
Not effective	0.00%	0.00%	0.00%	0.00%
Total	100.00%	100.00%	100.00%	100.00%

Q16. How useful is it for a choir director to have had vocal training?				
Usefulness	**Emma**	**Ken**	**Tim**	**Total**
Essential	66.67%	65.00%	60.47%	63.76%
Useful but not essential	33.33%	29.00%	34.88%	30.87%
Not necessary	0.00%	0.00%	2.33%	0.67%
(blank)	0.00%	6.00%	2.33%	4.70%
Total	100.00%	100.00%	100.00%	100.00%

Appendix E

Choir Questionnaire Data: Questions 8 and 9

Choir	Respondent Number	Q8. Can you give an example of an image that your choir director has used with your choir?	Q9. What do you think your choir director wanted you to do by saying this?	Intra-choir Stock Images	Inter-choir Stock Images
Emma	1	Sing it much lighter - like you're floating. Sing like you're yawning	Incorporate this imagery into my singing		1 Light
E	2				
E	3				
E	4	March-like qualities	Added vigour and rhythmical drive		
E	5				
E	6	‘I got rhythm' - Make it jazzy and bouncy rhythmically	Concentrate on rhythm and everything else will fall into place		2 Bouncy
Tim	1	Breathing	To sing from the stomach not the throat		
T	2	He says "put the sound in a cup" & demonstrates with his hands putting one hand inside the other - to help people hit the note	Make a clear note instead of swooping up to it	1 Sound in cup	
T	3	Put your finger in the cup.	To make sure we all start with the first note at the same time, at the right time.	1 Sound in cup	
T	4	Sit on a sound	Control the sound		
T	5	Smiling	To lift the voice and prevent going out of tune	2 Smile through a note	
T	6	"Put the note in the cup", "you're just under the note" (there's many images used!)	Be in pitch!!!	1 Sound in cup	

T	7	Smile a note through	Soften the note & give meaning to the song & a deeper meaning - emotional expression	2 Smile through a note	
T	8				
T	9	Asks us to smile through a song	It lifts the voice	2 Smile through a note	
T	10	Not at the moment but Tim uses this frequently - very imaginative & creative	For us to understand what he is trying to get across to us		
T	11	We physically put a finger into a cupped hand to place a note. We use our bodies to move towards a phrase.	To be more aware of words the actions used to portray words or phrases.	1 Sound in cup	
T	12	A swell	Move the sound up gradually	3 Swell[35]	
T	13	Stormy weather	Emphasis before & after storm/crescendo	4 Storm	
T	14	Our director helps us i.e. in a song we sing about a storm brewing, he helps us interpret the storm including imagery & voice control	He wanted us to create a dynamic sound to create the feeling leading to a crescendo as the storm brews	4 Storm	
T	15	He advises us to smile.	As a way to help project the voice	2 Smile through a note	
T	16	Smile the note through	Hit the correct note	2 Smile through a note	
T	17	Smile the note through	Hit the correct note	2 Smile through a note	
T	18	"Put the note in the cup"	Hold the correct note - put it in correctly	1 Sound in cup	
T	19	"Place the note in the cup"	Be precise = hitting the note	1 Sound in cup	
T	20	Place voice in a basket	Sing right note	1 Sound in cup	
T	21	Place voice in a basket	Sing the note	1 Sound in cup	
T	22	Putting the first word/sound in a cup	To start strongly	1 Sound in cup	

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[35] Tim gave this prior to recorded rehearsals.

T	23	To hit a note [Tim] speaks about sending & putting your voice in the cup & demonstrates this physically	To hit a note purely	1 Sound in cup	
T	24	Put your voice in the cup	Hit the right note	1 Sound in cup	
T	25	Putting the note in a box	Imagine reaching the high note & doing it	1 Sound in cup	
T	26	Place your voice in a pot	Hit the right note!	1 Sound in cup	
T	27	When moving hands move them out like a dancer	Wanted our voices to project rather than remain inwards		
T	28	Using the hand to push out a note when we need to stress a certain word/phrase	Use the physical act of pushing to remind us to stress a certain phrase		
T	29	Use analogy about the feeling of the music - usually food & cooking	Get into the feeling of the song		
T	30	Hand movements	Help musical interpretation		
T	31	I can't think of any specific image but he uses imagery all the time			
T	32	Enjoy and bring joy. Excellent	Be happy singing		
T	33	Imagining a crocodile	To open mouth widely when singing a particular note		
T	34	Comparison with floating feathers	Sometimes to reproduce feelings sometimes in unity		
T	35 - 43	No response			
Ken	1	"Very posh southern" intonation - needed sometimes	To be very clear with diction and use of certain vowels		
K	2	Smile[36] - good humour, get stern when necessary - all speaks to the singer	Watch him and "feel" the mood of the music		
K	3	Walking across room	Getting to end of phrases	1 Walking into door	
K	4	Can't think right now but there have been many! Sorry!			
K	5				

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[36] This is a facial expression, not an image.

K	6	An Italian opera singer	To achieve a sound or mood that the composer envisioned	2 Opera singer	
K	7	Charging troops - Welsh Hills - Ship sailing slowly into harbour	To have meaning in our sound & to communicate feelings to audience		
K	8	1) Walking out of the door/Stopping at the door. 2) "Dances"/Mimes/Uses lip reading 3) Sanctus	1)To get us all to stop at the end of the phrase 2) To demo the exact effect he wants 3) The visual helps more than technical names of notes	1 Walking into door	
K	9	E.g. "Bright" in the text: he looks bright, smiles brightly, emphasises pronunciation, the consonants	Use the word to express more meaning		3 Bright
K	10	In singing about war he asked us to imagine dying on the battlefield in order to encourage us to sing more passionately as if in the throes of death	To put more energy into the notes & to emphasise the words		
K	11	Sing like an Italian Tenor/bass/sop/alt in opera works/excerpts	Sing with feeling, legato in style, perhaps less inhibited	2 Opera singer	
K	12	Stirring a pot	Convey a sense of menace and also fluid movement	3 Stirring pot /bowl	
K	13	Ken demonstrates with his body language the imagery he requires	For unity of actions with emphasis on notes		
K	14	Marge Simpsons hair	Think high		
K	15	Sea images when rehearsing sea symphony - sleep and death images rehearsing sleep by Vaughan Williams	Conveying the idea of the swell of the sea, movement of boats. Sleep linked to death in Titanic memorial concert	4 Sea	
K	16	A needle & cotton through either cheek to 'brighten' the sound	Brighten the tone	5 Needle & cotton through cheeks	
K	17	Ping pong ball on a column of air	Vocal line		
K	18	Mouth shaping - sewing image using body to emphasise	Open our mouths	5 Needle & cotton through cheeks	
K	19	Telephone poles	Legato but not too legato		
K	20	All kinds of examples - river flowing	Hold on to note		

