

A hidden world of song:
Spontaneous singing in the everyday lives
of three- and four-year-old children at home

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Abstract

This study explores the spontaneous singing of three- and four-year-old children at home, with emphasis on how young children use singing in their everyday lives. Spontaneous singing pervades the everyday lives of young children and can provide insights into a child's musical and extra-musical experience at home. Although several studies have examined spontaneous singing in educational settings, young children's musical lives at home are rarely studied in detail. The home is a difficult space to access, and data collection methods often rely on parental reporting. As a result, some types of singing have been overlooked. Located within the sociocultural theoretical tradition, this thesis draws on and develops theories of musical agency to explore how children act musically to engage with others and manage their own experience. Audio data were collected using LENA all-day recording technology supplemented by semi-structured parental interviews. Over 183 hours of audio recording were collected from 15 children (7 boys, 8 girls), aged between 3:0 and 4:10 years (average age 3:8). The children were recorded for continuous periods during their normal everyday routines. The recordings contained more than nine hours of spontaneous singing in total. The data were analysed using qualitative thematic analysis with an element of embedded numerical analysis. Interpretive analysis indicated that the children sang to act on themselves and manage social interactions. Spontaneous singing was used as a tool through which the children could realise personal and social agency and influence themselves and others. The children used different modes of singing in social and solitary contexts, demonstrating knowledge of culturally meaningful ways of singing. The home musical environment, and particularly parental singing, appeared to influence the way young children use singing in their everyday lives. This research used an innovative methodology to access young children's singing in the home. The findings contribute to a greater understanding of young children's musical behaviours and the home musical lives of young children. Further, the thesis provides an original contribution to the understanding of how young children use spontaneous singing as musical agents acting in and on the world around them. This research has educational implications relating to the way young children's musicality is understood and encouraged and the importance of music in young children's lives.

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List of accompanying material

CD of audio examples (inside back cover).

Please note:

Some audio examples cover an extended period of time and have, therefore, been edited to remove audio that is not singing. A silence of two seconds has been added to indicate where the audio track has been cut.

Real names have not been edited out of the audio examples provided on the CD. The parents of the children who are named in the audio examples have given their written permission that they are included on the CD.

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1. INTRODUCTION

Leo and his older brother, Nathan are playing with their train set. Leo starts singing to the tune of the popular children's song, Wheels on the Bus. He sings, "I want to go on the track track track, track track track,... him go on the track track track,... he goes the track track track". Nathan picks up the end of the song, singing, "all in the early morning". Leo sings, "Him go go early-o morning, early-o morning, early-o morning". He repeats this quietly several times. After a while, Nathan sings, "Morning baby is chugging all around", and Leo joins in to sing, "chugging all around, chugging all around".

Often unnoticed by adults, spontaneous singing is woven into the fabric of a young child's life. Young children sing as they go about their daily lives, sometimes quietly, under their breaths, at other times raucously, filling the space. Their singing flows with their activity, directed inwards, to themselves, or outwards towards others. They draw on their musical experiences to make vocal music which is both meaningful and useful to them.

1.1 Personal rationale

This research was inspired by a small, single-case exploratory study of a three-year-old boy's spontaneous music-making at home, undertaken as the first paper in a part-time Master of Arts (MA) in Education (Early Years Music; Dean, 2011). My journey into early childhood music education was a haphazard one. My academic background is in musicology, German, linguistics, and cultural policy. However, after several years working in arts management in the United Kingdom (UK), serendipitous life events saw me become an expatriate early years and lower primary school music teacher at an international school in Azerbaijan. A passion was awakened, and, over the next few years, I taught music in several different early childhood and lower primary school settings, before having my own children and becoming interested in the musical experiences of young children at home. After returning to the UK, I took the opportunity to improve my understanding of early childhood music education

through enrolling in the MA programme. Unfortunately, a further international move meant I was unable to complete the Masters programme, but my interest in the topic became the foundation for this doctoral research.

The subject of my research for that first study was my own son, Oscar (a pseudonym), who had just turned three. I aimed to gain an overview of Oscar's musical activity at home over a period of six full, non-consecutive days. I used a handheld digital video camera, a digital voice recorder, and a notebook to collect observational audio, audio-visual, and field note data (Dean, 2011). The findings and the experience of carrying out the project influenced the current study, both conceptually and methodologically. Firstly, the analysis indicated that Oscar sang in different ways in social and solitary contexts. This led me to question whether other children also used different styles for social and self-directed singing. Social and self-directed singing are alluded to in the literature but usually in relation to children singing in group situations within educational settings. The social and self-directed singing of children at home, where the social context is very different, has not been explored in any depth. Oscar's spontaneous singing also made me think about how young children make use of music rather than simply what they produce musically. Secondly, the data showed that the most prevalent type of spontaneous music-making for Oscar was singing. This reflected findings from other researchers (Campbell, 2010; Moog, 1976; Young, 2003) and influenced my choice to focus on singing in the current study.

Methodologically, this initial study influenced my choice of data collection method. After a few days, Oscar began to find the filming and recording intrusive and, on the final day of data collection, he withdrew his consent and refused to let me record him. This experience demonstrated how invasive observation can be for young children, especially when it takes place in the privacy of the home. I also suspect Oscar became tired of his mother being overly interested in what he was doing, effectively invading his normal everyday play space. In addition, as a parent-researcher, I realised how inadequate my methods of data collection were. The roles of mother and researcher are very different, and it was difficult to fulfil both roles simultaneously. Although I managed to collect rich data, I was aware that some music-making was missed, either through my own inattention or by simply being in the wrong place. As a result, in this study, I made it a priority to find a method of recording that would

enable the continuous collection of naturalistic data without being intrusive.

In this doctoral research, I chose to study three- and four-year-old children as a continuation of my earlier research. As will be discussed in Chapter 2, the existing literature indicates that children in this age group are prolific singers. This is also an age at which children are often still cared for at home and are old enough to spend time playing on their own.

1.2 Aims of the study

My experience studying Oscar's music-making at home led to the development of the aims of this current study. The purpose of this study is to examine the ways in which three- and four-year-old children use spontaneous singing in their everyday home lives. In doing this, I aim to contribute to an understanding of the musical lives of young children at home, with a particular focus on how children act musically and how this action is situated within the context of their home lives. I began this study with five objectives:

- to identify child-initiated singing behaviours at home, the extent to which they occur, and the circumstances in which they occur;
- to consider the role and function of young children's spontaneous singing at home;
- to explore the idea that young children engage in distinct social and self-directed singing behaviours at home;
- to consider the influence of the home music environment in relation to child-initiated singing behaviours; and
- to assess the usefulness of the Language ENvironment Analysis (LENA) technology for the study of young children's singing.

1.3 Theoretical approach

I approach this research from a sociocultural perspective that is prevalent within childhood studies, or the “new” sociology of childhood. I consider children to be relatively competent (Sommer, 2012), active in constructing their own experiences and social lives, and able to influence the lives of those around them (Corsaro, 2005; James & Prout, 1997; Tisdall & Punch, 2012). Childhood studies is a multidisciplinary field, drawing on theories from sociology, social anthropology and human geographies, among others (Tisdall & Punch, 2012).

This multi-disciplinary approach reflects a desire to study childhood in a holistic way, respecting the complexities of culturally situated childhood experience. Because young children's spontaneous singing is multifaceted and permeates many aspects of the daily lives of young children, it, too, demands a multi-disciplinary approach. Therefore, to reach an in-depth understanding of young children's spontaneous singing, I draw on ideas from a number of different theoretical perspectives.

Research in early childhood music education often straddles academic disciplines. Music education has traditionally been situated within music psychology or musicology. However, music psychology is often primarily concerned with the development of musical abilities. The exploration of children's music-making at a single point in time—that is, without a linear developmental concern—is more comfortably located within ethnomusicology, as demonstrated by Campbell (1998). Everyday musical experience is often the concern of music sociology (e.g., DeNora, 2000; Frith, 2002). Music sociology, particularly the work of DeNora (2000), Batt-Rawden and DeNora (2005), and Karlsen (2011), has had a particularly strong influence on this study. However, the musical experiences of young children have largely been ignored by music sociologists. In this thesis, I adapt ideas from music sociology to apply them appropriately to young children. Another body of work that has been particularly influential on this study is the research into children's everyday musical experiences that can be situated within the field of childhood studies (e.g., Ilari & Young, 2016; Young & Gillen, 2007).

A key concept within childhood studies is agency. Children are seen to be competent social actors and constructors of social life. Over many decades, agency has become a contentious concept within sociology and childhood studies (Tisdall & Punch, 2012). However, as my analysis progressed, it became obvious that the concept of musical agency would provide the most appropriate framework for the research and would facilitate an exploration of spontaneous singing through the actions and possible intentions of the children themselves, allowing as far as possible, a *child perspective* (Sommer, 2012).

To address the aims of this study, it was important to collect naturalistic data that reflected the everyday musical experiences of young children. Therefore, I chose an ethnographically inspired exploratory methodology, with data collected through non-participant observation. I hoped to gain an

understanding of spontaneous singing through detailed observations of children within their home context (Tudge & Hogan, 2005). In keeping with the qualitative tradition, I used my personal knowledge and experience to interpret the empirical evidence and arrive at an understanding of the phenomenon of young children's singing at home. It is important to recognise that my interpretation is reliant on myself as a researcher. This is discussed further in Chapter 5.9.3.

1.3.1 What is spontaneous singing?

For the purposes of this research, I define spontaneous singing as all vocal behaviours that are organised rhythmically and/or melodically and are initiated by the child. I included singing, humming, chanting, and some instances of vocal play or vocal exploration. Vocal play was included when it occurred alongside singing or humming but excluded when it occurred in isolation. I included singing that was initiated by others if the target child voluntarily joined in but excluded instances of singing when adults or other children explicitly asked the target child to sing.

1.3.2 Positioning the home

I decided to situate this study of young children's spontaneous singing within the home because the home is a primary site of everyday experience for young children. The home is also essentially different from the educational settings where most related research has taken place. In middle-class Western homes, children are often more reliant on their own company. I was particularly interested in singing that took place when children were playing alone. However, I felt it was important to understand this solitary or self-directed singing within the overall context of spontaneous singing at home.

For each individual child in this study, "home" is a unique physical location, but the concept of home is more than a physical location. For many people in the middle-class Western world home is a place where we can withdraw and be ourselves. At home, we can relax and recharge our emotional batteries. This includes having the opportunity to withdraw and be on our own. Home is often considered to be a safe place where people feel rooted and secure (Cresswell, 2004). While this would normally be true for thriving children, it is important to remember that this is not always the case. Different members of the family and researchers from different research traditions (for example,

feminist theory) may view the home in different ways (Blunt & Dowling, 2006; Hancock & Gillen, 2007). Home is an important location for the study of young children as it is often a place where they spend a great deal of time, and it is where everyday life occurs as interaction between members of the family and with the outside world (Plowman & Stevenson, 2013).

Whilst there are many ways of approaching the idea of home (see Cresswell, 2004), Blunt and Dowling (2006) provide a helpful definition of home as "a place/site, a set of feelings/cultural meanings, and the relations between the two" (pp. 2-3). This simple definition draws on the idea prevalent within the field of human geography that place is both the location and product of human practices (Pink, 2012). Therefore, home is both a physical location and an environment created by the everyday interaction between family members and the interaction of family members with the physical space (Plowman & Stevenson, 2013). As such, unique family cultures are constructed within the home. This has implications for music-making in the home as both the social and physical aspects of the home can afford different types of musical agency.

Hancock and Gillen (2007) drew on data from the *Day in the Life* study (Gillen & Cameron, 2010) to consider the role of place in the play of seven two-and-a-half-year-old girls in seven different counties. They found that because parents considered the home to be a safe place, young children were able to enjoy a degree of autonomy and independence at home. Whilst children were rarely out of view—or at least earshot—of parents, the children found spaces in which they could experience the feeling of being “almost alone”. Being able to find space at home in which to be alone is also important for older children (Christensen, James & Jenks, 2000) and is thought to prepare children to become more independent (Christensen et al., 2000; Hancock & Gillen, 2007). The idea that the home is a place where children can attain some degree of privacy and independence, is an important one for this study.

1.4 Thesis outline

This thesis is structured in four parts. In Part One, I provide a conceptual background to the study by exploring relevant literature. In Part Two I explain the theoretical background of the study and how I designed and conducted the research. Part Three presents the findings over three chapters, beginning with descriptive findings and moving on to more interpretative findings. In Part Four,

I discuss the findings in relation to the prior literature and present my conclusions.

PART ONE: Background

Part One consists of two chapters which examine the background literature. I begin in Chapter 2 by exploring the literature on young children's spontaneous singing. I first look at typologies of spontaneous singing, noting that many studies seek universal models of musical development or child culture. Widening the age range, I then examine the small amount of literature that addresses children's everyday musical experiences and studies of young children singing at home. From these studies, I draw out ideas relating to the function of singing in the everyday lives of young children. Finally, I look at the methodological challenges of studying young children's singing at home.

The body of literature exploring young children's spontaneous singing, particularly spontaneous singing in everyday home life, is fairly small. Therefore, in Chapter 3, I broaden my lens to briefly examine some of the wider literature around music in everyday life. These are largely studies that relate to the everyday musical experience of adults. The aim of this chapter is to find out what this body of literature can lend to our understanding of the function of young children's singing. I particularly draw on theories from music sociology and ethnomusicology (Campbell, 2010; DeNora, 2000; Karlsen, 2011; Knudsen, 2008; Merriam, 1964; Nettl, 2005). A second focus of this chapter is to examine how music functions in our lives as both a social and solitary activity. Music is considered to be a fundamentally social phenomenon, and there is little literature concerned with the way people use music when they are alone. I discuss DeNora's (2000) concept of music as a *technology of the self* and look at how Knudsen (2008) uses this idea in a study of children singing to themselves. Knudsen's small study presents a useful starting point to exploring how children use singing to care for the self. I also examine literature on young children's solitary activity, particularly private speech, with the aim of drawing out concepts that are relevant to young children's spontaneous singing.

PART TWO: Approach

Part Two covers the theoretical background of the research and how I designed and carried it out. Young children's spontaneous singing at home is multi-faceted and, as a result, I draw on theories from several different

theoretical fields. However, as an overarching framework, I use the notion of musical agency to explain young children's use of spontaneous singing. In Chapter 4, I examine the notion of young children's agency in general and musical agency in particular and look at how Karlsen's (2011) sociologically inspired "lens" of musical agency can provide a useful framework for studying young children's singing behaviours. I also provide a justification of my research approach and present my research questions.

In Chapter 5, I describe the approach I took to designing and carrying out my research. I begin by outlining my methodology, describing the participants, and outlining the four phases of data collection. I then discuss how I used the LENA system to collect my data. I report on how I coded and analysed the data using qualitative thematic analysis, simple descriptive quantitative analysis, and narrative account. This is followed by a detailed discussion of the ethical considerations that were necessary for researching young children in their homes. The limitations of my research design are discussed, along with reflection on my own role in the study and how I strived to produce credible findings.

PART THREE: Findings

In Part Three, I present the findings of my research over three chapters. Each chapter addresses the findings relating to a specific research question. In Chapter 6, I describe the participants and data that was collected. I discuss the nature of the spontaneous singing I observed and use numerical data to explore the extent of spontaneous singing at home. This chapter focuses on descriptive analysis of the children's singing behaviours. Chapter 7 examines the contexts in which spontaneous singing takes place. I firstly consider "active" contexts and then discuss the importance of social context. In this chapter, I also examine observable factors in the home environments that appear to have an impact on spontaneous singing. Finally, I provide a narrative account of a single recording from one child. The purpose of the narrative account is to contextualise spontaneous singing within the child's day. In Chapter 8, I use a theoretical framework of musical agency to examine ways in which young children use spontaneous singing in their everyday lives. This is an interpretive analysis based on the context and social context of the singing together with an interpretation of communicative intent. My interpretation of the data demonstrates how children act in and through music and how they use music

as a tool in their social interactions and to act on themselves.

PART FOUR: Discussion and conclusion

In the final part of this thesis, I discuss my findings in relation to the literature that informed this study, and also draw on relevant findings from recently published literature. I focus on areas that I believe are particularly important in understanding the phenomenon of young children's spontaneous singing and areas that have previously been under-represented in the literature. In particular, I highlight self-directed singing and singing as a way of negotiating relationships. I conclude the thesis by clarifying how this research contributes to current knowledge of the role and importance of singing in young children's lives, and, in a wider sense, to how children use singing as they function as agents in the world. I briefly review the research process and the limitations and implications of this research.

1.5 Summary

In this chapter, I have introduced the aims and background rationale of this study and outlined the structure of the thesis. The following two chapters examine the literature relating to young children's spontaneous singing and the ways in which music is used in everyday life.

2. LITERATURE REVIEW 1

THE SPONTANEOUS SINGING OF YOUNG CHILDREN

2.1 Introduction

Researchers have taken a number of different approaches to the study of young children's spontaneous singing. Broadly speaking, the literature around young children's spontaneous singing can be grouped into two strands: developmental studies that examine what young children's spontaneous singing can tell us about how young children acquire musical skills, and studies that explore the role of spontaneous singing in the social and personal lives of young children. Studies in the first group dominate. These stem from disciplines such as educational psychology, developmental psychology, and musicology. Research in the second group is grounded in disciplines such as ethnomusicology, social anthropology, sociology and childhood studies. As this study explores how young children make use of singing in their everyday home lives, the primary focus of this literature review is on the second of these strands, spontaneous singing as a social and cultural phenomenon, rather than its place in the musical development of the young child.