K	21	1) "Stirring" a mixture - legato. 2) Sewing	1) Achieve smoothness 2) Effective sound	**3** Stirring pot/bowl **5** Needle & cotton through cheeks	
K	22	Musical instruments. Trains etc.	Expression. Motion		4 Instrument sounds - varied
K	23	Like you are stirring something /Henry V speech/Sea images	To fill the texture out/full of grandeur/to paint a big picture	**3** Stirring pot/bowl **6** Henry V speech **4** Sea	
K	24	Drowning people in Titanic disaster	Create the mood in the music		
K	25	When singing "sea symphony" we had lots of mentions of waves/swells/boats etc.	Engage with music and sing in a more interesting way	4 Sea	
K	26	To illustrate the & the moods of the sea	Heighten feeling and emphasise the dynamics	4 Sea	
K	27	Ebb & flow of waves	Intensity & volume changes	4 Sea	
K	28	Imagery of waves swelling, growing in size	Swell on the sounds - "sea symphony"	4 Sea	
K	29	The famous speech in Henry V - denoting war sacrifice	To feel the strong emotions of battle & approaching death	6 Henry V speech	
K	30	"Stirring a pudding bowl"	Used illustration to explain that he needed us to sing the word "Gloria" in a "rounded" sound.	3 Stirring pot/bowl	
K	31	Like stirring a pudding	Smooth notes together	3 Stirring pot/bowl	
K	32	Pulls the corners of his mouth up on strings	To show how the shape of your mouth should be	5 Needle & cotton through cheeks	

K	33	Mouth shape in Gloria - a needle threaded through mouth	(blank)	5 Needle & cotton through cheeks	
K	34	Stitches in cheeks	Correct position of mouth	5 Needle & cotton through cheeks	
K	35	String on corners of mouth	Keep the note in pitch	5 Needle & cotton through cheeks	
K	36	The "needle and thread" method of ensuring the correct mouth shape	Improve the quality of the vowel sound	5 Needle & cotton through cheeks	
K	37	Cotton & needle pulling up the side of cheeks	Correct mouth-shape therefore sound	5 Needle & cotton through cheeks	
K	38	Walking towards a door	To stop	1 Walking into door	
K	39	1) Walking through a door to demonstrate 2) Mimes a lot	1) Cutting off a phrase. 2) To show us how he wants us interpret the music	1 Walking into door	
K	40	1) He walked purposefully towards the door & stopped 2) Stir it all up with a spoon	1) To demo how he wanted us to cut off a phrase 2) Make words smooth & rounded sound warm & fluid	**1** Walking into door **3** Stirring pot/bowl	
K	41	Running into a door	To illustrate that we should sing through the whole phrase not anticipate the ending	1 Walking into door	
K	42	Basses - Don't just walk along straight into the door (demonstrating by walking into a door!)	It was for a light pull out/slowing at the end of a phrase but more subtle than a full rall/rit. You need to pause slightly before "opening the door" to the next phrase.	1 Walking into door	
K	43	Demonstrating how he wanted us to finish a note (or not) by crashing into the door head on instead of holding it open first!	To explain gradual closing of note. So would remember because the image was v striking and funny!	1 Walking into door	

K	44	Marching through door	For pacing	1 Walking into door	
K	45	Dancing	Get the tempo & mood right & keep us cheerful		
K	46	Dances in the way he wants us/doesn't want us to sing	Shows us how he wants the music to flow		
K	47	Using facial expression	To enhance performance		
K	48	"Smile"	Make the notes a little higher		
K	49	Marching - heavy/light & bouncy	Pick up the mood of the music		1 Light 2 Bouncy
K	50	Using "soundless" actions to illustrate mood	To make the point that visual interpretation can affect the vocal sound and feeling		
K	51	Raised eyebrows	Bright face and eyes!		
K	52	Marching to demonstrate style required or not required	Sing the way he wanted us to		
K	53	Smiley face	Make the tone brighter		
K	54	Stressing of partner words in the text in relation to the "mood"	To give what he thought was the desired effect		
K	55	Shaping his face	To achieve the right sounds		
K	56	Use of percussive consonants	Make the words clear		
K	57	He skips around; "nice cup of tea"	In order to get the rhythm: too soft		
K	58	1) Emphasis on words in text to convey different emotions of sound. 2) Shaping of mouth to produce specific sound.	To properly interpret the composers wishes.		
K	59	The shape of the mouth for certain words and vowels	To produce better sound		
K	60	Breathing - making aware of use of diaphragm			
K	61	Facial expressions e.g. raise eyebrows Mouth shapes, breathing			
K	62	Voice projection	Project & better voice tone		

K	63	Sewing corner of mouth and pulling corners	Correct expression and improved pitch and tone	5 Needle & cotton through cheeks	
K	64 - 78	No response			
K	79	To clarify			
K	80 - 101	No response			

Appendix F

Director Questionnaire Data: Phase Two

Q1. For how many years have you been directing choirs?

Years	Emma	Ken	Tim	DW	DG	DP
0-5 years						
5-10 years						
10-20 years	✓			✓		
20+ years		✓	✓		✓	✓

Q2. What types of choir have you worked with during this time?

Choir Type	Emma	Ken	Tim	DW	DG	DP
Children	✓	✓				
Mixed Voice	✓	✓	✓		✓	✓
Male Voices	✓					
Female Voices	✓				✓	
Professional	✓		✓			✓
Amateur		✓	✓			✓
University/College	✓	✓			✓	✓
Church		✓	✓		✓	✓
Community		✓	✓		✓	✓
School	✓	✓	✓			
Other		✓[37]				

Q3. For how many years have you sung in choirs?

Years	Emma	Ken	Tim	DW	DG	DP
No singing experience						✓
1-2 years						
2-5 years						
5-10 years						
10+ years	✓	✓[38]			✓	

---

[37] Symphony Chorus
[38] In total, not continuous

Choose one of your choirs to focus on for this questionnaire (if you have more than one.)

Q4. What type of choir is it?

Choir Type	Emma	Ken	Tim	DW	DG	DP
Children						
Mixed Voice	✓	✓	✓	✓	✓	✓
Male Voices						
Female Voices						
Professional						✓
Amateur		✓	✓			
University/College	✓			✓	✓	
Church						
Community		✓	✓			
School						
Auditioned	✓	✓				✓ [39]
Has other entry requirements (Please state.)						

Q5. For how many years have you been directing this choir?

Years	Emma	Ken	Tim	DW	DG	DP
0-5 years	✓					
5-10 years		✓				
10-20 years			✓		✓	
20+ years						✓

Q6. Approximate % of choir members who can sight sing?

%	Emma	Ken	Tim	DW	DG	DP
Don't know			✓ [40]			
100-90%	✓			✓	✓	✓
90-60%		✓				
60-40%						
40-10%						
Less than 10%						

---

[39] Every year

[40] Not applicable as Tim's choir do not use notation.

Q7. Approximate % of choir members who have/ have had vocal training?

%	Emma	Ken	Tim	DW	DG	DP
Don’t know						
100-90%	✓				✓	✓
90-60%						
60-40%				✓		
40-10%		✓ [41]				
Less than 10%			✓			

Q8. What do you think are the essential qualities of a good choir director? Answers in Table 6.4.

Q9. Do you enjoy working with this choir?

	Emma	Ken	Tim	DW	DG	DP[42]
Always	✓	✓	✓	✓	✓	✓
Mostly						
Sometimes						
Never						

Q10. Which of the strategies below do you use with your choir?
(Tick all that apply)

Q10a. Vocal demonstrations (alone)

	Emma	Ken	Tim	DW	DG
Never					
Rarely					
Sometimes				✓	✓
Very often	✓	✓ [43]	✓		

Q10b. Technical/vocal description (alone)

	Emma	Ken	Tim	DW	DG
Never					
Rarely					
Sometimes✓		✓		✓	
Very often	✓		✓		

---

[41] A guess
[42] DP did not answer any further questions
[43] I am finding Q 10 and 11 difficult to answer

Q10c. Gesture ie not beating time (alone)

	Emma	Ken	Tim	DW	DG
Never					
Rarely					
Sometimes				✓	
Very often	✓	✓	✓		✓

Q10d. Imagery (alone)

	Emma	Ken	Tim	DW	DG
Never					
Rarely					
Sometimes		✓	✓		
Very often	✓			✓	✓

Q11. Which of those strategies do you use in combination? (Tick all that apply)

Strategy	Emma	Ken	Tim	DW	DG
Vocal demonstration with gesture	✓	✓	✓	✓	
Vocal demonstration with imagery			✓	✓	
Vocal demonstration with technical description	✓	✓		✓	✓
Technical description with gesture	✓	✓	✓	✓	✓
Technical description with imagery			✓	✓	
Gesture with imagery	✓		✓	✓	✓

Q12. How effective do you find the following for transmitting
how you want your choir to sing?

Q12a. Vocal demonstrations (alone)

	Emma	Ken	Tim	DW	DG
Very effective		✓	✓	✓	
Sometimes	✓				✓
Not effective					

Q12b. Technical/vocal description (alone)

	Emma	Ken	Tim	DW	DG
Very effective		✓			
Sometimes	✓			✓	✓
Not effective					

Q12c. Gesture (alone)

	Emma	Ken	Tim	DW	DG
Very effective		✓	✓		
Sometimes	✓			✓	✓
Not effective					

Q12d. Imagery (alone)

	Emma	Ken	Tim	DW	DG
Very effective			✓		✓
Sometimes		✓		✓	
Not effective					

Q12e. Gesture with imagery

	Emma	Ken	Tim	DW	DG
Very effective	✓		✓		✓
Sometimes		✓		✓	
Not effective					

Q12f. Imagery with vocal demonstration

	Emma	Ken	Tim	DW	DG
Very effective	✓		✓	✓	
Sometimes		✓			✓
Not effective					

Q12g. Technical description with imagery

	Emma	Ken	Tim	DW	DG
Very effective	✓				
Sometimes		✓	✓	✓	✓
Not effective					

Q13. Which other strategies do you use to transmit to the choir how you want them to sing? Answers separately.

Q14b. If you do use imagery with your choir, why is this? (Tick all that apply)					
Reason	**Emma**	**Ken**	**Tim**	**DW**	**DG**
As a memory aid/ mnemonic/reminder		✓		✓	✓
To affect several aspects of the sound at the same time	✓	✓		✓	
Because explaining how the voice works is difficult				✓	
To explain a point more clearly	✓			✓	
To build vocal quality	✓			✓	
In place of technical vocabulary	✓	✓		✓	
To save time				✓	
To inspire the singers	✓	✓		✓	✓
To illustrate the text		✓		✓	✓
To interpret the music	✓	✓		✓	✓
Other					

Q15. If you don’t use imagery with your choir, why is this? No-one answered this question.

Q16. Do you currently have, or have ever had, vocal training?					
Years	**Emma**	**Ken**	**Tim**	**DW**	**DG**
None			✓		
Less than 1 year					
1-5 years					
5-10 years	✓	✓ [44]			✓
10+ years				✓	

Q17a. Does/did your vocal teacher ever use images to transmit how s/he wanted you to sing?					
	Emma	**Ken**	**Tim**	**DW**	**DG**
Yes	✓			✓	✓
No		✓ [45]			

Q17b. Exemplars are provided separately.

---

[44] Intermittent

[45] I have had singing lessons purely for technical information

Q18. Why do you think your vocal teacher uses/used imagery in this way? (Please tick all that apply)

Reason	Emma	Ken	Tim	DW	DG
To explain a point more clearly	✓			✓	
To build vocal quality	✓			✓	✓
To affect several aspects of the sound at the same time	✓			✓	
As a memory aid/mnemonic/reminder				✓	✓
Because explaining how the voice works is difficult				✓	
To illustrate the text				✓	
To interpret the music	✓			✓	
In place of technical vocabulary	✓			✓	
To save time					
To inspire the singer	✓			✓	
Other					

Q19. How effective do you think your vocal teacher's use of imagery is/was for you?

	Emma	Ken	Tim	DW	DG
Very effective					✓
Sometimes effective	✓			✓	
Not effective					

Q20. How useful is it for a choir director to have had vocal training?

	Emma	Ken	Tim	DW	DG
Essential	✓	✓[46]			✓
Useful but not essential				✓	
Not necessary					

---

[46] Although some are effective without much vocal knowledge

Q21. To what extent does the director's need for vocal skills depend on the level of the choir?