The aim of this chapter is to review previous work on young children's spontaneous singing. I particularly focus on the characteristics of spontaneous singing, evidence of how spontaneous singing is used, and the contexts in which spontaneous singing occurs. While the main focus of this study is spontaneous singing at home, the literature relating to young children singing at home is limited. Therefore, this literature review also takes into consideration observational studies of spontaneous singing that have taken place in educational settings. Educational settings are very different to the home context, primarily due to the presence of similarly aged peers. However, as this singing is child-initiated and spontaneous, it is possible to draw some useful comparisons. Because the literature around spontaneous singing is not large, this review covers children aged approximately one to seven years.

I begin this chapter by looking at general typologies of young children's

spontaneous singing, particularly focusing on its characteristics. This literature is largely from the field of music education and tends to be interested in attempting to arrive at universal models of spontaneous singing. I then examine the ethnomusicology and music education literature that is concerned with the everyday musical experiences of young children. Following this, I focus on the small number of studies that are specifically located in the home. Finally, I review the methods that have been used to collect data of young children singing at home.

2.2 Typologies of spontaneous singing

One of the earliest major studies of young children's spontaneous singing was carried out by Moorhead and Pond (1978). Their research was based on observations of children at the Pillsbury Foundation School in California, USA, between 1937 and 1948. The Pillsbury Foundation School was set up in 1937 at the suggestion of conductor Leopold Stokowski, who believed it was important to study children's natural music-making in order to advance music education (Kderstead, 1994). This was a time of educational reform and the founders were influenced by educationalists such as John Dewey, Maria Montessori, and Helen Parkhurst (Pond, 1980). The main purpose of the school was to observe young children's music-making in a naturalistic environment. Pond was employed as the music specialist and Moorhead as the early childhood specialist. The school was attended by 12 to 27 children at various times, mostly aged between 2–6 years old. It was run as a normal nursery school, but the children had free access to a variety of musical instruments, a small stage for performing, and a phonograph with a range of carefully selected records. Children at the school were given freedom to choose their own activities and organise themselves socially.

During the 1940s, Moorhead and Pond published a number of papers based on their observations at the Pillsbury school. Two of these papers report on spontaneous singing: *I. Chant* (1941) and *II. General Observations* (1942). Moorhead and Pond identify two distinct types of singing, which they refer to as *chant* and *song*. They describe chant as being very rhythmic and with little melodic scope. Rhythm was the driving characteristic and the words were made to conform to the rhythm. Moorhead and Pond (1941/1978) found an approximate descending minor third to be the fundamental melodic feature of

chant and surmised this to be a "primitive form of melodic musical expression" (I., p.13). However, they believed that the minor third in children's chant could not be contributed to either major or minor tonality because young children's song was outside the scope of Western tonality. Moorhead and Pond observed that chant often arose within group play contexts and was accompanied by movement. Although chant was usually started by an individual within the group, it was sometimes taken up by the group as a whole. In their report Moorhead and Pond (1942/1978) define group play as occurring with "several children who have gathered themselves together and are engaged in common or related activity, developing awareness of each other and of the group as a whole" (II., p.6). They comment that such group play does not usually take place until children are around five years old. As they describe chant as arising most often from group play situations, it can be surmised that it is the older children that most often use chant. Moorhead and Pond report that the children used chant to express heightened emotion, thoughts, and ideas.

The other type of spontaneous singing described by Moorhead and Pond (1978) was *song*. This was more individual and was usually sung by children playing on their own. Song was driven by melody, which was wandering and free, with flexible rhythm. Melodies usually moved by step or small intervals but could also include large intervals. Words, if used at all, often made no sense "as though the melody not the words were important" (Moorhead & Pond, 1941/1978, I., p.4). These songs were sung by children for themselves rather than for the group and were often experimental in nature. The songs were unique to the individual whereas chant always conformed to the same structure. Moorhead and Pond comment that "the singer sang to himself alone, quietly, of everyday things" (I., p.4) and that through these songs children seemed to provide a running account of their "inner imaginative life" (Moorhead & Pond, 1942/1978, II., p.7). They also used these songs to express quiet happiness, which was rather different to the heightened emotion of chant.

Apart from observing the characteristics of young children's songs and chant, Moorhead and Pond (1978) made a number of other important observations. They saw that music learning and musical play were part of and inseparable from other forms of learning and play and took place concurrently. The children did not distinguish between musical and non-musical experience; rather, it was all part of the fluid experience of their everyday life in the school.

As such, the children's vocalisations moved freely between speech and song. Moorhead and Pond realised that context was an important factor in the occurrence of different types of singing and musical play. This included social, emotional, and physical contexts. They ascertained that for a child to engage in musical play it was necessary for him or her to experience "freedom to move about in pursuit of his own interests and purposes, and freedom to make the sounds appropriate to them." (Moorhead & Pond, 1942/1978, II., p.5).

Moorhead and Pond recognised that children needed support from adults to extend their musical experience; however, they believed this should be provided sensitively and in keeping with the child's "urge for expression and growth" (II., p.5).

Moorhead and Pond (1978) were interested in how children, if left to engage in free play, come up with their own practices of social organisation. In their observations, they noted that children naturally moved between group play and individual play and suggest that individual play provides a time of relaxation and respite from group play. They noticed that this fluctuation between the social and solitary was also evident in musical play. The children would sometimes engage in group chant and, at other times, sing quietly to themselves. In the early years of the Pillsbury Foundation School, the daily routine was largely unstructured to allow children the freedom they needed to pursue their own interests, and this was one of the school's founding principles. However, in later years, partly due to the influence of World War II and changes in personnel, the school day became much more structured. According to Kderstead (1994), during this time, Moorhead and Pond both noted a reduction in spontaneous music activity. These observations indicate that there is an important link between free play and spontaneous singing and that children naturally flow between social and solitary activity.

Moorhead and Pond's (1978) interpretations display vestiges of recapitulation theory and diffusionism. Subscribers to recapitulation theory believed that the development of children mirrored the development of humanity. In music, this meant that the spontaneous musical behaviours of children could be equated with those of so called "primitive" peoples. Diffusionists were interested in children's songs as a means of locating the primitive origins of song across cultures (Minks, 2002). Moorhead and Pond (1941/1978) claim that their most important finding related to the way children

used chant as a "primitive, pagan, unsophisticated musical expression" (II., p.5) and how these chants had a musical form in common with those of primitive cultures. Of course, we no longer hold such ideas about child development. However, Moorhead and Pond's research is still extremely relevant today due to its breadth, its detailed descriptions of young children's singing, and Pond's strong underlying belief that children's music is valuable as music in its own right.

Like Moorhead and Pond (1978), Sundin (1960/1998) set out to discover what children did musically when not directly influenced by adults. Sundin was specifically interested in children's creativity and, in contrast to Moorhead and Pond (1978), used both naturalistic observations and quasi-experiment to collect data of spontaneous singing and invented songs. Sundin collected his data in Swedish schools, observing a total of 98 children aged 3:6–6:6 in three different schools. Thirty children were observed using time-sampling techniques at two schools, and the remaining children were observed in informal groups at a third school using event-sampling techniques. Sundin used a quasi-experiment to test the children's creativity in invented song-making. He also interviewed parents and teachers and examined the relationship between spontaneous singing and inventive song-making. Sundin discovered that spontaneous song could be very fleeting and often went unnoticed by adults. The amount of spontaneous singing varied greatly between the children with some singing only occasionally and others singing through most of the activities they engaged in. Like Moorhead and Pond (1978), Sundin noticed two distinct types of song. The dominant form was a social chant-like formula song. The other was more introverted and sung while children were playing on their own. These introverted songs often took the form of a commentary on the child's activity. Sundin did not find any relationship between the children's spontaneous singing and the songs they produced in the quasi-experiment. This led him to conclude that there were two distinct types of musicality in young children, one which was displayed in spontaneous singing and the other to meet the expectations of the adult musical world.

During the 1960s, Moog (1976) undertook a cross-sectional investigation into the musical development of young children in Germany. Moog's study is located in the field of developmental psychology and, unlike Moorhead and Pond (1978) and Sundin (1960/1998), was based on a series of tests which

were administered to preschool children in their homes. Data were collected from around 500 preschool children, making this one of the largest studies of young children's singing. In addition to approximately 8,000 tests, Moog interviewed parents and observed the children playing in their homes. The children in the study ranged from five months to six years old. For the purposes of this review, the most important aspect of Moog's study is his description of the spontaneous songs of the three- to four-year-olds. Moog catalogued three types of spontaneous song in this age group, which he labelled as *imaginative song*, *pot-pourri song*, and *narrative song*. *Imaginative song* was improvised using original material and snatches of known songs. *Pot-pourri song* was created by piecing together parts of songs the children knew but did not contain original material. *Narrative song*, which Moog also refers to as *sung monologue*, was song that sounded like a sung narrative, but which rarely carried any understandable meaning. Moog (1976) notes that although these songs are sung with words "the child sings without trying to tell the story to another person, carrying on as if he were quite alone" (p.115). The narrative songs sometimes contain short fragments from known songs and occasional nonsense words "as if the little singer cannot think of suitable words which make sense" (p.115). Only very few spontaneous songs were collected from four-year-olds. Moog carried out the tests on four-year-olds at school where he found spontaneous singing more difficult to observe.

Moog (1976) reports that more than half the children in the age group sang spontaneous songs that were original in some way. Many of the spontaneous songs were sung on a repeated word or syllable, and they were often in duple time with simple rhythms. Moog views this rhythmic simplicity as a serious defect in the spontaneous songs of young children. He points out that this simplicity is replicated in nursery rhymes and songs for children but does not appear to consider that the children's songs might be reflective of the repertoire they are exposed to.

Differences in home musical environment began to show in the musical development of the 3- to 4-year-olds in Moog's (1976) study. Children who came from homes where parents sang often and where parents or siblings taught them songs were more competent singers by the age of four than those who came from homes where there was little or no singing. Moog found that some parents did not know suitable songs, and many of the children were

learning all their songs at nursery rather than at home. He suspected that children needed to have a good repertoire of learnt songs in order to create their own songs. This view differs from that implied by both Moorhead and Pond (1978) and Sundin (1960/1998), who seem to believe that musical creativity comes from within the child.

Moog's (1976) research is important in that it was an extensive study across singing, movement responses and experience of language, music, and rhythm. This is one of very few early studies that observed individual children within the home. However, although Moog's study took place within the context of the home, the context was not considered to be important. This was a study of musical development with the data collected at home rather than a study of the way in which children behave musically at home. In contrast to Moorhead and Pond's (1978) and Sundin's (1960/1998) typologies, Moog's typology is content-based. Moorhead and Pond (1978) and Sundin (1960/1998) observed children in group settings, and this led them to develop typologies that reflected the social context of singing, contrasting the type of singing created during group play and the type of singing created when a child was alone. In Moog's study, the child was at home and, therefore, Moog did not observe these context-specific differences. This also explains why chant does not feature in Moog's typology. Moorhead and Pond (1978) and Sundin (1960/1998) both report chant as the predominant form of spontaneous singing and relate chant to group play. Chant would, therefore, be less likely to appear in the home environment.

Like Moorhead and Pond (1978) and Sundin (1960/1998), Veldhuis (1984) found that songs collected in her pre-kindergarten class of four-year-olds showed a predominance of chant. Veldhuis was interested in the development of singing and affective expression. She used participant observation and a running tape recorder to collect 50 songs from 16 middle class North American children and described the melodic structures present in their spontaneous vocalisations. Veldhuis found the children sang a great deal, and these songs were often very short with short phrases which used repetition and slight variation. The children used a mix of meaningful words and nonsense syllables. The songs used either a very limited melodic range or a very wide range incorporating vocal leaps. Like Moorhead and Pond (1978), Veldhuis (1984) noted that some songs appeared to be sung with no intention of anyone else

hearing or understanding them. This is an example of solitary singing taking place within a social setting—that of a classroom. Unfortunately, Veldhuis does not discuss this type of singing in any detail.

In a study that aimed to explore possible universals in children's spontaneous singing, Bjørkvold (1989) observed 4- to 7-year-old children in educational settings in Norway, Russia and the United States of America (USA). He identified three distinct types of song or *song forms*: *fluid* or *amorphous song*, *song formulas*, and *standard songs*. Bjørkvold describes fluid song as stemming from the musical babbling of infants, being rhythmically free and “fanciful” (p.64). *Song formulas* were short, rhythmical musical phrases used as a form of communication between children, and *standard songs* were songs learnt by children from the standard repertoire. Bjørkvold interprets *song formulas* as an important part of child culture and found they started to appear around the age of three when children were playing together more frequently. Bjørkvold's *song formulas* are similar to Moorhead and Pond's (1978) *chant* and Sundin's (1960/1998) *formula song*, and, like these other researchers Bjørkvold noted a predominance of the interval of a third, both major and minor.

Bjørkvold (1989) identified three ways in which children used spontaneous song. *Analogical imitation* refers to singing directly linked to play (for example, to movement) or to inner thoughts and emotions; *symbolic representation* refers to songs that are used to communicate; and song as *background colouration* or a type of soundtrack that accompanies and stimulates play. Bjørkvold saw a link between the types of spontaneous song and the uses they were put to. He found that *fluid song* was usually used for introspection, *song formula* was used to communicate between children, and *standard songs* were used for background colouration. Like Moorhead and Pond (1978), Bjørkvold found the dominant song form was the *song formula* or chant. This may be because he was observing the children in group settings where introspective *fluid songs* may be less likely to occur and also less likely to be noticed. Bjørkvold approached spontaneous singing as a linguistic phenomenon that is part of a child's natural means of communication, which could mean that he was biased towards sung communication.

Young (2002, 2006) observed the spontaneous singing of 2- to 4-year-olds in two childcare centres in London. The first of these (Young, 2002) was a private day care centre where Young observed the free play of six 2- to 3-year-

olds. These observations were later compared to a set of observations of 3-year-olds during free play in a local authority childcare centre (Young, 2006). Young was concerned with exploring the lived musical experiences of young children rather than their musical development. She observed that the younger children sang and vocalised more than they used spoken language whereas the older children spent more time engaged in social play and talk and, therefore, vocalised less. Like Moorhead and Pond (1978), Young found that vocalisation, or singing play, was inseparable from other forms of play. She proposes that spontaneous singing is used by children to enhance and engage more fully in their play experiences (Young, 2006).

In her analysis of spontaneous vocalisations, Young (2002) described several different types of spontaneous vocalisation, including: free-flow vocalising, chanting and intoning, reworking known songs, and movement vocalising. Young's descriptions of free-flow vocalising are similar to Moorhead and Pond's (1978) *song* and Bjørkvold's (1989) *fluid song*, rhythmically free melody largely based on vowel sounds and snatches of learnt songs, sung while the child is engrossed in play. Chanting and intoning were short repeated motifs. Unlike the chant observed by Moorhead and Pond (1978) and Bjørkvold (1989), this chant was only occasionally social or communicative in nature. This type of chant was observed among the younger children and may well relate to their age and the fact that most of their play was parallel rather than social play. Young does not mention any prevalence of the major or minor third in chant, which earlier researchers imply is a type of *ur-chant* (Bjørkvold, 1989; Moorhead & Pond, 1978; Sundin, 1960/1998). The children reworked known songs by changing them in a variety of ways to meet their own play needs. Young observed that the children often matched their vocalisations to movement. This is similar to Bjørkvold's notion of *analogical imitation*, where children match their singing to their physical movement, whether this is drawing or jumping. Young (2006) notes that it is unclear if the children are matching the singing to the movement or vice versa.

Tafari (2008) reports on a longitudinal study of musical development in Italian children from before birth until the age of six years. The overall aim of the study was to test the hypothesis that all children are predisposed to music and will learn to sing correctly if they grow up within a musically rich environment. Children were observed by the researcher during weekly music classes and by

the parents at home. A number of tests were also used to compare the musical development of the study subjects to children not in the study. Adult participants were recruited prior to the birth of their child. After the birth of the child the family attended infant music classes on a weekly basis, kept a diary about their child's musical activity that included audio and video data, and filled out regular questionnaires about their child's engagement with music. During the study, the parents recorded their children singing spontaneously at home. They recorded both known songs and invented songs. Invented songs were recorded less frequently than known songs because the parents found these difficult to capture and the act of recording often caused the child to stop singing. In her analysis, Tafuri divides the invented songs into two categories: *imitative song* in which the child puts new words to a known melody, and *original song* in which both the words and melody are invented. The original songs are further grouped into three sub-categories: *phrases*, which are short communicative passages; *monologues*, often one or two repeated syllables sung while the child is engaged in another activity; and *songs*, which are narrative in nature.

Tafuri (2008) is particularly interested in the development of tuneful singing and concurs with Dowling (1984) that intonation is less stable in invented songs than when singing standard repertoire. She claims that invented song gradually disappears from children's singing and surmises that this is because they become more aesthetically aware and learn to appreciate song models of the adult world above their own song creations. Knudsen (2008), whose work is discussed in Chapter 2.4, also explores the gradual disappearance of spontaneous singing as children grow older. However, he believes that the singing is internalised rather than given up in favour of standard repertoire. This reflects Vygotsky's (1962/2012) theory that private speech becomes internalised as children grow older.