Q 21a. Professional choir

	Emma	Ken	Tim	DW	DG
Essential	✓	✓	✓		✓
Useful but not essential				✓	
Not necessary					

Q 21b. Highly experienced amateur choir

	Emma	Ken	Tim	DW	DG
Essential	✓	✓	✓		✓
Useful but not essential				✓	
Not necessary					

Q 21c. University /college/ high school choir

	Emma	Ken	Tim	DW	DG
Essential	✓	✓	✓		✓
Useful but not essential				✓	
Not necessary					

Q 21d. Beginner choir – adults

	Emma	Ken	Tim	DW	DG
Essential		✓	✓		
Useful but not essential	✓				✓
Not necessary					

Q 21e. Children's/ primary school choir

	Emma	Ken	Tim	DW	DG
Essential	✓	✓[47]	✓		
Useful but not essential				✓	✓
Not necessary					

Q22. Are there any other comments you wish to make about choral directing? Answers separately.

---

[47] If you want them to develop as singers and as a choir

Appendix G

Director Questionnaire Data: Phase 1.3, 1.4 [48]

Q1. For how many years have you been directing choirs?

Years	Sam	Pete	Total 1.4 [49]
0-5 years			
5-10 years			30%
10-20 years			10%
20+ years	✓	✓	60%

Q2. Do you enjoy working with this choir?

	Sam	Pete	Total 1.4
Always	✓	✓	90%
Mostly			10%
Sometimes			
Never			

Q3a. What type of choir is it?

Choir Type	Sam	Pete	Total 1.4
Children			
Mixed Voice	✓	✓	8
Male Voices			
Female Voices			1
Professional			
Amateur			
University/College	✓	✓	8
Church			1
Community			2
School			
Other			
Auditioned			4
Other entry requirements			

---

[48] Some question numbers are different in this summary as questionnaires at Phase 1.3 and 1.4 are dissimilar.

[49] Total percentage of Phase 1.4 directors.

Q3b. Approximate % of choir members who can sight sing?

%	Sam	Pete	Total 1.4
Don’t know			
100-90%		✓	20%
90-60%			10%
60-40%	✓		20%
40-10%			40%
Less than 10%			10%

Q3c. Approximate % of choir members who have had vocal training?

%	Sam	Pete	Total 1.4
Don’t know			
100-90%			
90-60%		✓	30%
60-40%			10%
40-10%			40%
Less than 10%	✓		20%

Q4. What strategies do you use to motivate this choir? Answers separately.

Q5. Do you give vocal demonstrations to show how you want the choir to sing?

	Sam	Pete	Total 1.4
Very often		✓	80%
Sometimes	✓		10%
Rarely			
Never			

Q6a. Do you use imagery to transmit how you want the choir to sing?

	Sam	Pete	Total 1.4
Very often	✓	✓	80%
Sometimes			10%
Rarely			10%
Never			

Q6b. If yes, do you use the same images frequently?			
	Sam	**Pete**	**Total 1.4**
Yes			40%
No			10%
Yes plus new ones			30%
Try not to		✓	

Q6c. If yes, do you invent these images of have you learned them from someone else?			
	Sam	**Pete**	**Total 1.4**
Mainly invented		✓	40%
Learnt			10%
Both			50%

Q7. If you do use imagery please give examples. Answered separately

Q8. Do you give vocal demonstrations in conjunction with imagery?			
	Sam	**Pete**	**Total 1.4**
Very often			40%
Sometimes			30%
Rarely			10%
Never			

Q9. What do you think are the main attributes of a really good choir director?

Answers separately.

Q10. Do you currently have, or have ever had, vocal training?			
Years	**Sam**	**Pete**	**Total 1.4**
None			30%
Less than 1 year	✓		
1-5 years			10%
5-10 years		✓	30%
10+ years			30%

Q11. Did your vocal teacher ever use images to transmit how s/he wanted you to sing?			
	Sam	**Pete**	**Total 1.4**
Yes	✓	✓	40%
No			10%
(blank)			

Q11a. Please give examples. Answers separately.

Q12. Why do you think your vocal teacher uses/used images in this way?

Answers separately.

Q13. Do you think it is useful for a choir director to have/had vocal training?			
	Sam	**Pete**	**Total 1.4**
Yes	✓	✓	80%
No			20%

Q13a. If yes, in what ways? Answers separately.

Appendix H

Choir and Director Permission Request and Consent Forms

Director Permission Request Form

Date

Dear [name],
You may remember that I emailed you after the last [event]. As I mentioned then, I'm currently researching for my PhD into strategies which choral conductors use and we were talking about the possibility of me coming to video you during a rehearsal.

As you are an experienced and skilled conductor I wondered if you would allow me to include your rehearsals as part of this research?

It would mean allowing me to video two consecutive rehearsals and distributing a questionnaire during the first one - both without interrupting obviously! Then after the second rehearsal to interview a small number (eg 6-10) of the choir about their interpretations of those rehearsals. (Obviously I would need to ask the choir members to volunteer but wouldn't do that until after I've arranged things with you.)
It would also be very useful if - at another time - I could interview you about those rehearsals and about the rehearsal strategies you use in general.

The information on the videos would be then examined and categorised, but would be destroyed afterwards; any information used in the research will be presented anonymously.

If you are agreeable to this, could I suggest some possible dates:
7th & 14th March
or 14th & 21st March - leading up to the [title] concert

OR
any two consecutive Wednesdays from 18th April up to the [title] concert.

I would obviously be very grateful for your co-operation in this and would be pleased if you could let me know if this is possible.
Best wishes
Mary

Director Consent Form (Phase 1)

I would like your permission to video and take observational notes during this rehearsal. I will not interrupt the rehearsal.

The observations will be used to define the categories, questions and codes used in later stages of the research. They may be used in the final research report but will be presented anonymously.

Please sign below to give your consent for this:

-- Date ------------

If you would like any further information, you can contact me in the following ways:

Mary Black

[Address
Telephone
Email]

Choir Permission Request Form

Dear Choir Member,

I'm conducting some PhD research into the different strategies which choral directors use.

Your choir director [name] has agreed to take part in this research which entails videoing him rehearsing in two consecutive rehearsals.

I hope that you also will agree to be part of this research.

The video-camera would be on the choir director, rather than you. After the first rehearsal, I would give you a questionnaire to complete and after the second rehearsal, I would interview some of you about your interpretations of the strategies your director has used.

The information on the videos would be examined and categorised, but would be destroyed afterwards; any information used in the research would be presented anonymously.

If you are generally agreeable to this, I can provide you with as much further information as you wish.

I would obviously be very grateful for your co-operation in helping to facilitate my research.

Best wishes

Mary Black

[Title, Institution]

Appendix I

Observation Schedule

Venue **Date, Time**		
Conductor Status, relationship to researcher **Participants** number, voice type etc **Accompanist** **Others** **Researcher's role**		
Occasion; Pieces		
Space, layout **Objects, furniture**		
Permission sought	**Given - verbal**	**Given - written**

Description (time)	**Reflection**

Acts: specific individual actions	Events: particular occasions, eg meetings
Goals: what 'actors' are attempting to accomplish	Feelings: emotions in particular contexts

Other points from rehearsal:

-

Appendix J

Director and Choir Questionnaire Schedules

Directors Questionnaire Schedule - Phase 2

This questionnaire forms part of PhD research, investigating the strategies that choral directors use. I would be grateful if you would complete this short questionnaire about your conducting experiences. Responses will be treated as confidential and reported anonymously in the study.
Many thanks for your participation, *Mary Black [role institution]* blackm@email

Information about you and your choir(s).

1. For how many years have you been directing choirs?
☐ 0-5 years ☐ 5-10 years ☐ 10-20 years ☐ 20+ years

2. What types of choir have you worked with during this time? Please tick all that apply.
☐ Children ☐ Mixed voice ☐ Male voices ☐ Female voices ☐ Other
☐ Professional ☐ Amateur
☐ University/College ☐ Church ☐ Community ☐ School ☐ Other

3. For how many years have you sung in choirs?
☐ No singing experience ☐ 1-2 years ☐ 2-5 years ☐ 5-10 years ☐ 10+ years

Choose one of your choirs to focus on for this questionnaire (if you have more than one.)

4. What type of choir is it? Please tick all that apply.
☐ Children ☐ Mixed voice ☐ Male voices ☐ Female voices ☐ Other
☐ Professional ☐ Amateur
☐ University/College ☐ Church ☐ Community ☐ School ☐ Other
☐ Auditioned ☐ Has other entry requirements (Please state.)

5. For how many years have you been directing this choir?
☐ 0-5 years ☐ 5-10 years ☐ 10-20 years ☐ 20+ years**.**

6. Approximate % of choir members who can sight sing:
☐ Don't know ☐100-90% ☐ 90-60% ☐ 60-40% ☐ 40-10% ☐ Less than 10%

7. Approximate % of choir members who have/have had vocal training:
☐ Don't know ☐100-90% ☐ 90-60% ☐ 60-40% ☐ 40-10% ☐ Less than 10%

8. What do you think are the essential qualities of a good choir director?

9. Do you enjoy working with this choir?
☐ Always ☐ Mostly ☐ Sometimes ☐ Never

Information about how you work with your choir.

10. Which of the strategies below do you use with your choir? (Tick all that apply.)

Vocal demonstration (alone)	☐ Very often	☐ Sometimes	☐ Rarely	☐ Never
Technical/vocal description (alone)	☐ Very often	☐ Sometimes	☐ Rarely	☐ Never
Gesture ie not beating time (alone)	☐ Very often	☐ Sometimes	☐ Rarely	☐ Never
Imagery (alone)	☐ Very often	☐ Sometimes	☐ Rarely	☐ Never

(Imagery eg '*Can you make it bouncy*?')

11. Which of those strategies above do you use in combination? (Tick all that apply.)

Vocal demonstration in combination with: ☐ Gesture ☐ Imagery ☐ Technical description
Technical description in combination with: ☐ Gesture ☐ Imagery
Gesture in combination with: ☐ Imagery

12. How effective do you find the following for transmitting how you want the choir to sing?

Vocal demonstration (alone)	☐ Very effective	☐ Sometimes	☐ Not effective
Technical/vocal description (alone)	☐ Very effective	☐ Sometimes	☐ Not effective
Gesture (alone)	☐ Very effective	☐ Sometimes	☐ Not effective
Imagery (alone)	☐ Very effective	☐ Sometimes	☐ Not effective
Gesture with imagery	☐ Very effective	☐ Sometimes	☐ Not effective
Imagery with vocal demonstration	☐ Very effective	☐ Sometimes	☐ Not effective
Technical description with imagery	☐ Very effective	☐ Sometimes	☐ Not effective

13. Which other strategies do you use to transmit to the choir how you want them to sing?

14a. If you don't use imagery with your choir, please skip to **Q 15**.
14b. If you do use imagery with your choir, why is this? (Tick all that apply.)

☐ As a memory aid / mnemonic /reminder
☐ To affect several aspects of the sound at the same time
☐ Because explaining how the voice works is difficult
☐ To explain a point more clearly
☐ To build vocal quality
☐ In place of technical vocabulary
☐ To save time
☐ To inspire the singers
☐ To illustrate the text
☐ To interpret the music

Other – please state:
Now go to **Q 16**.

15. If you don't use imagery with your choir, why is this? (Tick all that apply.)

☐ Imagery too vague/confusing
☐ Need solid technique first
☐ Would use for interpretation only
☐ Italian terms more precise
☐ Technical explanations more precise
☐ To save time
☐ Not useful/required for this piece

Other – please state:

Information about your vocal experience.

16. Do you currently have, or have ever had, vocal training?
☐ None If none, please skip to **Q 20**.
☐ Less than 1 year ☐ 1-5 years ☐ 5-10 years ☐ 10+ years

17. Does/did your vocal teacher ever use images to transmit how s/he wanted you to sing?
☐ Yes ☐ No If no, please skip to **Q 20**.
If yes, please give examples here:

18. Why do you think your vocal teacher uses/used imagery in this way? (Please tick all that apply.)

☐ To explain a point more clearly
☐ To build vocal quality
☐ To affect several aspects of the sound at the same time
☐ As a memory aid / mnemonic /reminder
☐ Because explaining how the voice works is difficult
☐ To illustrate the text
☐ To interpret the music
☐ In place of technical vocabulary
☐ To save time
☐ To inspire the singer

Other – please state:

19. How effective do you think your vocal teacher's use of imagery is/was for you?
☐ Very effective ☐ Sometimes effective ☐ Not effective

20. How useful is it for a choir director to have/had vocal training?
☐ Not necessary ☐ Useful but not essential ☐ Essential

21. To what extent does the director's need for vocal skills depend on the level of the choir?

Professional choir: ☐ Not necessary ☐ Useful but not essential ☐ Essential
Highly experienced amateur choir: ☐ Not necessary ☐ Useful but not essential ☐ Essential
University/college/high school choir: ☐ Not necessary ☐ Useful but not essential ☐ Essential
Beginner choir - adults: ☐ Not necessary ☐ Useful but not essential ☐ Essential
Children's / primary school choir: ☐ Not necessary ☐ Useful but not essential ☐ Essential

22. Are there any other comments you wish to make about choral directing?

MANY THANKS FOR YOUR PARTICIPATION IN THIS STUDY

Please leave this section blank: *Dir:* *Resp No:* *Date:*

Choir Questionnaire Schedule - Phase 1.3

This survey forms part of a PhD research project, investigating the strategies that choral conductors use.
I would be grateful if you would complete the following short questionnaire about your singing experiences.
Responses will be treated as confidential and reported anonymously in the study.
Many thanks for your participation. *Mary Black, [role, institution, email]*

Information about singing in choirs.