In another longitudinal study, Whiteman (2001) sought to contest traditional models of musical development. In his three-year study of eight preschool children (age at onset ranged between 2:6–3:6) in a day-care facility in Sydney, Australia, Whiteman explored the ways in which the children acquired musical knowledge through the social interaction that spontaneous singing affords. Interestingly, he found the children in his study used improvised songs more often than standard songs, and these were used for a range of purposes. Improvised songs were primarily used as a means of social

interaction and to accompany play whereas standard songs were sung for their own sake. Musically, the improvised songs had a free rhythmic structure compared to the more metrical standard songs. Whiteman found the use of repetition tended to decrease as the children got older, but melodic development was difficult to generalise. Patterns of musical development appeared to vary between children, and the children used a number of scaffolding behaviours to acquire and transmit musical knowledge between peers.

The different contexts of these studies, the disparate aims of the researchers, and the diverse ages of the children observed makes it difficult to draw comparisons from these studies. However, some relevant similarities are evident. The studies that took place in educational settings with older children (4- to 7-year-olds)—Bjørkvold (1989), Moorhead and Pond (1978), and Sundin (1960/1998)—identify a difference between social or group singing interactions, where chant is the dominant form, and a more introverted style of singing when children are playing alone. The studies that focused on younger children (2- to 3-year-olds) who were not yet engaged in extensive social play, and Moog's (1976) study of children at home do not remark on differences in spontaneous singing based on social context (Moog, 1976; Tafuri, 2008; Young, 2002, 2006). These studies tend to base the categorisation of spontaneous singing on musical content and/or the context of the singing in relation to the individual child.

Most of these studies are based on observations of children in educational settings such as nursery schools. Nursery settings typically provide opportunities for free play and, in these settings, researchers have reasonably straight-forward access to observe young children at play with their peers. Several of these studies are also based on the assumption that there are universal models to be found in young children's singing. These are models, either of musical development or of child culture, that can be applied to all children, regardless of their social and cultural context. The publication of Campbell's (2010, first edition published in 1998) study, *Songs in their Heads*, marked an important shift of focus away from this search for universals towards the qualitative study of children's musical experiences within the context of their everyday lives.

2.3 The everyday musical lives of young children

Campbell (2010) explored the role music plays in the lives of children from an ethnomusicological perspective, drawing on the work of Nettl (2005) and Blacking (1973) and contemporary ideas from childhood studies. *Songs in their Heads* (Campbell, 2010) includes children aged 4–12 years old and takes the form of a number of case studies, both of individual children and of settings in which singing occurred. Campbell observed North American children singing in a school playground, a school cafeteria, a preschool, a large toy store, a school bus, and a family home. She also reports on interviews held with 20 children, aged 4–12 years, about music in their lives.

Although only one preschool setting and two children under five are included in the study, Campbell's approach is highly relevant to this study. Campbell is particularly interested in what music means to children rather than in their musical development. She understands that children learn when they are engaged and sets out to discover what is meaningful to them. Campbell argues that music holds meaning for children primarily because it is useful to them. The children used music in many different ways, both personally and socially, as an activity in its own right and as a means of enhancing another activity. In unravelling the function of music in these children's lives, Campbell refers to Merriam's (1964) categories for the functions of music in human culture: *emotional expression, aesthetic enjoyment, entertainment, communication, physical response, enforcement of conforming to social norms, validation of religious rituals, continuity and stability of culture, and integration of society*. Campbell concluded that through singing, children express thoughts and feelings that they cannot express in other ways. She found that music and singing were particularly important for forming identity in that it helped shape a child's concept of themselves alone and in relation to others. Perhaps unsurprisingly, family environment was found to be very influential on a child's engagement with music.

In one of these case studies, Campbell (2010) observed a group of three- and four-year-old children in a private preschool over eight mornings. Like Young (2002, 2006), she found spontaneous singing interspersed throughout much of their activity. The songs were often open-ended, stemming from and returning to play. The children used spontaneous song to

"communicate with their friends, to think aloud and sometimes to express their feelings to no one in particular" (Campbell, 2010, p.34).

Campbell's (2010) observation of children at play and her interest in child culture is similar in some respects to the work of Bjørkvold (1989). Like Campbell, Bjørkvold expresses his belief that children have their own musical culture that should be respected as such. Bjørkvold discusses the function of young children's spontaneous singing in detail, using Merriam's definition of use and function to distinguish between the uses spontaneous singing is put to, described in the previous section, and the *function* of spontaneous singing. Bjørkvold (1989) believes singing is part of a young child's "communication system" (p.80) and approaches his discussion of the function of spontaneous singing through three functions of spoken language: creating contact, communicating information, and marking identity. Bjørkvold argues that the contact-creating function of spontaneous singing originates in early musical exchanges between the parent and the infant, what Malloch and Trevarthen (2009) term *communicative musicality*. These exchanges also facilitate the child's experience of singing as a way of sharing emotion, both exploring their own emotions and expressing emotion to others. Spontaneous singing therefore, is a way for children to connect with both their inner and outer worlds. Bjørkvold (1989) notes that singing can be used in the same way as language to communicate a message; however, he asserts that because singing is emotionally charged, it acts to free the imagination and can lead to a higher level of awareness or an enhanced experience. He refers to this as the "awareness-broadening function" (p.81) of spontaneous singing.

Bjørkvold (1989) also believes that spontaneous singing can be used to structure children's play, "giving it outer and inner form, rhythm, dynamic drive, pulse, and emotional energy." (p.82). According to Bjørkvold, spontaneous singing plays a role in building a child's individual and cultural identity. Bjørkvold situates identity within the group child culture, asserting that a child's individual identity can develop through experiencing their uniqueness within a group and their cultural identity through their experience of spontaneous singing as part of group play. Bjørkvold claims that spontaneous singing gives child culture a "structural continuity" (p.83).

Campbell's (2010) study marked an important shift of focus away from a search for common models through the study of large groups of children.

Although researchers, such as Bjørkvold (1989) and Moorhead and Pond (1978), were interested in spontaneous singing as part of child culture rather than in purely developmental terms, they sought universal truths. In contrast, Campbell's work and that of later researchers, such as Barrett (2009, 2011, 2016) and Young and Gillen (2007, 2010), are small-scale qualitative studies that seek to understand young children's musical experiences within the context of their naturalistic everyday activities.

2.4 Spontaneous singing at home

Among the studies of young children's spontaneous singing, there are very few that specifically address spontaneous singing at home. A number of studies have used data collected in the home (e.g. Dowling, 1984; Moog, 1976; Tafuri, 2008) to examine the role of spontaneous singing in musical development. Here I limit my discussion to studies that are positioned in the home where the child being at home and the child's everyday home life are important factors in the research. As these studies are few, the age range of the children discussed here range from 1–7 years.

Research undertaken in homes where parents sing to and/or provide musical resources for their children indicates that all children sing at home (Barrett, 2009, 2011, 2016; Custodero, 2006; Young & Gillen, 2007, 2010). Singing at home can be part of solitary, parallel, or social play (Barrett, 2016). Children sing learnt, adapted, and improvised songs (Barrett, 2011; Custodero, 2006) and sing along with recorded music (Young & Gillen, 2007). Three- to four-year-old children seem particularly inclined to produce sung narrative (Barrett, 2016; Custodero, 2006; Forrester, 2010, Tafuri, 2008), and Forrester reports that at this age, his daughter's singing was the most prolific. Singing and musical play are embedded within a child's flow of play activities, sometimes existing in the background and at other times becoming the focus of the child's play (Young & Gillen, 2007).

Perhaps the most significant research into young children's musical home lives has been by Young and Gillen (2007, 2010) and Barrett (2009, 2011, 2016). Young and Gillen's research was part of a larger project in childhood studies, the *Day in the Life* project (Gillen & Cameron, 2010). This project was an ecological study of one two-and-a-half-year-old girl in each of seven different countries: Canada, Mexico, the UK, Peru, Thailand, Italy, and

Turkey. The girls were filmed for an entire day, and the resulting footage was analysed from a range of perspectives. Although the main data source was the video recording, the preparation for this was extensive and included interviews with the caregivers, maps, house plans, and other materials. Music had not initially been intended as an area of focus but was included when researchers noticed a salience of music throughout the girls' days.

The unexpected presence of a notable amount of singing in data originally collected for language development research is also what prompted Forrester (2010) to develop a study of his own daughter's emerging musicality. Forrester collected video recordings of his daughter over three years (from 1 year to 3 years and 10 months) during meal times when she was seated in her high chair in their home in England. As a psychologist studying language development, Forrester took an ethnomethodological approach and used conversational analysis to analyse the data. This approach is interesting as it concentrates on the patterns of social exchange, thereby highlighting the social context of emerging musicality. Although Forrester's data were limited to meal times when his daughter was seated at the table, the social context and the types of data gathered are varied. Sometimes, the whole family were present, and the child was part of a sociable family meal and at other times the child was left to entertain herself while her father prepared a meal or left the room temporarily.

Barrett (2009, 2011, 2016) explored the role of singing and music-making in young children's identity-building through a longitudinal study of 18 Australian children aged 18 months to 4 years. Data were collected primarily at home through parental observations, which were recorded in paper and video diaries, and parental interviews. Additional data were collected through observations of the children participating in a *Kindermusik* programme. In her studies, Barrett examines the singing and music-making of three individual children: a young boy who was observed over a period of two and a half years (Barrett, 2009), and two young girls who were each observed for a year (Barrett, 2011, 2016). The diaries kept by the parents were intermittent, giving a partial view of the child's musical activity based on what the parent chose to record and when they remembered to record.

Several relevant themes relating to young children's singing at home can be identified in the literature discussed in this section. They are: singing as

social interaction, singing as a solitary activity, singing in self-regulation, singing and identity, learning and development, and factors that enhance and inhibit singing.

2.4.1 Singing as social interaction

Much has been written about the musicality of interactions between parents and infants (e.g. Malloch & Trevarthen, 2009). Young and Gillen (2010) and Barrett (2009, 2011) demonstrate how musicality continues to influence the way parents interact with their young children beyond infancy. Adults use their own singing (Barrett, 2009; Young & Gillen, 2010;) or recorded music (Barrett, 2011) to regulate their children's emotions and facilitate daily routines.

In a study of singing in the homes of ten families with three-year-olds, Custodero (2006) found that all the parents in the study sang with their children, particularly around daily care routines. Custodero used parental diaries, interviews, and observation to study the singing practices of families in New York City. The families were visited in their homes by two researchers, one of whom interviewed the parents while the other observed the child playing or engaged the child in play. Parents were asked to observe and record their child's singing for several days. Custodero concluded that there may be a link between the sing-song *motherese* that is used to communicate with infants and the way parents use singing to help children through daily routines. Singing to assist in the execution of daily routines was also an important tool for the mother of the young boy in Barrett's longitudinal study, who felt that singing had enabled her to find enjoyable ways to interact with her children during what could otherwise be mundane routines (Barrett, 2009).

Barrett (2009), and Custodero (2006), and Young and Gillen (2007) all found that singing was used within families to foster family unity and promote a sense of security and continuity through family rituals and traditions. This occurred when familiar songs and musical experiences were repeatedly shared between family members. Barrett (2009) illustrates how music can play an important part in everyday family life, which serves to remind us that the musical lives of young children are firmly rooted in and are perhaps inseparable from the rest of the family. It also indicates the significant influence the home musical environment has on a young child's musical experiences.

The studies described above tend to focus on how parents and children

use music as a mode of social interaction and particularly as a way of communicating emotion or affective states. Based on research with slightly older children, Knudsen (2008) discusses sung communication from a Foucauldian viewpoint, explaining how improvised vocalisations are used by children to situate and empower themselves as agents. Knudsen's study was based on the analysis of four video clips of five children (his own and their friends), aged 3-7 years old, during play at home in Norway. He uses examples of two six-year-old boys and a seven-year-old girl to demonstrate how meaning can be communicated and power negotiated through spontaneous singing. Although these children are older than the children in this study, Knudsen points out that children of all ages are engaged in power negotiations throughout their everyday existence, including the struggle to be seen, to be heard, to be respected, and to gain control (Knudsen, 2008). Interestingly, Forrester (2010) noticed that from the age of two years, his daughter sang to get attention and, from two and a half, she used singing in a defiant way and also to indicate disagreement. These are examples of power negotiation in a much younger child as the child attempts to gain attention and to make her opinions heard.

2.4.2 Singing as a solitary activity

As we have already seen, not all singing is communicative, and children sometimes choose to sing to themselves (Bjørkvold, 1989; Moorhead & Pond, 1978; Sundin, 1960/1998; Tafuri, 2008). Although several of the at-home studies mention solitary or individual singing and the home is where we might expect to find solitary singing in greater quantities, it is not discussed in any detail. This is in part due to the fact that solitary, or self-directed, singing is more difficult to observe and record than socially-orientated singing. Researchers report that children use both known and invented song when they are alone to accompany their play, to explore personal identity, to provide commentary on activity, as a means of co-ordinating physical action (Barrett, 2009, 2011, 2016), as part of narrative play, to express emotion (Forrester, 2010), and to create and maintain certain emotional states (Knudsen, 2008). Barrett (2016) also suggests that solitary singing may provide comfort and companionship.

Barrett (2009) argues that, as they grow beyond infancy, young children draw on their early experiences of shared musical exchange as the basis for their improvised singing. Forrester's (2010) findings seem to agree with this.

Forrester reports that his daughter's singing was initially very dyadic in nature, relying heavily on the participation of an experienced other, but, by the age of two, her singing started to become more self-focused and independent. By two and a half, her singing was dominated by solitary narrative.

2.4.3 Singing in self-regulation

Barrett (2009, 2011), Knudsen (2008), and Young and Gillen (2007, 2010) all discuss emotional regulation. In the case of Young and Gillen (2007, 2010) and Barrett (2009, 2011), this process seems to be largely initiated and controlled by the parents, with the parents choosing when to use music in this way and selecting appropriate repertoire. Both Young and Gillen (2007) and Barrett (2011) describe how parents sing to assist their children regulate their physical and mental states. Lullabies and play songs—and their improvised equivalents—are used to soothe or stimulate young children. Parents also use recorded music to entertain and to regulate their children's physical states, particularly by channelling their energy (Young & Gillen, 2010). A much larger, questionnaire-based study of the parents of 63 Finnish children shows similar findings (Saarikallio, 2009).

In contrast, Knudsen (2008) applies DeNora's (2000) theory of Technology of the Self (discussed in Chapter 3) to examine how children themselves use spontaneous singing as a means of *acting on the self*. He deduced that children use spontaneous singing as a way of creating and exploring emotional experience and also to construct and maintain states of mind. Knudsen illustrates this with an example of a three-year-old girl singing to herself as she eats her cereal. By singing, she interacts with the experience on an emotional level and maintains her state of mind, "creating a satisfying, multi-sensory experience" (p.292). This is similar to Young's (2006) finding that young children use singing as a means of engaging more fully in a play experience. Although he uses a very small sample, Knudsen's study is important because he examines the intrapersonal function of children's spontaneous singing.

2.4.4 Singing and identity

Barrett (2011, 2016) uses a theoretical framework of narrative to explore how young children construct identity through singing and music-making. She argues that young children's spontaneous singing has its origins in the improvised communicative musical exchanges between parent and infant

(Malloch & Trevarthen, 2009) and that these communicative exchanges provide a narrative structure which young children later use for “musical storying” (Barrett 2011, p.406). Through musical narrative, young children "perform and enact multiple ways of being" (Barrett, 2011, p. 420) to explore and construct self-identity. Barrett illustrates this identity work with a case study of a two-year-old girl who uses invented musical narrative to explore her identity as an individual and in relation to her family. Through performing known and invented songs, the child explores her musical preferences, “tries on” different musical personas, and sings about herself as an individual and her role and relationships within her family. Barrett concludes that spontaneous singing helps young children make sense of themselves in the world and is an important tool for the narration of the self. In her analysis, Barrett draws on ideas from cultural psychology, particularly Bruner's (1996) concept of the narrative self, Hargreaves, Miell and MacDonald's (2002) social psychological framework of musical identity, and DeNora's (2000) perspective from music sociology. While the latter two of these are based on research with adults, Barrett successfully applies the theoretical concepts to identity work in very young children. With the exception of Bruner, these ideas will be discussed further in Chapter 3.

2.4.5 Learning and development

Many of the larger studies are concerned with what young children's spontaneous singing can tell us about the development of their singing or creative abilities. The at-home studies are far less concerned with this. Young and Gillen (2007) mention that the singing they observed in the *Day in the Life* project was congruent with ideas of singing development, illustrating how the child's vocal abilities, motivations, and prior experience are all linked in the development of singing. Barrett (2016) notes that children make use of familiar musical structures in their song-making. Knudsen (2008) agrees with the idea that children apply their knowledge of musical structure and norms in their spontaneous singing. However, he argues that spontaneous vocalisation "is not so much about becoming an adult, as it is about being a child" (p.290). He suggests that we view the learning associated with spontaneous singing from a wider perspective. Through spontaneous singing, Knudsen believes, children learn about the relationship between their bodies, sound, and emotion.

Essentially, through spontaneous singing, children "learn to know the self as a self" (p.291). These ideas that learning is secondary to the experience of singing provide an important foundation to this study, which is focused on spontaneous singing as part of lived, everyday experience.

2.4.6 Factors that enhance and inhibit musical play

Koops (2012) designed a study to examine factors that encouraged and inhibited music play in the home. Six middle-class North American families, with a total of 10 children aged 2 to 4:6, took part in a weekly music class and were given at-home tasks to complete. Parents video recorded their children engaged in the at-home tasks, and an online social network site was set up for the families to share their experiences. Koops observed the children during the weekly music class and interviewed the parents at the conclusion of the course. She found that parent involvement in music activities could have either an enhancing or an inhibiting effect on music play. Music play was enhanced when the child had a degree of agency; that is, they had some choice in the activity and a degree of control over the direction of the activity. Parental involvement enhanced the play if the parent was invited to join in and followed the child's direction but inhibited the play if the parent took control of the activity. This was particularly the case if the activity was rushed. Young and Gillen (2010) also noted that musical play was enhanced and extended if the adult play partner was sensitive to the musical exchange and was able to improvise in a playful way. Koops found that sibling involvement enhanced play if the siblings were playing alone but inhibited play if a parent was also involved. Koops' findings indicate that parents need to approach music play with sensitivity and that children benefit from having plenty of time to engage in music play. This reiterates what Moorhead and Pond (1978) had to say about children needing freedom to engage in their choice of activity.