1. For how many years have you been singing in choirs?

☐ Less than 1 year	☐ 1-3 years
☐ 3-5 years	☐ 5-10 years
☐ 10+ years	

2. Which voice part do you sing in this choir?

☐ Soprano	☐ Alto
☐ Tenor	☐ Bass

3. Do you enjoy singing in this choir?

☐ Always	☐ Mostly
☐ Sometimes	☐ Never

4. Do you currently sing in another choir? If so, which?

5. What do you think are the benefits of singing in a choir?

Information about vocal training.

6. Do you currently have, or have ever had, vocal training?

☐ None	☐ Less than 1 year
☐ 1-3 years	☐ 3-5 years
☐ 5-10 years	☐ 10+ years

7. If you currently have vocal training, who is your teacher?

8. Do you think you use your voice differently in choir rehearsals than in your vocal training? If so, how?

MANY THANKS FOR YOUR PARTICIPATION IN THIS STUDY
Please leave your completed questionnaire in the box provided.

If you are willing to take part in a follow-up interview, please give your contact details below:

This would involve an open discussion at the end of next week's rehearsal, based on a brief section of the video of this rehearsal. It would take around 15 minutes and again all your responses would remain anonymous.

Name:
Email: Phone:

Please leave this section blank: Ch Ref. Date: Ref. No:

Appendix K

Interview Schedules (Examples)

C Emma Interview Schedule – Researcher version

- **THANK you for your time – please help yourself to ....** [refreshments]
- **I'm going to ask you to watch the short extracts taken from last week's rehearsal and give your opinions and comments. There are no right or wrong answers, so please be as specific as you can.**
- **Your director won't be told what you say, but will see the same extracts as you in a later interview.**
- **If you don't want me to record what you say, please write it down instead. Any results will be presented anonymously in the study.**

Give CONTEXT
Extract 1 The long day closes.

1 Where we did it on the syllable '*dah*' because I'm just trying to make our singing smoother
2 ... smoother and more instrumental ...
3 ... and a little bit lighter ..
4 ... just closer to the teeth, rather than doing .. deep.

1. What do you think your director was trying to convey by using the words 'smoother' and 'more instrumental' and 'lighter'?

2. What did you try to do in response to that phrase?
(If you can't remember, what do you think you did?)
3. What did you understand when your director said 'closer to the teeth, rather than deep'?

4. She also sang the phrase. Did that help, and if so, how?

CONTEXT
Extract 2 Just before singing **Oh Danny boy.**

1 We were trying to do it .. in a good blend and tune ..
2 .. and we were trying to start it from the consonant not on '*oooh*' because it's too deep sounding .. [she demonstrates]
3 .. with '*dah*' or we can start with '*nuh*' for example .. it's not audible actually, shall we start it from '*nuh*'?

There's quite a lot in this extract:
1. What do you think your director meant by 'good blend'?

2. She asked you to start on a consonant, rather than oooh, because oooh was too deep. What do you think she meant by that?

3. What did you try to do in response to each of those phrases?
(If you can't remember, what do you think you did?)

4. To what extent did your director's vocal demonstration help?

CONTEXT
Extract 3 Swing low, sweet chariot (very short!)

(There's not much pause but we are waiting for you (bass) to start)
We cut the sound down on the first beat. [she gestures]

Again a number of questions relating to this extract:
1. What do you think your director meant by 'cut the sound down'?

2. What do you think your teacher trying to convey by the arm gesture?

3. Was one of these more useful in helping you understand what she wanted? Which one?

4. To what extent did you achieve what your director wanted at this point? How did you do it?

Your director has used several strategies in these extracts, ie vocal demonstrations, gestures, verbal descriptions (technical description), **imagery - which of these is most useful in helping you to understand what your director wanted, or how you were to respond?**

Why do you think that is?

What tells YOU that you have achieved the response your director asks for?

MANY THANKS FOR YOUR PARTICIPATION IN THIS STUDY

Please leave this section blank: Dir Ref: Emma RN: Date:

C Emma Interview Schedule – Respondent version

Video extracts

Please watch the short extracts taken from last week's rehearsal and give your opinions and comments. There are no right or wrong answers, so please be as specific as you can.

Your choir director will not be told what you say, but will examine the same extracts as you in an interview later. Any results will be presented anonymously in the study.

Extract 1 The long day closes.

1 Where we did it on the syllable '*dah*' because I'm just trying to make our singing smoother
2 ... smoother and more instrumental ...
3 ... and a little bit lighter ..
4 ... just closer to the teeth, rather than doing .. deep.

Extract 2 Just before singing **Oh Danny boy.**

1 We were trying to do it .. in a good blend and tune ..
2 .. and we were trying to start it from the consonant not on '*oooh*' because it's too deep sounding .. [she demonstrates]
3 .. with '*dah*' or we can start with '*nuh*' for example .. it's not audible actually, shall we start it from '*nuh*'?

Extract 3 Swing low, sweet chariot

(There's not much pause but we are waiting for you to start)
We cut the sound down on the first beat.

Your director has used several strategies in these extracts, ie vocal demonstrations, gestures, verbal descriptions (technical description), **imagery - which of these is most useful in helping you to understand what your director wanted, or how you were to respond?**

Why do you think that is?

What tells YOU that you have achieved the response your director asks for?