Koops (2012) noticed that video recording had the potential to either enhance or inhibit musical play. Barrett (2011) comments on the same phenomenon in relation to a young girl in her study, finding that the child was reluctant to be video recorded singing her invented songs but perfectly happy to be recorded singing along to a favourite CD. Barrett wonders "whether her singing and song-making is at times so personal, she doesn't want to share this with others" (p.417).

Although the number of at-home studies of spontaneous singing are few, the ideas explored are rich and multi-faceted. The studies discussed here explore spontaneous singing from a variety of perspectives, arriving at similar conclusions. Spontaneous singing at home appears to be firmly rooted in the musical exchanges between adults and infants through which children develop their own improvised singing. This singing is used in a variety of ways in both social interaction and to act on the self, be it to regulate emotion or to explore personal identity. It is important to mention here that although these nine at-home studies cover children in a number of different countries, largely due to the inclusion of the *Day in the Life* study, the total number of children observed is just thirty-six (although Barrett's articles [2009, 2011, 2016] are based on broader research). Data from twenty-three of these children was largely collected in the form of parental diaries and interviews, and six children were observed by their own parents. Difficulties with this type of data collection are discussed in the next section, but, simply framed in terms of numbers, the lack of data available to draw conclusions about young children's singing at home becomes obvious.

2.5 The methodological challenges of researching young children's singing at home

Many researchers have pointed out that young children's spontaneous singing is fleeting and difficult to capture (e.g., Dowling, 1984, Young, 2002), and several have found that spontaneous singing ceases once children realise they are being observed (e.g., Barrett, 2011). This makes the collection of data very difficult. Researchers have used a variety of methods to collect singing data from children at home, including parent-researcher observations, parental diaries, parental interviews, video observation, telephone interviews, and researcher observation.

The study of young children's everyday musical experience depends on the collection of reasonably naturalistic data. However, it is difficult to overcome problems of access and the effect of researcher presence in the home. One way to get around these problems is to study one's own children. As a result, many small studies of young children's music-making at home have been carried out by parent-researchers (Chen-Hafteck, 2004; de Vries, 2005; Dowling, 1984; Forrester, 2010; Knudsen, 2008; Papoušek & Papoušek, 1981).

The tradition of making a “child-study” of one's own children dates back at least as far as Darwin (1877) and, more recently, Piaget (1962). As a participant observer, the parent is not only accepted as a normal presence in the child's home environment, but also has an intimate knowledge of the child and his or her home environment. This can result in rich, detailed, and very natural data. However, there are ethical issues involved in researching one's own children, and parent-researchers need to be aware of these. Parent-researchers need to be particularly diligent about obtaining consent from their child and also need to be sensitive to their child's wish to withdraw consent (Adler & Adler, 1996; MacNaughton & Smith, 2005). Parents of young children often use coercion as a means of managing behaviour. While this may be acceptable and even necessary as a parenting tool, it is not an ideal means of gaining ongoing consent from a young child in a research situation.

Parent-researchers must also be sensitive to how their research might change their behaviour towards their child. A sudden change from a parent who is happy to let a child play on their own to one who constantly follows the child with a video camera can be disconcerting for the child and cause withdrawal of consent (Dean, 2011). It can be challenging for a parent to maintain dual roles, as everyday parenting duties cannot usually be put on hold while the parent observes the child. As a parent-researcher researching my own son, I found it difficult to observe and record musical behaviour and parent at the same time. Adler and Adler (1996) found their obligations as parents sometimes came into conflict with their research. Complete member observers often find it difficult to be objective in their research (Robson, 2002) and parent-researchers are likely to bring bias to a study (Mukherji & Albon, 2010). Studies based on the observations of parent-researchers can provide rich content; however, they are usually limited in scope by their small sample size.

Researchers who are not in a position to study children in their own homes or who wish to study a wider sample have used a range of methods to gather data. Lamont (2008) conducted telephone interviews with parents of 32 young children in a study of toddlers' musical engagement. Other researchers have visited children's homes as observers or participant-observers (Addessi, 2008; Lum, 2009; Mang, 2005). Observation is difficult in the home. The presence of a stranger or even a well-known visitor is very likely to change a child's behaviour. Having a visitor is likely to restrict self-directed singing and,

possibly, social singing as well, depending on the character of the child and their willingness to interact with the researcher. Mang (2005) visited and observed Canadian children in their homes. She attempted to engage the children in singing and play within the familiar surroundings of their bedroom or the family living room. This approach seems to have worked because the children all knew her, either through attendance at the music class where she was the teacher or as a family friend. Moog (1976) also collected his data by visiting children in their homes. He ran a series of tests and observed spontaneous singing. He reports that about half of the children sang spontaneous songs. More recent research, albeit with smaller sample sizes, has shown that all children sing spontaneously at home (Custodero, 2006). As Moog tested around 500 children, it can be assumed that he was a stranger to most of these children. Although he makes no mention of how the children reacted to him as the researcher, it is likely that his presence would have inhibited spontaneous singing in some children.

Many researchers have responded to the challenge of collecting natural data at home by either interviewing parents about the musical behaviour of their child or by asking parents to observe their own children and keep a diary, often including audio and/or video footage. A number of studies have used data gathered through the parental diary method (Barrett, 2009, 2011, 2016; Custodero, 2006; Tafuri, 2008) where researchers ask parents to keep a diary—either written or audio-visual (and often both)—of their child's musical activities at home. This can be on an ad-hoc basis over a period of time (Barrett, 2009, 2011, 2016) or by filling in a set questionnaire at certain points (Tafuri, 2008).

Both types of diary can provide rich data based on episodes of music-making that the researcher would otherwise not have access to. However, the potential for parental bias and the possibility that parents report what they think the researcher wants to hear is particularly high with this method. Parents may only share what they think is important, causing some musical behaviours to be overstated and others overlooked. Parents may also miss certain behaviours, particularly if they do not fully understand the details of what the researcher is interested in. In an ad-hoc diary situation, the parent may forget to record their child's singing or not have the equipment to hand at the right moment. Parental questionnaires ask parents to notice specific behaviours, thus allowing other

behaviours to be omitted. Parental interviews could be prone to similar problems. There is a danger that parents report on what they think the researcher wants to hear or what they perceive as important behaviours. Again, they simply may not notice all their child's musical behaviours. Bias can be a problem for all types of parental observation and reporting.

Observations are often recorded using video. The advantage of using video is that it captures visual data, including the child's movements and the context of the activity. This is particularly useful as research has shown that singing is very often linked to movement (Young, 2002). However, a video camera must be operated by someone. This is usually the researcher or the parent, but both of these options present their own difficulties. Alternatively, a video camera can be set to record in a fixed position (Forrester, 2010). The disadvantage of this is that the location of the study is limited to a single room or part thereof.

My own experience as a parent-researcher (Dean, 2011) demonstrated that the presence of recording equipment, even without a stranger present, can have an effect on the child. Young children today are experienced subjects of the camera. Most young middle-class children today have been videoed and photographed since the moment they were born, and many are familiar with operating recording devices themselves. This can have the benefit that the children are used to a camera and quickly forget that it is there. However, it can also have the disadvantage that they know how to play to the camera, and they know that once they have performed for the camera, they can watch themselves on the playback. This means children often act up to the camera or, alternatively, retire from it when they are not in the mood for performance.

Koops (2012) found that video recording equipment could both enhance and inhibit musical play. This makes it very difficult to video record a child's natural behaviour. Barrett (2011) reported on video diaries showing a child engaged in singing in both social and solitary contexts. She notes that when singing to herself, the child did not like being filmed, but, at other times, was happy to perform for the camera.

The most common method of collecting data about how adults use music is through interviews. This method has also been used with young children. Campbell (2010) interviewed two pre-schoolers about music in their lives, and Burton (2002) asked parents to question their three- and four-year-olds as to

what they were thinking when they were singing and why they were singing it. Campbell reports that she struggled to keep a three-year-old focused during the interview; however, a four-year-old was better able to discuss music. Burton found the children were unable to articulate why they were singing and often seemed unaware that they were singing at all. This indicates that interviews may not be a particularly effective means of collecting data on young children's singing.

As with all data collection methods, the methods outlined here have both advantages and disadvantages. However, in my opinion, the overall disadvantage is that none of these methods collects data in a way that can give a comprehensive picture of a young child's singing at home. Because parents and researchers choose what to record, there are likely to be some singing behaviours—or singing within some contexts—that is overlooked. In this study, I hope to address this issue.

2.6 Summary

The literature examining young children's spontaneous singing is by no means comprehensive, and disparate aims and approaches make it difficult to draw comparisons across studies. However, these studies do provide a reasonably clear overview of the characteristics of spontaneous singing, particularly in educational settings. Studies exploring the everyday musical lives of young children and spontaneous singing in the home have become more common in recent years, but these studies are both limited in number and draw on very small amounts of data. The main reason for these limitations is that accessing spontaneous singing in the home environment is difficult, and researchers face significant methodological and technical barriers. Because the literature concerning young children's spontaneous singing in everyday home life is limited, in the next chapter I examine the wider literature around music in everyday life.

3. LITERATURE REVIEW 2

MUSIC AND SINGING IN EVERYDAY LIFE

3.1 Introduction

As discussed in the previous chapter, there is very little research into how young children use spontaneous singing in their everyday home lives. However, within the existing literature, I identified several themes. These were: singing as social interaction, singing as solitary activity, singing in self-regulation, singing and identity, learning and development, and factors that enhance and inhibit musical play. In this chapter, I look at some of these themes within the broader context of how adults use music in their everyday lives. While it should not be assumed that research relating to adults is directly transferable to young children, I examine how the evidence from adult research can provide theoretical concepts that support understanding of how young children use singing at home.

I begin by exploring ideas about the function and meaning of music in everyday life from the sociocultural perspectives of ethnomusicology, music sociology, and the social psychology of music. I then look at the concept of music as social interaction, particularly music as an expression of relationship and musical communication. The ways in which individuals use recorded music as part of their everyday lives have been examined by researchers from a number of different disciplines. I examine what these studies have to say about adults using music in their everyday personal lives, including music in self-construction and identity, self-regulation, and using music as a personal refuge.

In the final part of this chapter, I return to focus on young children. An important feature of this study is its location in the home. At home, young children are more likely to spend time alone than in educational settings. Therefore, here I explore literature that relates to young children's solitary activity. I begin by examining young children's solitary activity in general, then turn to the literature on young children's private speech to discuss how this literature can provide insight into young children's self-directed singing.

3.2 The function and meaning of music

In *The Anthropology of Music*, Merriam (1964) argues that there is a significant difference between the *use* and *function* of music and sees these as being intrinsically linked to the meaning of music. Merriam defines the use of music as "the situation in which music is employed in human action" (p.210) and the function of music as "the reasons for its employment and particularly the broader purpose which it serves" (p.210). The uses of music across different cultures are vast and varied, so the ethnomusicological analysis of the function of music across cultures requires generalisations about what music "does for and in human society" (Merriam, 1964, p.219). Merriam proposes ten functional categories. These categories are: emotional expression, aesthetic enjoyment, entertainment, communication, symbolic representation, physical response, enforcing conformity to social norms, validation of social institutions and religious rituals, contribution to the continuity and stability of culture, and contribution to the integration of society. Merriam considers these functions to be social and expresses his hesitation at including the category of physical response, which he considers to be a more personal or even biological response. Given Merriam's field—music anthropology, or ethnomusicology, which is essentially the study of music in society—it is not surprising that he is unwilling to consider more personal functions of music.

Nettl (2005) challenges Merriam's (1964) distinction between the uses and functions of music, claiming that Merriam's ten functions of music could apply to the functions of any art form. Nettl sets forth a pyramid model of the function of music that enables both greater diversity and broader generalisation. At the base of the pyramid are the uses of music, which Nettl suggests are innumerable. Above this sit the more abstracted functions of music, such as Merriam's ten functions. Above this again is the main function of music in a particular cultural or community group, which, for example, he suggests is entertainment in the West. At the top of the pyramid, Nettl places two fundamental functions of music in society: "to control humanity's relationship to the supernatural" (p.253) and "to support the integrity of individual social groups" (p.253). Nettl believes that music expresses the values of a culture or group in abstracted form and that the ultimate, universal, function of music is the expression of identity.

Small's (1998) deconstruction of a symphony orchestra concert helps illustrate Nettl's (2005) assertion that music is an expression of the cultural values and identity of a cultural or social group. Small describes how a Western classical orchestral concert reflects the values of nineteenth-century industrial society. In a generic purpose-built concert hall, which could be in any large city in the world, uniformly dressed members of the orchestra are organised in a hierarchical structure, headed by the authoritarian figure of the conductor. The audience members are polite spectators rather than participants. They are familiar with the context and understand the rules of appropriate behaviour, making the concert hall "a place where middle class white people can feel safe together" (p.42). Small describes the modern concert hall as a ritual that provides an identity narrative for a certain social group.

Social psychologists Hargreaves and North (1999) consider that the functions of music can be grouped into cognitive, emotional, and social domains. Within the social domain, individuals use music to manage interpersonal relations, mood, and self-identity. In a review of music listening research, Sloboda, Lamont, and Greasley (2009) identify five salient functions of music listening: *distraction*, where listeners use music as a way of diverting their attention or reducing boredom; *energizing*, where listeners use music to maintain attention or an aroused state; *entrainment*, where music is used to regulate the movement of the body, when exercising for example; *meaning enhancement*, where music is used to add significance to a task; and *mood management*, where music is used to regulate mood and emotion.

Also from a music psychology perspective, Clarke, Dibben, and Pitts (2010) describe the overall functions of music as being: to order and organise time; to represent and express people and values; to control and facilitate participation and observation; and to channel and express emotion. Further to this, Clarke, Dibben, and Pitts describe the ways in which people make use of music in their everyday lives, both as individuals and in groups. They suggest that on an individual level, music enhances human life, acting as a vehicle for emotional experience and enhancing cognitive performance and attention. Within groups, music is used to co-ordinate collective action and promote group cohesion. While there is some variation within the psychological perspective, the psychological functions of music show fundamental similarities to Merriam's (1964).

There is general agreement among researchers in the fields of music sociology, ethnomusicology, and the social psychology of music that music is fundamentally social, and the meaning of music is socially constructed. This follows from a socio-cultural understanding that humans develop within cultural communities, and human thought and action are anchored within these communities (Rogoff, 2003). Because music is a product of culture and cultural experience is gained through social interaction, all music practices can therefore be viewed as inherently social (e.g., Barrett, 2005). Regardless of whether people are making or listening to music on their own or with others, they are engaging with cultural products and/or using cultural tools (Barrett, 2005; Martin, 2006; Small, 1998).

As well as being socially constructed, musical meaning is also highly contextual (Martin, 1995). Merriam (1964) and Blacking (1973) both suggest that music is only meaningful when the creator and the listener share a cultural background. As mid-twentieth-century ethnomusicologists, Merriam and Blacking were writing about musical cultures in different parts of the world. However, what they say is relevant in some ways across all forms of musical culture from Western classical music to the music listening habits of a single family or peer group. Cultural “insiders” within these contexts will construct different meanings and understand music in different ways, to cultural “outsiders”.

3.3 Music as social interaction

Small (1998) argues that the meaning of music lies in the relationships that are associated with it. He proposes that music holds meaning, not as an object or artefact, but as an action—the act of “musicking” (p.9). Small coined the term musicking to describe the act of engaging in and with music: "To music is to take part, in any capacity, in a musical performance, whether by performing, by listening, by rehearsing or practising, by providing material for performance (what is called composing), or by dancing" (Small, 1998, p. 9).

Small's focus on music as action allows questions of the value of a musical artefact to be replaced by the value of the human experience of action in music. This is particularly relevant when studying the music of young children. To look for the musical artefact within young children's spontaneous singing is less important than to examine the context of the singing. The

meaning and value of young children's spontaneous singing lies primarily in the process of singing, not in what is sung (Young, 2003).

Central to Small's (1998) concept of musicking is the idea that music is an expression of ideal relationships. According to Small, all types of musicking involve relationships: performing music, listening to live music, or listening to a recording in the privacy of one's own home. These relationships can be between performing musicians, musicians and the audience, record companies and consumers, radio programmers and listeners, and even human relationships to the natural world and the supernatural (Small, 1998).

The idea of music as relationships is also explored by sociologists Frith (2002) and Turino (2008). Frith (2002) proposes that the most important function of music is its ability to enable people to be together in groups, which can be real or imagined. Turino (2008) draws on the work of Bateson (1972/2000), Peirce's theory of semiotics (cited in Turino, 2008), and Csikszentmihalyi's (1990) concept of *flow* to demonstrate that the primary function of music is one of integration. Turino suggests that music is used to integrate the self, to integrate the self with others and the environment, and to experience the self. Through uniting different aspects of the self, music helps individuals relate to others, which is fundamental for the forming of cohesive social groups. This idea also links to Knudsen's (2008) assertion that, through spontaneous singing, children learn to "know the self as a self" (p. 291). Turino proposes that active music-making is particularly powerful for connecting with others, as it requires concentration and both emotional and physical involvement. The experience of solidarity this evokes is important in forming and sustaining the social groups that are essential for our emotional and economic well-being.

Psychologists Malloch and Trevarthen (2009) propose that music serves our human need for companionship, and their work with mother-infant communication highlights the crucial role of human musicality in building relationships. The communicative interaction between a sensitive caregiver and an infant is considered the earliest musical relationship, and many researchers believe that the origins of human musicality lie in these early musical interactions (Dissanayake, 2012; Malloch & Trevarthen, 2009; Papoušek & Papoušek, 1981; Stadler Elmer, 2011). It is proposed that infants come to associate singing with pleasurable emotional states through playful musical

interactions. As they get older, young children use singing to revisit these affective states, enabling them to develop the ability to regulate the emotions through singing (Stadler Elmer, 2011).

Relationships depend on communication. Writing in relation to young children, Barrett (2005) describes music as being "inherently 'communicative'" (p.265) and Welch (2005) claims "to sing is to communicate" (p. 255). Welch argues that singing is an act of both interpersonal and intrapersonal communication. Interpersonally, singing communicates emotion and a sense of belonging or group membership. When singing, people also communicate with the self; engaging with emotional states, exploring self-identity, and monitoring their own singing (Welch, 2005). With a similar perspective on the inter- and intra-personal aspects of singing, Bannan (2000) proposes a model for singing development in children, that is based on the communicative nature of music. He suggests that gaining pleasure from singing relies on experience of singing as both communication with self (amusement derived from use) and communication with others (power derived from use). Bannan touches on an important concept here. He implies that to enjoy singing one must have experience of using singing in an agentive capacity—that is, of having singing work for you. While concerned with singing development, Bannan's model places importance on young children's experience as musical agents.

Music is sometimes likened to language as a means of communication. However, unlike language, which carries specific meaning, musical meaning is ambiguous. According to Cross and Morley (2009), the "floating intentionality" (p.68) of musical meaning is where music's communicative value lies. Cross and Morley argue that musical meaning is formed through both the intention of the producer and the construction of the listener. While this is also true of language to some extent, the ambiguities of music allow the listener and groups of listeners to attach their own meanings to music. The intentions and interpretations of performer and listener also feature in Hargreaves, MacDonald and Miell's (2005) reciprocal feedback model of musical communication. However, they also emphasise the contextual nature of musical communication and propose that musical communication occurs in interaction between the music itself, the context of the musical event, and the intentions and interpretations of the performer and listener.

Music as communication is a central concept in the theory and practice

of music therapy, and the companionship that music can facilitate is a crucial tool for music therapists (Ansdell & Pavlicevic, 2005; MacDonald, Kreutz & Mitchell, 2012). In music therapy, the power of music as a means of communication lies with the action of music as an embodied experience that engages people "bodily, emotionally, intellectually and socially" (Ansdell, 1995, p.8).

While researchers from many different schools of thought agree that music is communicative, why and how this is so is a complex question, and is the subject of much debate. Here, I have aimed to highlight some of the concepts of musical communication that specifically relate to this study.

3.4 Personal uses of music in everyday life

While conceptualising music as a social phenomenon, many studies focus on how individuals make use of music on a personal level in their everyday lives. Some of the most significant work in this area has been undertaken by music sociologist, DeNora (2000, 2003, 2013). In examining music in everyday life through a sociological lens, DeNora focuses on how music acts as an enabling device, making other action possible. DeNora (2003) makes use of the concept of *affordance*. Originally proposed by Gibson (1979/2014), affordance is a concept used in social psychology to refer to the way in which the properties of an object (or, in Gibson's original theory, the natural environment) lends the object to being used in a certain way. For example, the shape of a tea cup invites the beholder to pick it up by the handle. DeNora (2003) extends the concept of affordance to enable a focus on how music is used and what the properties of music "makes possible" (p. 46). Music can be thought of as an "organising medium" (p. 46), which can lend structure to our thoughts and actions. Like Small's (1998) concept of musicking, music as affordance shifts focus away from music as a product to musical action. This makes the idea of musical affordance useful when considering the music-making of young children.

DeNora (1999, 2000) interviewed 52 British and American women, aged between 18 and 77 years, about how they used music in their everyday lives. This tended to be recorded music, rather than live or self-made music. Conclusions DeNora draws from these interviews illustrate how the women use music in ways that enable them to maintain and care for the self. The women in

DeNora's study used music to regulate their emotions, as a tool to aid concentration, and a means through which to construct self-identity. DeNora (2000) uses the phrase *technology of the self* to describe this process of construction and maintenance of the self. Technology of the self is a phrase originally used by Foucault to describe the techniques people use to act upon themselves to attain different psychological states (cited in Burkitt, 2002). DeNora uses the concept of technologies of the self to explain how people use music as a tool in the management of the self on a daily basis. DeNora's adaption of Foucault's concept of technologies of the self is valuable in the study of young children's spontaneous singing at home as it enables a focus on how children use singing in ways that are intrapersonal or self-directed.

3.4.1 Music in self-construction and identity

An important aspect of DeNora's (2000) work is to examine how music is used to facilitate the construction and maintenance of self-concepts. The self is important in sociology and social theory because it "can be thought of as a central mechanism through which the individual and social world intersect" (Elliot, 2014, p.30.). There are many different theories of self; however, within social theory there is a prevailing idea of the self as a reflexive project—that is "a work of active construction and reconstruction" (Elliott, 2014, p.185). Although the literature on the self and self-hood is too vast to discuss here, there are several key concepts that are useful in the study of young children's spontaneous singing. As a music sociologist, DeNora's concept of self is influenced by prominent sociologists, such as Mead (1934/1967). Mead considered the self to be social as we develop our sense of self through our interactions with others. He believed that children use play to "try on" different selves. This idea is reflected in Barrett's (2011) work on music and identity, as discussed in the previous chapter. Barrett demonstrates how one young girl tries on different musical selves. DeNora also draws on the work of Goffman (as cited in DeNora, 2013), who believed people act as different selves in different social interactions, and Giddens (as cited in DeNora, 1999), who argued that people gain self-knowledge through self-monitoring and use this knowledge reflexively to manage themselves.

DeNora (2000) argues that people use music to establish and maintain the expressive, stylistic aspects of the self. She notes that nearly all the women

in her study made use of music reflexively. That is, they consciously chose music for a specific purpose. However, in a study focusing on music and well-being, Batt-Rowden and DeNora (2005) found that music is not always used reflexively. People often use music in mundane, operational ways “to get by and make do” (p.292). Batt-Rowden and DeNora report on a project involving 22 Norwegian participants who were suffering from chronic illness. The participants were involved in choosing music tracks to share with the other participants on CDs that were distributed every second month and were encouraged to use music actively to influence their psychological state. Batt-Rowden and DeNora (2005) found that the conscious, reflexive use of music improved mental health and well-being.

DeNora (2000) found that constructing and maintaining self-identity was a key function of music for the women in her study. This was achieved primarily through memory and biography. Within the women's lives, music came to be associated with specific life-events, people, and relationships. Specific songs, pieces of music, or musical styles work to remind people of how they were at a certain time in their lives and can be used to demonstrate this to others (DeNora, 2000). Music can also be used to revisit feelings and psychological states (Stadler Elmer, 2011). DeNora points out that, as music is temporal, it allows memories to play out over time and be relived. She argues that music acts most strongly in memory when it helped structure the original experience, and music can therefore serve as a “container” (DeNora, 2000, p.67) for an experience. In a psychology study in the UK, in which 249 people provided written responses to an open question about music use, music was most often reported to be a cue for reminiscence (Sloboda, 2005).

Whilst identity is derived from biography or self-in-the-past, it also important in the construction of our present and future selves. Music is used to construct identity through expression of musical preference and the way people identify with certain types, styles, and pieces of music. Larson (1995) explains how teenagers use solitary music listening to explore their changing identity and develop a sense of a private self. As part of a study of the emotional lives of teenagers, Larson and his colleagues used experience sampling to collect data on the emotional states of 483 white American 5th–9th graders (c.10 to 15-year-olds) over a period of one week. Larson concluded that although solitary music listening was often associated with feelings of loneliness and negativity, the

teenagers valued the time they were able to be alone listening to music.

In this section, I have focused on DeNora's sociological view of music and identity. However, identity and self-construction through music is also of interest to music psychologists. Hargreaves et al. (2002) propose two ways of thinking about musical identity: *identities in music* and *music in identity*. They use the phrase *identities in music* to refer to the ways in which people define themselves with regard to music. These are social roles, such as musician, audience member or record producer. *Music in identity* refers to the ways in which people use music as a tool for developing or expressing aspects of their personalities (Hargreaves et al., 2002). More recently, Hargreaves, MacDonald and Miell (2017) have concluded that musical identities are also "performative and social" (p.4). That is, musical identities represent the ways in which people engage in musical activity on an everyday basis rather than something that is static.

3.4.2 Music for self-regulation

DeNora (2000) demonstrates how the women in her study use music to alter their emotional states. Music was used to change a mood or emotion, to attain a desired mood, or to enhance and maintain a mood. The women also used music as a way of identifying and working through emotions. According to DeNora, listening to music that one perceives to reflect what one is feeling helps that feeling climax, plateau, and subside. Larson (1995) found that teenagers use solitary music listening to work through negative emotion in a similar way. The literature indicates that this technique may well be learnt in early childhood. Both Saarikallio (2009) and Young and Gillen (2010) found that parents use singing to regulate emotion on behalf of their toddlers. It may be through this parental facilitation that young children learn to use music to regulate their emotions.

Emotional self-regulation is widely regarded as an important use of music and several empirical studies illustrate this (e.g., McPherson, Davidson & Faulkner, 2012; North, Hargreaves & Hargreaves, 2004; Sloboda, O'Neill & Ivaldi, 2001). Psychologists Sloboda, O'Neill and Ivaldi (2001) used an experience-sampling method to gather data about the psychological outcomes of music listening in different contexts. Eight participants in the north of England were paged once every two hours for a week. On being paged, they were asked

to complete a self-report form containing open-ended and scaled questions. At the end of the week, they were also interviewed. Results indicated that the participants used self-chosen music to enhance or change their mood. However, music listening was usually used as an accompaniment to other activity rather than a focal activity in itself.

Social psychologists North, Hargreaves, and Hargreaves (2004) undertook a similar study involving 346 participants in the UK. Participants were sent a text message once a day for fourteen days. On receiving the message, they were required to fill out a forced-choice questionnaire relating to the music they could hear or were experiencing at that time. Results showed that, although many people listen to music out of habit or to pass the time, recorded music was also used consciously to achieve different psychological or emotional states. To be effective in attaining these states, the music had to be freely chosen and controlled by the listener. Both studies indicate that people consider music listening to be a private activity, and music was most often listened to at home during leisure time. Music listening was frequently used as an accompaniment to another activity rather than as an activity in its own right.

Writing about the link between music listening and emotion in everyday life, Sloboda (2010) makes ten propositions to distinguish “everyday” and “non-everyday” emotion in music listening. Sloboda makes some important observations. He concludes that everyday music listening is fragmented and varied, and the emotion derived from it is low-intensity, unmemorable, and fleeting. These emotions are often linked to the activity that accompanies the music-listening or some other extra-musical referent rather than to the music itself. While Sloboda refers to the emotional experience of adults during music listening, it is useful to bear his observations in mind when considering young children's everyday singing.

Music is also used to regulate and co-ordinate physical movement or bodily comportment (Karlsen, 2011) at both individual and collective levels. In a year-long ethnographic study of an aerobics class, DeNora and Belcher (in DeNora, 2000) found that music provides structure that enhances co-ordination, motivates, increases energy levels and improves endurance. DeNora (2000) suggests that music can be thought of as a “prosthetic technology” (p.103) due to the capacity it affords to extend what the body is capable of.

3.4.3 Finding refuge in music

Music is an important tool that adults use when they are alone. Research reveals that most voluntary music listening takes place in solitude at home and is used to accompany other activities (North et al., 2004; Sloboda, 2005; Sloboda et al., 2001). Sloboda (2005) found that music was frequently used to enhance solitary activities. During tasks that required greater attention, such as desk work, music was used to heighten concentration. For more routine activities, such as housework, music was used as a distraction to enhance the task and make it more enjoyable.

DeNora (2000) describes how some of the women in her study use music to help them concentrate when they worked. Typically, they always chose the same music or type of music and, therefore, came to associate that music with the need to concentrate. DeNora proposes that music affords concentration because it blocks out disturbances and structures the sonic environment to be conducive to mental concentration. DeNora (2013) further develops these ideas into a concept of “music asylum” (p.63). Music asylum refers to the way music can structure and privatise space. This mental space can act as a kind of refuge to make oneself feel secure, to mentally remove oneself from a disagreeable situation, and to provide space to daydream (DeNora, 2013). Importantly, DeNora notes that it is not just music listening that is utilised in this way, but also the voice, which is constantly available for humming, whistling, or singing.

A type of music asylum is described by Bull (2005). Bull reports on the use of iPods by 18 adults in the USA, Canada, the UK, and Switzerland, making journeys to and from work on foot or using public transport. In these situations, Bull found that people use their iPods to create an “accompanied solitude” (p.343). The iPods enabled participants to create and maintain a personal sonic sanctuary within the public clamour of a daily commute. Whilst creating their own personal space, shutting out the intrusion of strangers, they retained a feeling of being connected through their music. Using an iPod allowed participants to “aestheticise” (Bull, 2005, p.350) the experience of the daily commute and bestowed a sense of empowerment and control. Through listening to music during their commute, participants created space to think and imagine, manage their mood, and create a sense of narrative in time and space.

In a similar study, Skånland (2011) explores how personal MP3 players are used as a resource to create personal space in public places and to block

out unwanted sound or interaction. Based on data from 12 adult men and women in Norway, Skånland found that MP3 players were used like sonic security blankets, personalising public spaces and enabling users to cope better with the stresses of everyday urban life, including internal stress, noise and crowding.

In the final chapter of his book, *Musicking*, Small (1998) describes a solitary herdsman playing his flute in the African night. His description illustrates that what at first glance appears to be a solitary endeavour, is anchored in social music-making on many levels. Small explains how the man's flute is a product of the society in which it has been made. The music he plays, whether learnt or invented, stems from the cultural values and assumptions of that society, as does the meaning he attaches to it. Small claims that by choosing how he plays his flute, the herdsman explores his relationship to the society of which he is part, and in creating a sonic space, he is in effect, saying, "here I am and this is who I am" (Small, 1998, p. 206). Small demonstrates that music works well as a solitary activity because through its very nature as a cultural practice, it allows people to feel connected in their solitude, even if this is subconscious. This connected solitude is a useful concept when considering young children's spontaneous singing at home.

The literature discussed in this section shows how music plays an important role in everyday lives. Music is used by individuals to construct self-identity, to regulate the emotions, co-ordinate physical movement, afford concentration, as a distraction from routine tasks, and as a way of creating privacy. Usually, the literature refers to music listening rather than music making. Because the literature on young children's spontaneous singing at home touches only briefly on solitary music making, it is necessary to turn to the wider literature on young children's solitary activity to further understand solitary singing at home. This is the subject of the next section.

3.5 Young children and solitary activity

One of the unique features of this research is that it accesses young children in their homes. As discussed in Chapter 2, most studies of spontaneous singing take place in educational settings. The nature of the home, often with an absence of same-age peers, means young children potentially spend more time engaged in solitary play at home than in educational settings. As discussed in the previous section, adults use music in specific ways when they are alone. Therefore, it is possible that young children also have different ways of singing when they are alone. To bridge the conceptual gap between young children's socially oriented spontaneous singing and adults listening to music as a solitary pursuit, it is necessary to examine the literature dealing with young children's solitary activity. In this section, I first examine some background literature on children and solitude. I then explore the literature on young children's private speech to draw out concepts relevant to spontaneous singing at home.

An emphasis on the importance of social interaction within childhood and education literature has led to an apparent bias against solitary activity. As with research in spontaneous singing, most research on solitary play has been located in educational settings where children can choose to play on their own in the presence of peers. Thriving children playing alone at home are only briefly mentioned in the literature (e.g., Bruce, 1991). However, in Western homes, it is not unusual for parents to expect even quite young children to entertain themselves for short periods of time. This solitary play at home is largely ignored in educational research.

Solitary play has traditionally been discussed in terms of immaturity or maladjustment (for examples see Luckey & Fabes, 2005; Rubin, 1982). However, research has shown that there are several different types of solitary play, and some forms of non-social play, particularly object- or construction-based play have been shown to be beneficial for children (Coplan & Armer, 2007; Lloyd & Howe, 2003; Luckey & Fabes, 2005). Importantly, solitary play allows children to control their play experience, develop their own ideas, consolidate their understandings (Bruce, 1991; Katz & Buchholz, 1999; Luckey & Fabes, 2005), and self-regulate (Luckey & Fabes, 2005). It may also positively affect the development of imagination, reflection, and analytical

thinking (Strom, 1976).

The literature on adult solitude shows that periods of voluntary solitude can be beneficial (Burger, 1995). Much of the research on children's experience of solitude refers to loneliness and isolation. However, Galanaki (2004) differentiates between aloneness, loneliness and solitude. She defines aloneness as an objective state, the state of being alone. Loneliness, on the other hand is a subjective experience based on feelings of disconnection or exclusion. Solitude is "voluntary aloneness" (Galanaki, 2004, p.436) or "the absence of social interaction" (Burger, 1995, p.86), which can either be positive or negative. Solitude can be experienced in the presence of others (Galanaki, 2005; Laufer & Wolfe, 1977; Winnicott, 1965) as people can "maintain a sense of solitude by choosing not to interact with the people around them" (Burger, 1995, p.86). This is particularly important when considering how young children, who are typically closely supervised, achieve moments of solitude. Long and Averill (2003) argue that solitude can only be understood when framed within a social context. This is relevant when considering young children playing—and singing—alone at home. Musically, this is reminiscent of Small's (1998) solitary flute player anchored within a socio-cultural tradition.