MANY THANKS FOR YOUR PARTICIPATION IN THIS STUDY

Please leave this section blank: Dir Ref: Emma RN: Date:

Appendix L

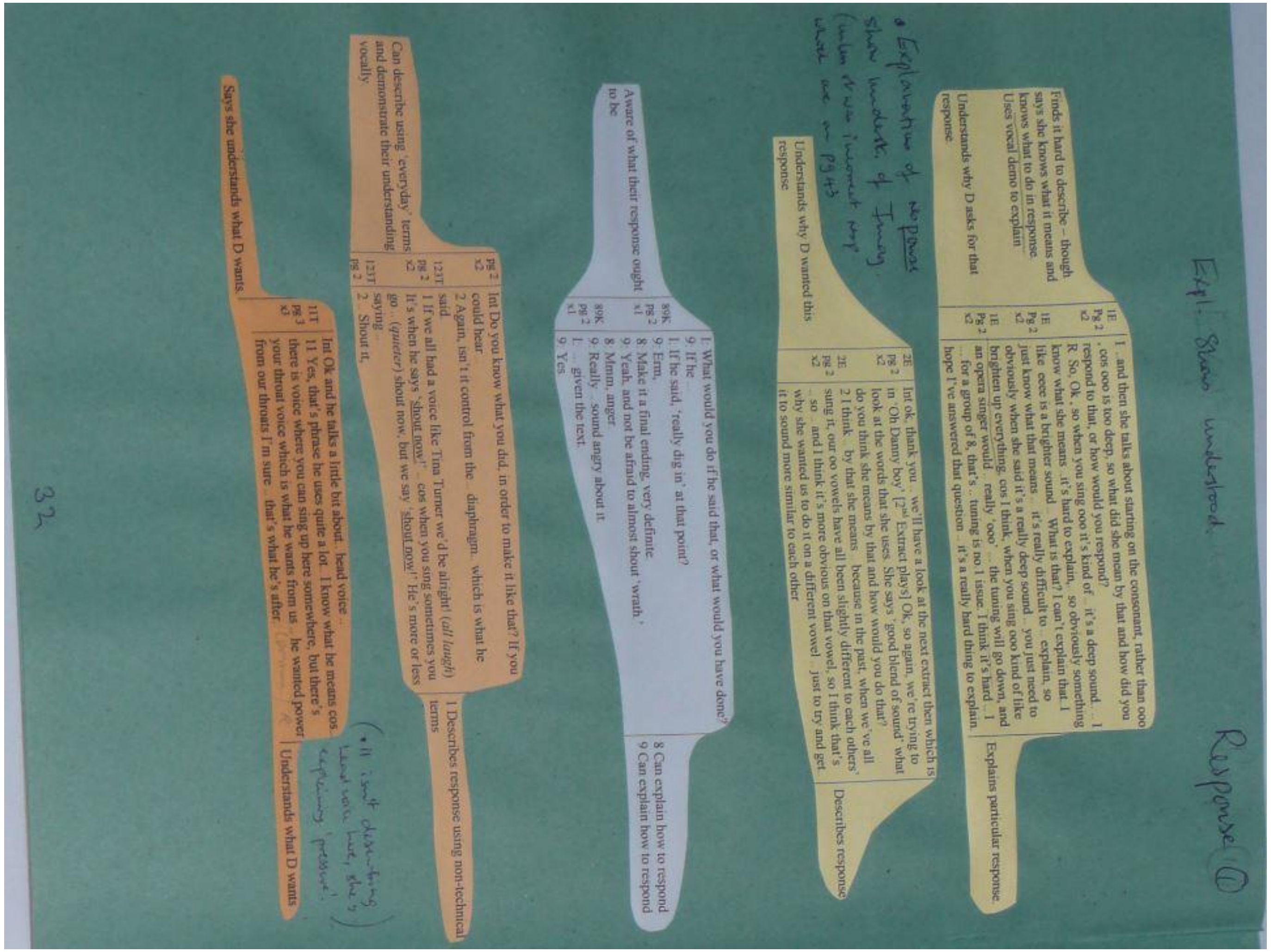
Revised List of Main Themes

Those themes not in bold were not central to analysis and were therefore omitted due the large amount of data.

Director Book 1	**Imagery; Response; Pre-and post- use of imagery (P&P);** Explanation; Explanation of one strategy with another; **Stock images**
Director Book 2	**Strategies; Technical / Italian terms; How to remember; Vocal Demonstration; Gestures; Stop, Repeat segment (SRS); Director's role; Choir role;** Imitating gestures; **Confusions; Directors Vocal Technique**
Choir Book 1	**Imagery; Problems with Imagery; Coincidences**
Choir Book 2	**Explanations of Imagery;** Explanations of one strategy with another, 1WA (imagery with vocal demo or other strategy)
Choir Book 3	**Comparing examples P&P; Response to Imagery**
Choir Book 4	**Stock Images; Negative images; Technical language; Italian terms; Success of strategy; Remembering response; Director's role**
Choir Book 5	**Strategies other than Imagery; Strategies Combined; Vocal Demonstration; SRS; Gestures;** Imitating gestures

Appendix M

Example of Scrap Book Page



Expl. Shows understood.

Response ①

Finds it hard to describe – though says she knows what it means and knows what to do in response. Uses vocal demo to explain Understands why D asks for that response.	1E Pg 2 x2 1E Pg 2 x2 1E Pg 2 x2	I ..and then she talks about starting on the consonant, rather than ooo , cos ooo is too deep, so what did she mean by that and how did you respond to that, or how would you respond? R So, Ok , so when you sing ooo it's kind of .. it's a deep sound.. .. I know what she means ..it's hard to explain,.. so obviously something like eeee is a brighter sound .. What is that? I can't explain that. I just know what that means .. it's really difficult to .. explain, so obviously when she said it's a really deep sound .. you just need to brighten up everything, cos I think, when you sing ooo kind of like an opera singer would .. really 'ooo' ... the tuning will go down, and ... for a group of 8, that's .. tuning is no.1 issue. I think it's hard .. I hope I've answered that question .. it's a really hard thing to explain.	Explains particular response.

• Explanation of no pause show underst. of Imag. (when it was incorrect stop where we are on pg43

Understands why D wanted this response	2E pg 2 x2 2E pg 2 x2	Int ok, thank you .. we'll have a look at the next extract then which is in 'Oh Danny boy' [2nd Extract plays] Ok, so again, we're trying to look at the words that she uses. She says 'good blend of sound' what do you think she means by that and how would you do that? 2 I think .. by that she means .. because in the past, when we've all sung it, our oo vowels have all been slightly different to each others' .. so .. and I think it's more obvious on that vowel, so I think that's why she wanted us to do it on a different vowel .. just to try and get it to sound more similar to each other	Describes response

Aware of what their response ought to be	89K pg 2 x1 89K pg 2 x1	I: What would you do if he said that, or what would you have done? 9: If he ... I: If he said, 'really dig in' at that point? 9: Erm, 8: Make it a final ending, very definite. 9: Yeah, and not be afraid to almost shout 'wrath.' 8: Mmm, anger. 9: Really .. sound angry about it. I: ... given the text. 9: Yes	8 Can explain how to respond 9 Can explain how to respond

Can describe using 'everyday' terms and demonstrate their understanding vocally.	pg 2 x2 123T pg 2 x2 123T pg 2	Int Do you know what you did, in order to make it like that? If you could hear 2 Again, isn't it control from the .. diaphragm.. which is what he said. 1 If we all had a voice like Tina Turner we'd be alright! *(all laugh)* It's when he says 'shout now!' .. cos when you sing sometimes you go .. *(quieter)* shout now, but we say 'shout now!' He's more or less saying .. 2 .. Shout it,	1 Describes response using non-technical terms

(• It isn't describing head voice here, she's explaining 'pressure'.)