There is a small body of psychotherapy literature concerned with the positive benefits of voluntary aloneness—or solitude—for children. Buchholz (1997) challenges the dominance of Bowlby's (1969/2008) attachment theory, suggesting that the emphasis on attachment has left psychologists assuming that it is natural to crave company and fear solitude. Buchholz proposes a complementary theory of aloneness. She asserts that the ability to be alone is as developmentally important for children as having strong emotional attachments (Buchholz, 1997; Buchholz & Chinlund, 1994). Detrixhe, Samstag, Penn and Wong (2014) use the notion of the securely attached infant willing to make solo exploratory forays away from the mother to suggest that positive experiences of solitude are based on experiences of strong relationships and the knowledge of a secure base. They refer to Winnicott's idea of the capacity to be alone to show that people draw on the implied presence of others or feeling of connectedness when experiencing positive solitude.

From a psychoanalytical perspective, Winnicott (1965) distinguished between the fear of being alone, the wish to be alone, and the capacity to be alone. He believed that the capacity to be alone was a sign of emotional

maturity. Winnicott argued that the process of learning to be alone begins in infancy when the infant learns to be content to be alone in the presence of someone who gives reliable emotional support. For example, a baby can be happy lying on a playmat while his or her caregiver is nearby, but not interacting with them. Contemporary parenting practices in the West mean that many parents expect very young children to sleep alone in their own bedrooms. When analysing recordings of a two-year-old girl alone in her cot at bedtime, Stern (2006) notes that she often seemed entirely content to be left alone. Galanaki (2005) found that school-age children often considered time alone in a positive light and that children equate solitude or time alone to privacy.

The experience of solitude is closely linked to privacy. Altman (1975) describes privacy as a process through which access to the self is controlled. As such, privacy plays an important role in the ability of individuals to regulate and control their lives. Privacy is a means by which people manage interpersonal interaction and develop and maintain a sense of self. Altman identifies a number of mechanisms through which individuals attain privacy goals. These include verbal and para-verbal behaviour, personal space and the use of distance, and territorial or possessive behaviour. Readdick (1993) gives examples of these behavioural mechanisms when discussing the privacy needs of pre-schoolers in educational settings. She argues that the privacy needs of young children are often overlooked in childcare settings and that adults in these settings need to try to attain a balance between requiring social interaction and allowing moments of solitude. Luckey and Fabes (2005) also warn that young children should be allowed to spend time alone without being judged as maladjusted.

Psychologists van Manen and Levering (1996) consider privacy and secrecy in childhood to be important for the development of personal autonomy and independence. They note that in childhood there is a fine balance between the need for supervision and the need for freedom to develop the self. While young children are often unaware of parental supervision, they also lack the freedom to withdraw from scrutiny or avoid adult intrusion (van Manen & Levering, 1996). More recently, Skånfors, Löfdahl, and Hägglund (2009) identify how pre-schoolers in Sweden control their level of social interaction by developing a range of withdrawal strategies to separate themselves from the group.

Research shows that different people have different needs and tolerances for both social interaction and solitude (Burger, 1995) and that these needs change during each day and during the life course (Altman, 1975). This also appears to be the case for children, at least from the age of five (Youngblade, Berlin & Belsky, 1999). Fluctuating needs for interaction and solitude are reflected in Moorhead and Pond's (1978) finding that children's musical play cycles between periods of social and non-social play.

3.5.1 Private speech

An area of solitary activity that is well covered in the literature is private speech. This is also referred to in the literature as ego-centric speech, self-directed speech, or self-talk and defined by Winsler (2009) as overt audible speech that is not addressed to another person. Although there is limited literature on young children singing to themselves, there is extensive literature on young children talking to themselves. There are some links in the literature between speech and singing. Chen-Hafteck (1997) draws an explicit parallel between standard songs and social speech, and spontaneous songs and egocentric speech. As discussed in Chapter 2, Bjørkvold (1989) likened the function of spontaneous singing to three functions of spoken language: creating contact, communicating information, and marking identity. These functions all relate to social language. In this section, I will examine the literature on young children's private speech and how it relates to spontaneous singing, particularly self-directed singing.

The private speech literature comes from a number of fields of research but is dominated by developmental psychology. Here, the ideas of Piaget and Vygotsky are salient. In brief, Piaget (1959) identified two types of speech in young children: socialised speech, which is communicative and directed at the other, and ego-centric speech, which is self-directed and non-communicative. He believed ego-centric speech was an immature form of speech that reflected the inability of the child to understand someone else's perspective. In Piaget's view, children speak when they feel like it with no concern as to whether anyone is listening. Piaget identified three types of ego-centric speech: repetition, or word play; monologue (thinking aloud); and dual or collective monologue, in which children playing alongside one another speak without any intention of engaging the other in conversation. Piaget believed that ego-centric speech

slowly disappeared as the child became more socialised. Piaget's categories of ego-centric speech are reflected in the way some researchers have categorised spontaneous singing (e.g., Tafuri, 2008).

Vygotsky (1962/2012) disagreed with Piaget's view of private speech. He argued that private speech was communicative in the sense that it enabled communication with the self and played an important role in self-regulation. In contrast to Piaget, Vygotsky believed that speech develops socially and later becomes a vehicle for inner thought, with private speech an important stage in this process. According to Vygotsky, the main purpose of private speech is self-guidance or self-regulation. He proposed that, initially, adults use speech to regulate a child's behaviour. The child then begins to regulate his or her own behaviour using overt private speech, which later becomes internal verbal thought. As a consequence of Vygotsky's ideas, much of the private speech research has investigated the relationship between private speech and behavioural self-regulation (Winsler, 2009). There is also a large body of research in the domain of cognitive psychology that has shown that private speech is an important cognitive strategy for problem-solving and memory work (Winsler, 2009) and is used as a tool for thought and to focus concentration (Smith, 2007). Private speech is also used for emotional self-regulation (Day & Smith, 2013), motivation (Winsler, 2009), and has been linked with creative thinking (Daugherty & White, 2008). In linguistics, it has been shown that private speech is used among children learning a second language to rehearse, check understanding, and play with language (Ohta, 2001). Some of these uses of private speech are similar to the uses of spontaneous singing described by Campbell (2010), Bjørkvold (1989), and Knudsen (2008), as discussed in Chapter 2.

Most research into the private speech of young children has been laboratory-based or, like spontaneous singing research, has taken place in educational settings. However, there have also been a small number of studies of young children's "crib speech". One of these is Nelson's (2006) *Narratives from the Crib*. This book is based on recordings of a two-year-old child alone in her cot at bedtime, which are discussed by a number of researchers from different disciplines. Whilst the monologues show evidence of a young girl problem-solving, using speech as a vehicle for thought, and practising language, she also uses these private monologues to construct narrative of self

and of her world. Morin (1993) proposes that self-talk facilitates self-awareness, which would make it important in the development of self-understanding. In a study of 22 five-year-olds in the UK, Fernyhough and Russell (1997) found that private speech is used by children in social situations to distinguish themselves from others and develop a sense of the self as a speaking agent. Barrett (2011, 2016) has shown that young children use spontaneous singing in a similar way to construct a sense of self.

Some researchers include singing in their typologies of private speech (Clark, 2005; Dore, 2006; Manfra & Winsler, 2006; Stern, 2006). However, singing is not usually treated with the same gravitas as speech. Due to the influence of Vygotsky's (1962/2012) ideas of self-regulation, private speech is often categorised as either having planning or non-planning function. Singing is usually categorised as non-planning word play (Winsler, Fernyhough, McClaren & Way, 2005). In Nelson's (2006) *Narratives from the Crib*, Dore (2006) notes that some of the monologues are entirely sung and that these "prosodic" monologues are distinct from the "narrative" monologues in that they lack thematic coherence. However, Stern (2006) looks more closely at the singing and distinguishes different types of singing. He suggests that these may carry different functions, such as self-regulation or to accompany mental or affective states. Winsler, Ducenne, and Koury (2011) explicitly address singing in relation to self-regulation. In laboratory-based research with 89 three- and four-year-old children in the USA, Winsler et al. (2011) found that children who were currently enrolled in a music education class showed better self-regulation and were more likely to use humming or singing to facilitate self-regulation than those children who had not experienced the music programme.

In her review of the private speech literature, Berk (1992) suggests that private speech may be used as a coping mechanism and for emotional regulation, and that these functions may arise during imaginative play and "moments of idle reflection" (p.48). However, private speech is difficult to capture at such times. Although Winsler and Diaz (as cited in Winsler 2009) reported that private speech is most often used during goal-oriented tasks, such as working on a puzzle, in later research, parents reported that children most often talk to themselves when engaged in fantasy role play (Winsler, Feder, Way & Manfra, 2006). This indicates a potential misalignment between research and the real-world use of private speech. As discussed in Chapter 2, the same

methodological problem exists in the study of self-directed singing. Only singing—or speech—that can be captured can be analysed.

While Chen-Hafteck (1997) draws some parallels between the development of music and language, this brief survey of the private speech literature indicates that similarities also exist between the functions of private speech and self-directed singing. The literature discussed in Chapter 2 indicates that like private speech, spontaneous self-directed singing is used in self-regulation; the expression of inner thought, and emotion or affective states; to construct narrative and sense of self; and provide commentary on activity.

3.6 Summary

In this chapter, I have widened my discussion of the literature to look at the function and meaning of music in everyday life. Comparing this literature to the literature on young children's spontaneous singing discussed in Chapter 2 highlights a number of key concepts that are useful for the study of young children's spontaneous singing. The adult literature demonstrates the following key concepts:

- Music is a social phenomenon that reflects cultural values and identity.
- The meaning of music and what is communicated through music is socially constructed and dependent on context.
- Music is used on an individual level in many different ways, including for self-regulation, construction of identity, to distract or focus attention, and to create personal space.

Because children are more likely to play alone when they are at home than when they are in educational settings, I also explored some of the literature that deals with young children's solitary activity, particularly private speech. There is very little literature that explores thriving, well-adjusted children playing on their own at home. However, some literature in the areas of child development and psychotherapy suggests that young children can be content to play alone and that solitary play may provide children with a level of control over their own play experiences and space to develop their own ideas. Playing alone can also give children a sense of privacy and independence.

Private speech, on the other hand, has been thoroughly researched. It has been found that young children use private speech to regulate their behaviour, focus concentration, as a vehicle for thought, and to practice

language. Some research also indicates that private speech is used to construct a sense of self and for emotional regulation. These uses closely reflect the function of music in the lives of adults. If the uses of young children's private speech are similar to the uses of adults' personal musicking, it is likely that young children also use spontaneous singing in similar ways. In this thesis, I explore how theoretical concepts that have been developed in relation to both adults' use of music and young children's solitary activity can enhance understanding of the ways in which young children use spontaneous singing at home.

4. MUSICAL AGENCY AS A THEORETICAL FRAMEWORK

4.1 Introduction

In the previous chapter, I discussed how key concepts from the study of adults' use of music and young children's solitary activity can provide ways of understanding young children's spontaneous singing at home. In developing an understanding of young children's spontaneous singing at home, it is also important to establish a conceptual framework that enables a focus on the everyday experience of young children. The concept of agency is a useful framework for this study as it places emphasis on the child's actions and intentions in constructing their experience.

In this final literature review chapter, I look at the concept of agency and how it has been applied in relation to children and music. I begin by giving a background to the sociological and psychological concepts of agency. I then examine how young children's agency has been treated, particularly within the field of childhood studies. Finally, I explore ideas of musical agency. I particularly focus on the work of Karlsen (2011). Karlsen argues that the concept of musical agency is a useful means through which to view engagement with music, specifically in music education. She proposes a "lens" of musical agency as a tool for music education researchers to facilitate a focus on the learner's overall experience in music as an alternative to the traditional focus on musical outcomes. Karlsen's framework is based largely on the music sociology work of DeNora (2000) and Batt-Rawden and DeNora (2005), and the writings of music educationalist, Small (1998).

In the final section of this chapter, I draw together the main points from the three literature review chapters to present a justification for my research approach.

4.2 Agency as a sociological concept

Before discussing musical agency, it is important to clarify the general notion of agency. In very general terms, the word *agency* in sociology refers to

an individual's capacity to act. This is traditionally considered in relation to *structure*, which represents societal constraints on the individual. For centuries, there has been polarised debate around the degree to which agency is determined by structure. In simple terms, some sociologists and social theorists have asserted that the actions and behaviour of individuals are determined by social structures (e.g., Durkheim—as cited in Giddens, 2006), and others have maintained that individuals have the capacity to act freely and shape their own circumstances (e.g., Locke—as cited in Emirbayer & Mische, 1998).

In Section 4.4, I will discuss Karlsen's lens of musical agency. To frame her ideas about musical agency, Karlsen (2011) draws on the theories of two prominent sociologists, Giddens (1984) and Barnes (2000). Giddens is well known for his theory of structuration, through which he attempted to overcome the traditional dualism between structure and agency. Giddens' theory proposed that structure and action are intimately connected. In his model, societies exist because individuals act in habitual or routinised ways and individuals are able to act in society only because they have socially structured knowledge (Giddens, 2006). This means that individual agency can be either enabled or constrained by societal structure, but the social structure does not *determine* the individual's actions by compelling them to act in a certain way (Giddens, 1984). Giddens' theory of structuration has been criticised for focusing too much on the routine habits of individuals with little room for reflexive agency and for making agency and structure appear inseparable (Archer, 1982). While accepting Giddens' contribution to establishing that structure and agency are closely linked, Emirbayer and Mische (1998) view structuration as an over-simplification of a complex concept. They regard agency as being social, relational, and temporally constructed and offer the following definition:

...the temporally constructed engagement by actors of different structural environments which, through the interplay of habit, imagination, and judgement, both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations. (p. 970).

In emphasising the social nature of agency, Emirbayer and Mische are in agreement with Barnes (2000). Barnes argues against a notion of agency that places too much emphasis on individual free will. He proposes that agency, like the human agents who act upon it, is fundamentally social, and attention must be paid to collective agency.

Although Karlsen (2011) chooses to frame her lens of musical agency within the field of sociology, the notion of agency does not belong exclusively in the sociological domain. In the field of cultural psychology, a similar dualism between agency and culture is demonstrated by Ratner (2000). Ratner strongly reiterates the important structural role culture plays in agency and stresses that agency is situated within cultural contexts and values. Bandura's (2001) psychology-based Social Cognitive Theory presents a middle ground that sits comfortably with both Giddens's (1984) theory of structuration and Barnes's (2000) ideas of collective agency. Bandura (2001) agrees that human functioning is rooted within society and that individuals operate within "a network of societal influences" (p. 14). Like Barnes, he emphasises the importance of collective agency, alongside personal agency and proxy agency.

Karlsen's (2011) lens of musical agency draws on sociological theory that is based on the adult world. However, agency is a key concept in childhood studies, where it faces similar issues.

4.3 Agency in the sociology of childhood

Although intended for use in music education research, it is important to note that Karlsen's (2011) lens of musical agency draws on work that explores how adults use music. To gain an understanding of how the notion of musical agency might apply to young children, it is necessary to understand some general theories of children's agency.

Children's agency is most thoroughly represented in the field of childhood studies, or the new sociology of childhood. The new sociology of childhood emerged as a field of research interest in the post-war era and gathered momentum during the 1980s and 1990s through the theoretical writings of social scientists, such as Jenks (1982), James and Prout (1997, original edition 1990), and Qvortrup (see Qvortrup, Corsaro, & Honig, 2009). Childhood studies emerged as a critical paradigm, pitting itself against the dominant ideas in developmental psychology and sociology. Among the central tenets of childhood studies are that childhood is understood as a social construction rather than a natural stage of development; that the lives of children are worthy of study in their own right; and that children are active in the construction of their own social lives and contribute to the social lives of those around them and the culture of wider society (Corsaro, 2005; James & Prout,

1997; Tisdall & Punch, 2012).

The view that children actively construct their own social lives and co-construct culture, positions children as social actors and makes agency a key concept in childhood studies (Esser, Baader, Betz & Hungerland, 2016). The emphasis placed on children as competent social actors was intended to counteract traditional views of children as passive dependents (Tisdall & Punch, 2012) and to give conceptual value to children in their current state as children rather than as future adults (Qvortrup, 2009). The concept of children as competent actors in social life has also given rise to a range of participatory research methodologies designed to give voice to children, who were viewed as a politically disadvantaged, minority group.

In their early work in childhood studies, James and Prout (1997, original edition 1990) describe children as: “active in the construction and determination of their own social lives, the lives of those around them and of the societies in which they live” (p. 8). However, as childhood studies has reached maturity, researchers have reassessed notions of children’s agency (see Esser et al., 2016; Tisdall & Punch, 2012). This has led to James and Prout’s original statement about children’s agency being criticised for privileging individual agency and for leading to a romanticised view of how much control children have over their own lives (Tisdall & Punch, 2012). Several researchers have pointed out that individual autonomous agency is based on minority world (predominantly Western male) values that are not necessarily appropriate across all cultures (Bordonaro & Payne, 2012; Esser et al., 2016).