Says she understands what D wants.	11T pg 3 x3	Int Ok and he talks a little bit about.. head voice .. 11 Yes, that's phrase he uses quite a lot. I know what he means cos.. there is voice where you can sing up here somewhere, but there's your throat voice which is what he wants from us .. he wanted power from our throats I'm sure .. that's what he's after. [illegible]	Understands what D wants

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Appendix N

Total number of Images

Director[50] (No. of rehearsals)	**Total number of images**	**Number (%) of stock images**	**Number (%) of negative images**	**Examples misunderstood or confused** number (%)	**Examples of imagery explained with imagery**
DL (1)	10	1 (10%)	5 (50%)		
DR (1)	2	1 (50%)	0		
Rob (2)	55	9 (16.3%)	18 (33%)		
Sam (2)	6	4 (66.6%)	1 (16.6%)		
Pete (2)	17	5 (29.4%)	7 (41%)		
Emma (1)	12	5 (41.6%)	1 (8.3%)	2 (16.6%)	0
Ken (1)	97	7 (7.2%)	30 (31%)	1 (1%)	4 (4.1%)
Tim (1)	12	4 (33.3%)	0	4 (33.3%)	9 (75%) (8 multiple)

Choir Respondents: Number of Images Recalled from Prior Rehearsals

1.4	16		0		
C Emma	3		0		
C Ken	59		1		
C Tim	24		0		

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[50] The table excludes images from directors in stage 1.1, 1.4 or directors DW, DG and DP, as their rehearsals were not videoed.

Appendix O

All Stock Images

Stock Image [51]	**Director**							
	DL	**DR**	**Rob**	**Sam**	**Pete**	**Emma**	**Ken**	**Tim**
Punchy	✓			1				
Crisp		✓	2					
Yelp /yelping			6					
Glitter			7					
Energetic /energy			2	2			9	
Heavy			2					
Shape			4					
Lyrical			2					
Epic			2					
Foggy			2					
Elegance			2					
Bright			2		1		5	
Spongy			3					
Shiny			3					
Cymbal /gong (themed)			8					
Horses			2					
Bounce /bouncy				1	5			
Use amplifiers				1				
Stodgy					2			
Light					3	9		
Smooth						5		
Deep						3		
Gentle						2		
Closer to the teeth						1		
Strong							7	
Take a risk							4	
Put it in the voice							4	
Challenge							6	
Power							1	10
Swell								8
Harsh								2
Bite								2

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[51] In order of collection during research; numbers not counted with DR or DL.

Appendix P

Published Inter-Choir Stock Images

The exemplars with numbers in bold are explained more comprehensively in the original publications, with clear links to detailed vocal pedagogy.

	Example	**Reference**
1	**Puppet on a string** (and variations)	(Smith & Sataloff, 2006, p. 156)
2	The old idea of imagining that you are being suspended by a piece of string from the crown of your head is fine if you have good proprioceptive awareness. This is an accurate sense of where your body is.	(Williams, 2013, p. 83)
3	(On a skeleton) drawing imaginary strings from the bottoms of their feet, upward through their legs, joining at the hips, continuing through the spine and neck, and finally out of the top of their head. By pulling the string up from the top of their head, they now can draw their skeleton upward into a beautiful position for singing.	(Skoog, 2004, p. 44)
4	For proper posture [teacher] recommends that students imagine a hairlike string coming through the tops of their heads like Christmas ornaments, and being hung on the tree.	(DeGroot, 2009, p. 63)
5	Imagine that a magic thread attached to the upper tip of the shoulder is lifting your right shoulder. Let it to up as high as it will go, while letting your arm hang loosely, like a dead-weight, close to your body. Suddenly release and let the shoulder droop	(Chipman, with Hoffman, & Thomas, 2008, p. 12)
	Cradling or petting something in arms	
6	With arms folded, cradle an imaginary child or pet	(Smith & Sataloff, 2006, p. 156)
7	Invite the choir to cradle an imaginary child while singing a familiar lullaby on a single vowel.	(Smith & Sataloff, 2006, p. 191)
8	Pet the kitty (stroke your arm)	(Stollack & Alexander, 1998, p. 18)
	Biting an apple (and variations)	
9	Bite an imaginary piece of fruit.	(Smith & Sataloff, 2006, p. 157)
10	Picture of mouth biting apple on front cover of the book.	(Chen, 2007)
11	Think of placing an intact, raw egg in one’s mouth, closing the mouth around it without breaking the egg, and then singing with that amount of space in the mouth	(Skoog, 2004, p. 46)

12 To promote an open throat they should feel the sensation of placing hot food on one’s tongue. (Skoog, 2004, p. 46)

13 Sing as if you have a hot potato on your tongue. (Williams, 2013, p. 175)

14 Telling vocalists to pretend they are taking a bite from a big apple has been demonstrated (by cameras inserted through the nose of the subjects) to result in the deconstriction needed to produce the desired sound for western classical singing. (Schippers, 2006, p. 211)

15 Pretend you have a bubble in the back of your throat. (Jacobsen, 2004, p. 58)

Smelling a rose

16 Drinking in the scent of an exquisite perfume or flower provides a fine image for proper inhalation. (Smith & Sataloff, 2006, p. 163)

17 Smelling a rose (Mason, 2000, p. 218)

Spin the tone

18 Spinning the tone (…) this is a concept which is best described with images. Encourage singers to imagine their voices spinning like frisbees or clay pigeons through the air as they sing. This helps to prevent a bland sound that lacks energy and intensity. (Carrington, 2012, p. 289)

19 Spin or spinning the tone. (Jacobsen, 2004, p. 56)

Published Sources and Research Respondents

Sting

20 There’s an accent, so you have to sting that note a little. (Barten, 1998, p. 94)

21 I call it a sting, it’s slightly sharper, it sort of cuts through the rhythm. (Tim, p. 4, ex. 4)

Exaggerated smile

22 Imitate a clown face with elevated eyebrows and expansive smile. (Smith & Sataloff, 2006, p. 157)

23 Pulls the corners of his mouth up on strings (32Ken, Q8)

String of pearls

24 A legato line may be describe as a slender, supple thread of singing, a wide unfurled ribbon of sound a string of perfect pearls of song. (Smith & Sataloff, 2006, p. 190)

25 Like pearls on a string (D7, Q7)