Problematizing agency, Esser (2016) argues that researchers in childhood studies continue to approach agency through the agency-structure dualism that dominated sociology prior to Giddens's (1984) introduction of the theory of structuration. Whilst Prout and James (1997) argue that it is important to consider both childhood as a social structure and the ways in which children can act within the constraints of social structures, children's abilities to act are often pitted against societal constraints. Tisdall and Punch (2012) discuss a number of attempts that have been made to reduce the tension between structure and agency, such as Klocker's (2007) concept of “thick” and “thin” agency. Klocker (2007) uses the terms thick and thin to recognise that a child’s agency is dependent on the options they have available to them, and that these can change over space and time and according to relationships. However, this

idea has also been accused of supporting inequalities between privileged children who have an increased capacity to act and those who have a reduced capacity to act (Esser, 2016). Tisdall and Punch (2012) suggest that a revised understanding of children's agency would refer to the *potential* ability of children to act within the constraints of their particular situation. They note that this is not dissimilar to the position of adults.

Prout (2005) explains how structure is often emphasised in research that is concerned with the large, overall patterns of childhood, whereas agency is used to emphasise the unique aspects of diverse and localised childhoods. He shows how the traditional dualism between structure and agency is outdated and unhelpful. He suggests alternatives that could include Actor-Network Theory, Complexity Theory, and Generational Ordering. Esser (2016) builds on these ideas. Prout proposes that child agency is based on social relationships and linked to social conditions, making relational and network theories a more appropriate theoretical framework for understanding child agency. This is also reflected in Oswell's (2012) assertion that child agency is not necessarily linked to individual "subjective reflexivity" (p. 7) but is networked between human and non-human entities. These non-human entities can include cultural tools, such as singing.

It is important to recognise that different contexts and circumstances afford children different types of agency and that agency is often linked to power relations, particularly with respect to generational ordering (Esser et al., 2016). The relationship between agency and power can be seen in empirical research. Markström and Halldén (2009) carried out ethnographic research at two preschools in Sweden, looking at the strategies young children use to negotiate social order. They found that children gained a sense of personal autonomy by distancing themselves from the collective and stepping outside the group routine to create their own sense of time and space. The children achieved this through a range of strategies, including ignoring and negotiating with practitioners. Although the preschools were controlled by adult practitioners and governed by routine, Markström and Halldén show how the children were able to exercise agency to negotiate and influence the social order. In another example, Goh and Kuczynski (2009) examine how young Chinese children exercise agency at home in multi-generational families. They found that children found "subtle and creative" (p. 525) ways to resist, influence, and negotiate with

their care-givers based on their relationships with each individual. Corsaro's (2005) study of pre-schoolers in an Italian kindergarten demonstrates how children achieve a sense of agency through evading adult rules and through trying on powerful adult roles during imaginary play. This literature demonstrates how agency is situated and relational. The children are able to act in the way they do because of the situation they are in and the people with whom they are interacting.

In this thesis, I look at ways in which individual children act in and through music within the social structures of family and home and how these children use their musical agency to influence themselves and those around them. Karlsen's (2011) use of Giddens's (1984) theory of structuration and Barnes's (2000) collective agency in her lens of musical agency allows us to consider the agency of the individual within their social context and in relation to their family.

4.4 Musical agency

The literature on musical agency is fairly limited. However, like agency in general, musical agency is not a straightforward concept, and different researchers interpret musical agency in different ways. Much of the literature in the field of music education discusses musical agency in terms of a child having personal autonomy in music or having the ability to act musically (Burnard, 2013). In this vein, Wiggins (2015) describes the musical agency of children as "their sense that they can initiate and carry out their own musical ideas and ideas about music" (p. 103). This definition is fashioned on Bruner's (1996) definition of agency as the capacity to both initiate and complete acts. Wiggins provides an up-to-date review of the literature on musical agency, specifically focusing on children's musical learning and including examples from young children. She asserts that children's musical agency is grounded in musical experience and engagement and reflects musical understanding and knowledge. Importantly, Wiggins (2015) suggests that children's readiness to assert their musical agency "is dependent upon opportunity and upon their belief that their ideas will be accepted and valued" (p. 115). Here, Wiggins draws on Bandura's theory of self-efficacy. Bandura (2006) argues that in order to act, an individual needs to believe themselves "capable of making things happen." (p. 170). In terms of spontaneous singing at home, this suggests that

to act with musical agency, children need to believe they are musical and expect their singing will be accepted and understood. This would depend on their musical experience, and on whether they have been parented in musically sensitive ways. Therefore, the home musical environment and parental attitudes would appear to be crucial to the use of musical agency.

Wiggins (2015) suggests that musical agency is rooted in musical identity. This reflects Hargreaves, Miell and MacDonald's (2002) view that self-concepts contribute to a sense of agency. However, working with the concept of affordance, DeNora (2000) suggests that music *provides* the agency through which identity is constructed. While writing about music and agency, DeNora tends not to discuss musical agency as such but music as a tool—or medium—for social agency. She suggests that agency resides in the act of using music to construct identity rather than stemming from identity. These are two similar but distinct approaches to musical agency. One approach stems from the psychology literature and views musical agency as emerging from musical experience and identity and manifesting itself in a personal belief of what can be achieved musically (Wiggins, 2015). The other approach stems from sociology and views music as a tool for the realisation not only of musical agency, but also of social agency (DeNora, 2000). Importantly, in DeNora's approach, music is seen as a tool by which to achieve extra-musical means. Essentially, DeNora is interested in how music as an aesthetic material is used in the manifestation of social agency (DeNora, 1999). Looking towards relational theories of agency within the field of childhood studies (e.g. Esser, 2016; Oswell, 2012), DeNora's approach comes close to placing music, or the process of musicking within networked constructs of agency where musicking is one non-human, cultural, element of agency. Whether or not agency provides or is rooted in identity, these different interpretations indicate a reciprocal link between agency and identity.

As mentioned previously, Karlsen (2011) bases her lens on the music sociological work of DeNora (2000) and Batt-Rowden and DeNora (2005), and the work of music educationalist, Small (1998). She also draws on Giddens's (1984) theory of structuration and Barnes's (2000) work on collective agency. Utilising these theoretical and empirical works, Karlsen defines musical agency as the "individuals' *capacity for action* in relation to music or in a music-related setting" (p. 110). This definition relates to how people act in musical ways and in

musical settings. Karlsen's lens of musical agency, reproduced in Figure 4.1, is presented as two dimensions relating to individual and collective musical agency. The *individual dimension of musical agency* refers to ways music is used to act at an individual level, and the *collective dimension of musical agency* refers to how music is used in collective contexts (Karlsen, 2011).

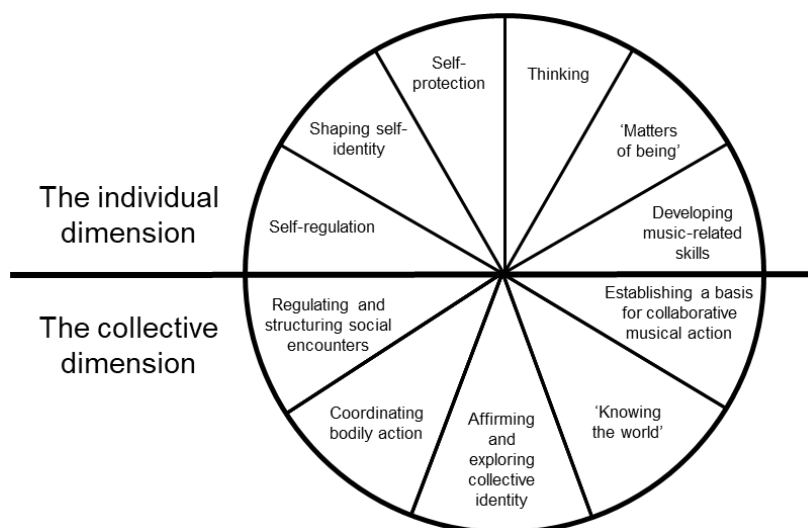


Figure 4.1. Karlsen's "lens" of musical agency. Adapted from Karlsen, S. (2011).

A table summarising the characteristics of Karlsen's (2011) six categories of individual musical agency and five categories of collective musical agency can be found in Appendix A. While not all the categories in Karlsen's lens are necessarily relevant to the musical actions of young children, they provide a useful framework for examining the ways in which young children use singing in their daily lives.

For the purposes of this study, my definition of musical agency is the capacity to act in or through music. This definition is based on the ideas of Karlsen (2011) and DeNora (2000) and is particularly influenced by DeNora (2000) in that it allows for the use of singing as a means of acting musically to non-musical ends. That is, to act *through* music, using music as a tool for social or personal agency, is as much an aspect of musical agency as being able to act *in* music for purely musical goals. In this regard, my concept of musical agency could perhaps more accurately be termed "agency in and through music." Music and spontaneous singing are then part of a network of elements that make up child agency at any time.

4.5 Justification for research approach

In this section, I draw together elements of the literature review chapters to justify my research approach. I identify gaps in the literature and explain why it is important that these gaps are addressed.

It is widely acknowledged that singing is a salient feature in the lives of many young children. However, the value of young children's singing is rarely acknowledged. Since the 1930s, spontaneous singing has been the subject of a thin thread of research woven across a number of fields of interest.

Researchers in developmental psychology, ethnomusicology, music education, and, more recently, cultural psychology and childhood studies have all been interested in the spontaneous singing produced by young children. This interest from diverse fields of study reflects the multi-faceted nature of spontaneous singing.

As discussed in Chapter 2, the study of young children's singing has traditionally been dominated by developmental models that focus on how children become singers. When spontaneous singing has been examined, it has often been viewed romantically as evidence of the natural creativity of young children and with assumptions that the characteristics of spontaneous singing reflect universal models of development or of child culture. The contextually situated, everyday musical lives of young children have only recently become a focus of interest. This reflects a general recognition, particularly within childhood studies and the sociology of childhood, of everyday experience as a space in which young children participate in and construct cultural life (Hedegaard & Fler, 2008; Rogoff, 2003; Tudge & Hogan, 2005). An important site of the “everyday”, is the home. This is especially the case for young children, many of whom are cared for in the home to some extent. However, most of the research exploring spontaneous singing has taken place in social settings. The literature exploring the musical experiences of young children at home is very limited, and conclusions or interpretations are based on very small numbers of children. Further research is required to broaden the evidence base of research into young children's spontaneous singing at home.

One aspect of the home that makes it unique is the opportunity—or necessity—for children to play on their own. It is clear from the private speech literature that young children's private speech is valued and assumed to have

function and meaning. While there is wide acknowledgement in the music education literature that young children sing to themselves, this singing is rarely explored in detail, and very little literature asks questions about its purpose or meaning for the children who create it. Within the literature on adults' personal use of music, solitary use of music is recognised as a means of caring for the self. As discussed in Chapter 3, it is possible that young children use spontaneous singing in ways that are similar to adults' use of recorded music. However, this has not been addressed specifically in the literature. Research investigating spontaneous singing often focuses on the more obvious social singing. Self-directed singing when children are alone is often missed due to limitations in data collection methods.

Methodologically, young children's spontaneous singing is very difficult to study, particularly within the home. The majority of research has taken place within education and care settings. Research in the home is usually undertaken by parent researchers (e.g., DeVries, 2005; Forrester, 2010) or through the use of parental diaries (e.g., Barrett, 2009; Tafuri, 2008). More rarely, researchers have observed children in their homes (Young & Gillen, 2007, 2010). The different contexts and methodologies of these studies have influenced the outcomes. Most studies, particularly those which have taken place in education or care settings, focus on social or interpersonal singing. Because only singing that is noticed can be recorded, there is a danger that more inwardly focused or self-directed singing is overlooked. These challenges of access and methodology mean that there is a lack of research that is able to provide an overall picture of spontaneous singing in the home lives of young children. An overview of all spontaneous singing is essential to an understanding of the musical lives of young children at home and how young children use singing to act in and on the world around them.

4.5.1 Research Questions

The original aim and five objectives of this study were set out in Chapter 1. Following the review of the literature, and initial interaction with the data, I reworked the aim and objectives into a main research question and four sub-questions.

Main research question:

How do three- and four-year old children use spontaneous singing in their everyday lives at home?

Sub-questions:

1. What is the nature and extent of spontaneous singing at home?
2. In what contexts and circumstances does spontaneous singing occur?
3. What observable factors influence young children's spontaneous singing at home?
4. How is musical agency demonstrated in spontaneous singing?

4.6 Summary

Although the concept of agency in general has some shortcomings, the concept of musical agency—or agency in music—provides a useful framework for examining the ways in which young children use singing in their everyday lives at home. The concept of musical agency facilitates a view that a child has a capacity to act purposefully in and through music. This action is, of course, constrained by many factors, including the child's musical skill and experience and the reception the singing may receive. However, the key notion is that singing may be used as a tool through which agency can be realised.

5. RESEARCH DESIGN

5.1 Introduction

The act of research is influenced by the underlying philosophical assumptions of the researcher and the discipline they work within. Therefore, it is important for researchers to clarify the assumptions that frame their work (Burnard, 2006). Burnard urges music education researchers to explicitly address Crotty's four elements of research: methods, methodology, theoretical perspective, and epistemology (Burnard, 2006; Crotty; 1998). I begin this chapter by briefly outlining the underlying assumptions of this study and then discuss how I designed and carried out the research. I start with an overview of the phases of data collection and analysis, and a brief description of the participants in the study. I then discuss my choices relating to data collection and how I went about analysing the data I collected. Finally, I discuss the ethical considerations I made before and during the research process and explain why this research can be considered valid and reliable.

5.2 Theoretical perspective

This study is situated within the interpretivist paradigm. A theoretical paradigm is informed by assumptions about the nature of reality (ontology) and the nature of knowledge (epistemology) (Crotty, 1998). In education research, there are also assumptions about the epistemology of learning—that is, the way learning takes place. Paradigms are usually associated with certain research methodologies and methods. There are many different interpretivist approaches. Essentially, interpretivist research seeks to understand human experience (Cohen, Manion, & Morrison, 2011). Interpretivist research often seeks to understand a phenomenon from the participants' point of view, and usually acknowledges the role of the researcher as interpreter (Cohen et.al., 2011). This is in contrast to positivist approaches, which usually seek to uncover objective “truths” independent of the researcher.

The philosophical foundation of interpretivism is social constructionism. Social constructionism is a school of thought that understands knowledge as

being constructed through human interaction with the world and that this construction is developed and transmitted within a social context (Crotty, 1998). Constructionism is neither objective, believing meaning exists outside of human experience, or subjective, believing meaning is created by humans. Rather, meaning is constructed through the interaction of the conscious mind (the subject) with an existing object (Crotty, 1998). Social constructionism focuses on the idea that meaning is socially constructed and culturally transmitted. Individuals do not construct their own meanings—rather, meaning is learnt through enculturation and social interaction (Crotty, 1998).

5.3 Research Methodology

As set out in previous chapters, my research aim was to explore the spontaneous singing of young children at home. Although I had some specific areas I was interested in, I wanted to retain flexibility to explore areas of interest that arose from the data. Therefore, I decided to use an ethnographically inspired exploratory research design. Exploratory study is an often-used but little-explained methodological approach. In the positivist tradition, the term is used to describe inductive studies that precede deductive reasoning studies as a means of developing hypotheses. In interpretivist research, exploratory studies are important in situations where little is known of the phenomenon being studied or to "seek new insights" (Robson, 2002, p. 59). The term *exploratory* refers to the goal of the research and compares it to *descriptive* research, which aims to build up an in-depth description of a phenomenon, and *explanatory* research, which is concerned with casual relationships (Robson, 2002). Stebbins (2001) notes that researchers explore "when they have little or no scientific knowledge about the group, process, activity, or situation they want to examine but nevertheless have reason to believe it contains elements worth discovering" (p. 6). I decided an exploratory methodology was appropriate for this study because although there is prior literature on spontaneous singing, there are very few studies that have taken place in the home, and the number of children involved is very small.

Traditional ethnographies are usually based on participant observation and often involve complete immersion within the group or setting being studied (Hammersley & Atkinson, 2007). Although not a true ethnography, my design is ethnographically inspired in its open-ended design and its aim to investigate the

everyday singing experiences of young children in the naturalistic context of their homes. The data collected was unstructured and naturalistic, and interpretative categories were largely generated during the analysis process, rather than at the outset of data collection (Hammersley & Atkinson, 2007). This study is primarily an interpretivist one; however, both qualitative and quantitative methods of analysis were used to facilitate an in-depth understanding, draw comparisons, and develop generalisations.

5.4 Phases of data collection and analysis

This study involved several phases of data collection and analysis. The data collection process began with a small pilot study involving a single participant. This was followed by three phases of data collection and analysis. The phases of data collection and analysis are depicted in Figure 5.1.

The first phase of data collection took place in the United Arab Emirates (UAE), where I was resident at the time. Children of English-speaking expatriates were recruited through word of mouth and letters distributed at a nursery. The families were asked to record their children on four separate occasions for 4–6 hours at a time. This process is described in full in Section 5.6. During the first phase of data collection, I collected recordings from six children, including two further recordings from the pilot study subject. This resulted in 102 hours of recordings as shown in Table 6.1 (p. 112). During analysis, all aspects of singing and music-making were considered, including that of other family members. The aim was to build an overall picture of the child's home music environment.

Following the first phase of data collection, it became clear that it was not necessary to continue collecting so much data from each child. It was also clear from the reactions of the children in the first phase that the more often they were asked to participate, the less likely they were to consent. For ethical reasons, I did not want the families to feel under pressure to record on multiple occasions when sufficient data could be collected in as little as two sessions. Consequently, the parents of the three children in phase two of the data collection were asked to collect data for 4–6 hours on two or three occasions, or to collect up to 12 hours of recording. Phase two of the data collection involved a further three children in the UAE and resulted in an additional 32 hours of recording. The breakdown of this can be seen in Table 6.2 (p. 118).

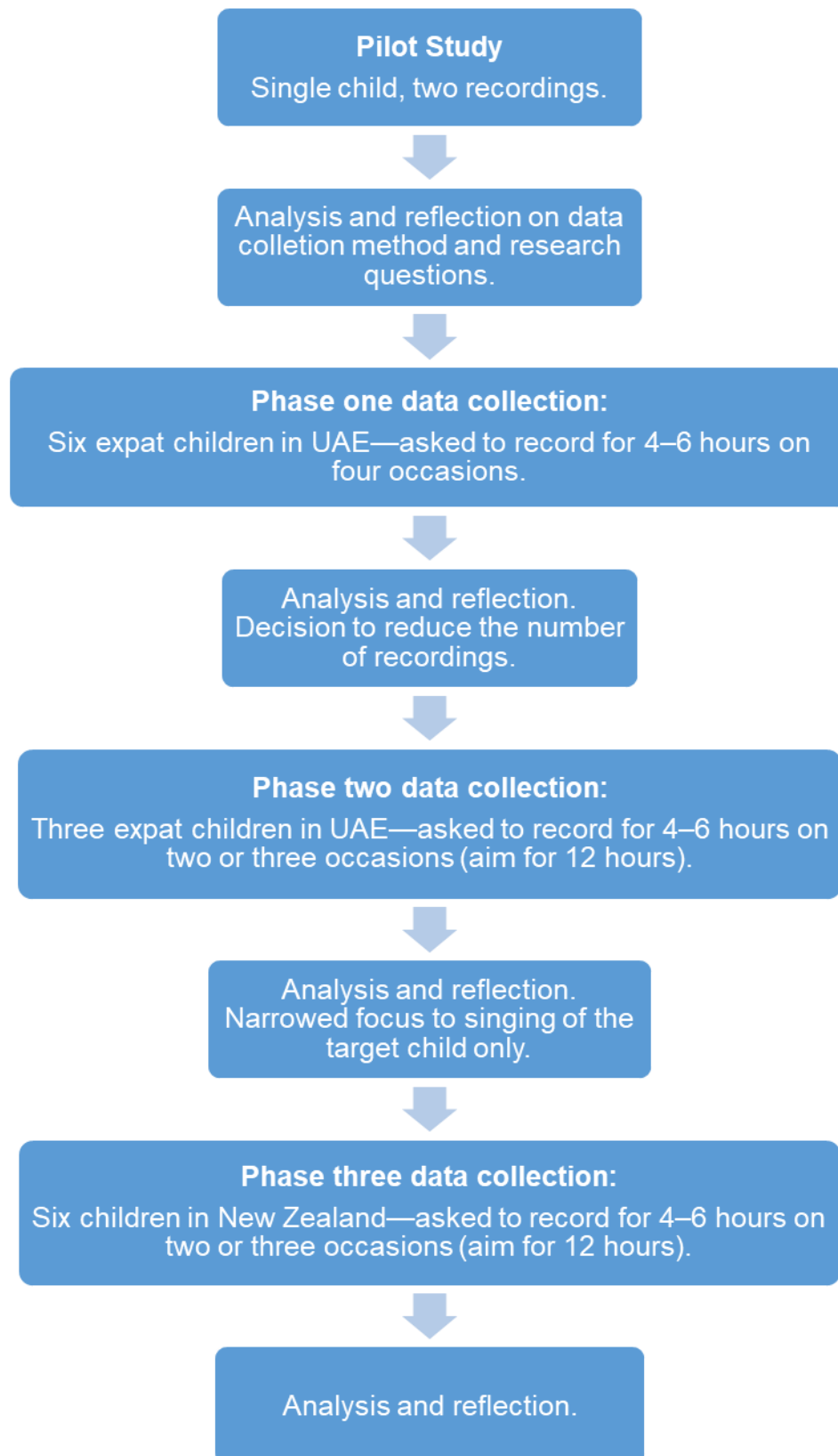


Figure 5.1. Phases of data collection and analysis.

In analysing the data from the second phase, I narrowed the focus to concentrate solely on the singing of the target child. The singing of others in the family and playing of instruments were not included in the detailed coded analysis. However, I continued to make analytical memos relating to music and singing in the home environment.

A relocation to New Zealand meant the final phase of data collection involved six New Zealand children. As with the second phase, the families were asked to record on two or three occasions for 4–6 hours, aiming for a total of 12 hours. Due to the location of the participants, four of the parent interviews were conducted by phone. This phase resulted in 49 hours of recording. Details of this data collection can be seen in Table 6.3 (p. 121).

5.4.1 Pilot study

Prior to commencing data collection, I carried out a single-subject pilot study. The aims of the pilot study were:

- to test the recording equipment;
- to test the process of data collection, including the documentation and the parent interview;
- to use the data collected to develop effective data handling and analysis methods; and
- to reflect on the broader research questions.

The subject of the pilot study was Alfie (not his real name), a four-year-old British expatriate who had lived in the UAE for approximately 18 months. Alfie and his mother attended a preschool music class that I helped run with the music teacher at the school his older sisters attended. He was cared for at home by his mother. The data collection began with a semi-structured interview with Alfie's mother. During the interview, we discussed Alfie's home musical environment and family music practices. I took notes and recorded the interview using a digital voice recorder. Alfie was then recorded on two occasions using the LENA Digital Language Processor (DLP). The recordings took place during weekdays when Alfie was at home with his mother. The first recording was four hours long and the second was just over five hours. Following the period of data collection, I had an informal conversation with Alfie's mother to gain feedback. Alfie's mother reported that she found the forms and documentation clear and straightforward. Alfie had been happy to wear the research vest containing the

DLP, and the recording had not interfered with their normal daily routine. I found that by taking notes quickly and occasionally asking for clarification, I could efficiently record the initial interview. Therefore, I decided not to make an audio recording of the parent interviews in future.

I used the pilot study as a means of trying out ways of working with the data. The first step was to define what I meant by singing as this would impact on the entire analysis. My definition is included in Chapter 1 (p. 20). Secondly, I developed a process by which to manage the data. This is described fully in Section 5.7. Thirdly, with reference to the existing literature, I used the data collected during the pilot study to develop some initial codes. These codes are described and discussed in Section 5.7. My coding frame is presented in Appendix B. The data I collected for the pilot study was used as part of the main body of data and is, therefore, reported on in full in the findings' chapters (Chapters 6–8).

Alfie was recorded for a total of ten hours and 23 minutes and, during this time, sang for just over two hours. The first recording was four hours and four minutes. In this time, he produced 128 episodes of spontaneous singing, singing in total for one hour seven minutes. The second recording was six hours and 19 minutes. During the second recording, Alfie sang 113 times for a total of 52 minutes. Alfie's most prevalent singing behaviour was humming, of which there were 135 instances. This was followed by singing on syllables (113 instances) and singing with words (61 instances). Alfie occasionally chanted and used percussive vocal sounds (tongue-clicking and bilabial trilling) in his singing. He experimented with his voice and often switched quickly between singing and speech. The large amount and varied nature of singing data collected during these two recordings was very encouraging and proved the effectiveness of the LENA recorder.

Alfie most often sang while playing, and this singing was often interspersed with self-talk. He also sang a lot while waiting, and while eating. In terms of social context, most singing (125 instances) took place in the presence of others, with 107 instances produced when Alfie was alone. There were eight instances of social singing when Alfie sang with his mother or his two sisters.

One of the objectives of my study was to explore the idea that young children engage in distinct social and self-directed singing behaviours at home. I used the pilot study data to try out trustworthy ways of interpreting social and

self-directed singing. This process is described in full in Chapter 7.3.

5.4.2 Recruitment

Children were recruited on a voluntary basis. In the UAE, three children, including the pilot child, were recruited through a preschool music class where I assisted the music teacher. A letter was given out to all the parents in the group, and parents who were interested approached me informally. One child was recruited through the nursery my son had attended. The staff distributed a letter to the parents of three- and four-year-olds at the nursery. The remaining children in the UAE were recruited by word of mouth through friends and acquaintances.

In New Zealand, I visited a local playgroup and spoke to the parents when they were gathered together for circle time. I also placed a poster on the notice board. One child was recruited from this playgroup. The remaining children were once again recruited via word of mouth through friends and family connections. Sample recruitment materials can be found in Appendix C.

Using word of mouth as a recruitment tool limited the demographic of the participating families. However, as I was already restricted to English-speaking expatriate families in the UAE, I do not consider that the method of recruitment placed significant further restrictions on the demographic of the participants. Word of mouth proved to be the most effective means of recruitment. The more impersonal approach of letters to parents at the nursery and a poster at the local playgroup only resulted in the recruitment of two participants.

5.5 Participants

In this section, I briefly describe the participants in each phase. Further details about the children and their families are given in Chapter 6.2.

5.5.1 Phase one participants

The first phase of data collection took place in the UAE, where I recruited six three- and four-year-olds. The sample was an even representation of gender and age, consisting of three girls, three boys, three 3-year-olds, and three 4-year-olds (see Table 5.1). The children were all from English-speaking expatriate families living in the UAE. Each of these families approached life in the UAE in different ways, with their own family cultures and routines. Three families were British, one family was Australian, and the other two were

German/American and Australian/American. English was the predominant language in the German/American household. The families were all white and middle class. Four of the children attended some form of preschool. All names are pseudonyms.

Table 5.1

Participants in Phase One of the Data Collection

Name	Age (y:m)	Gender	Members of household	Cultural background	Childcare
Alfie	4:1	M	Parents (mother at home), two older sisters	UK (England)	Home
Emma	4:9	F	Parents (mother at home), older sister, baby brother, live-in maid	UK (England)	Full time in British curriculum school (FS1)
Karl	4:0	M	Parents (both in full-time work), live-in maid	Australia/USA	Montessori nursery (4x per week), nanny
Leo	3:6	M	Parents (mother at home), older brother, baby brother, live-in maid	Germany/USA	Montessori nursery (4x week), mother, maid
Xanthe	3:1	F	Parents (mother at home), older sister	Australia	Home
Harriet	3:1	F	Parents (both in full-time work), baby sister, live-out nanny	UK (England)	Nursery (3x per week), nanny

5.5.2 Phase two participants

This phase of data collection involved three girls, all daughters of English-speaking expatriate families in the UAE. Two of the girls were three years old and the third was four years old. All three girls had siblings. Phase two participants are listed in Table 5.2.

Table 5.2*Participants in Phase Two of the Data Collection*

Name	Age (y:m)	Gender	Members of household	Cultural background	Childcare
Rachel	3:0	F	Parents (mother at home), older brother	UK (England) /South Africa	Home
Maggie	4:2	F	Parents (both in full-time work), younger sister	UK (Scotland)	Full-time in British curriculum school (FS1)
Caitlin	3:1	F	Parents (mother at home), two older sisters, live-in maid	UK (Scotland)	Nursery (3x per week), mother, maid

5.5.3 Phase three participants

The children in phase three of the data collection were all living in New Zealand (NZ). In order to maintain a similar demographic, I recruited white, middle-class children. The participants in phase three are listed in Table 5.3.

Table 5.3*Participants in Phase Three of the Data Collection*

Name	Age (y:m)	Gender	Members of household	Cultural background	Childcare
Milly	4:5	F	Parents (mother at home), younger brother	NZ (European)	Kindergarten (3x per week), parents
Esther	4:10	F	Parents, older brother	NZ (European)	Day care (4x per week), mother, grandparents
Oliver	3:1	M	Parents	Netherlands/ Zimbabwe (European)	Day care (3x per week), mother
Jacob	3:7	M	Parents, older brother and sister	NZ (European)	Kindergarten (2x week), mother, grandmother
Thomas	3:3	M	Parents (mother at home), baby sister	NZ (European)	Kindergarten (2x per week), playgroup, mother
James	3:8	M	Parents, baby brother, grandparents	NZ (European)	Day care (3x per week), mother, grandparents

5.6 Data collection methods

The nature of my research questions required that I collect data that was as naturalistic as possible. As discussed in Chapter 2.5, the collection of naturalistic data from young children in their home environment is fraught with difficulty. Based on my review of prior studies, the traditional methods used to study young children's singing at home were revealed to be inadequate. I was particularly concerned that methods such as parental diaries could cause some types of singing, particularly self-directed singing, to be overlooked. I aimed to find a method of collecting data that had as little impact as possible on the child's daily routines at home. I aspired to a situation where the child could be as natural and comfortable as possible with minimal observer interference—a situation that I hoped to be optimal for spontaneous singing. I decided that having a researcher in the child's home would be too intrusive and would potentially disrupt routines. I investigated the possibility of using fixed video cameras. However, fixed video cameras would only be able to record action in the room they were in and only from a certain perspective within the room. I wanted to be able to record all singing behaviours over a period of time; however, in the UAE, many of the children lived in large houses with many rooms, so I suspected video would capture only a small portion of a child's singing. I therefore chose to use non-participant observation via discreet audio recording and semi-structured parental interviews. This produced two types of data: The principal data set is audio recordings of 15 three- and four-year-old children, and this audio data is supported by contextual information from the interviews.

5.6.1 Non-participant observation

Non-participant observation refers to observation that takes place when the researcher is not a member of the group or setting being studied and does not take part in the activities being observed during the research. Often this is an outside researcher who tries to remain in the background (Mukherji & Albon, 2010). Robson (2002) refers to this as *unobtrusive observation*. Mukherji and Albon (2010) point out that although non-participant observation can enable the collection of naturalistic data, this can be at the expense of gaining an insider view. However, Tudge and Hogan (2005) argue that non-participant observation is an important method when the aim of the research is to gain an

understanding of children's behaviour within the context of their everyday lives. Although I describe my data collection method as non-participant observation, this differs from the traditional method in that I was not physically present during the data collection. However, the data were not collected without a personal connection to the participants. Most of the children were recruited through personal associations. I knew or had met most of the children in the study and interviewed the parents to gain an understanding of their home life.

5.6.2 The LENA system

I decided that for the benefits of a naturalistic recording, I was prepared to forgo the benefits of visual data and rely solely on audio clues to understand the child's actions and environment. This meant I required a small recording device that could attach to the child's clothing and could be operated by a parent. I found this in the Language ENvironment Analysis (LENA) system.

The LENA system was developed by the LENA Research Foundation in Colorado, USA, as an automatic language collection and analysis tool for the study of child language development. It features a small recording device called the Digital Language Processor (DLP), supported by software that distinguishes the child's speech from other speakers and environmental sound. The system was specifically designed to gather naturalistic data in the home environment. I used the LENA Pro Graduate Student version.

The DLP was designed for use with babies and young children at home. It is a sealed plastic unit approximately 5.5 cm x 8.5 cm x 1.2 cm in size and weighing approximately 60 grams. The unit has no detachable parts and conforms to international safety standards UL STD 60065 (Audio, Video, and Similar Electronic Apparatus) and UL STD 696 (electric toys). It can record for up to 16 hours at a time. The DLP is fitted into a specially designed item of clothing that the child wears. The LENA Foundation offers a range of clothing options. I chose to use research vests as these seemed to be the most flexible and cost-effective option. I ordered three different sizes of vest in gender-neutral colours. One of the vests and the DLP unit are pictured in Figure 5.2. The vests were lightweight cotton fastened with poppers at the back and with a credit-card-sized pocket at the front to hold the recording device. The pocket was also fastened with poppers. The vest could be worn on its own, underneath, or over the top of the child's own clothes. This allowed flexibility

when the weather was hot, if extra layers of clothing were needed, or when the child wanted to wear dress-up clothes. Some children did not like the look of the research vests, so I also adapted a T-shirt for one child and made a faux tiger-skin pin-on pocket for another child. These are pictured in Figure 5.3. Although the child that the adapted T-shirt was made for did not agree to take part, the T-shirt was popular with other participants. Harriet, aged three, was very excited about wearing the “fairy top” with her “corder” inside.

Initially, I aimed to record each child four times over a period of approximately two weeks, with each session lasting 4–6 hours. Once we had agreed a recording schedule, the parents were responsible for completing the recordings. For each recording, they were asked to switch on the DLP, place it securely inside the vest, ask the child's permission, and dress the child in the vest. The parent turned the DLP off at the end of the session and returned it to me to download the data. Data collection was limited to times when the child was at home. This included outdoor play and, in the UAE, walks within the housing compounds. I encouraged the parents to vary the days and times of the recordings. In practice, they tended to choose similar times of day according to their family routines. The families all had very different routines, with some spending a lot of time at home and others finding it very difficult to find longer stretches of time when they were at home. It was particularly difficult in families where both parents were working. One of these families opted to record for a shorter time over more sessions. Parents were asked to fill in a brief activity log for each recording session, indicating the main events that took place during that session. An example activity log is presented in Appendix D. The purpose of these activity logs was to assist me to identify key events in the recordings.



Figure 5.2. LENA DLP and research vest.



Figure 5.3. T-Shirt adapted for use with LENA DLP and faux tiger-skin pin-on pocket.

5.6.3 Interviews

Prior to the commencement of the recording sessions, I carried out a semi-structured interview with each child's mother. Most of the children in the study had at least one day a week of at-home care with the mother and, in every case, it was the mother who volunteered to participate in the research.

The purpose of the interview was to collect information relating to the child's daily routines, the musical background of the family, musical practices in the home, parental attitudes to music, and the parents' perception of the child's singing at home. The interview was also used to schedule the recordings and to ensure parents understood the importance of gaining informed consent from the child. The interviews were semi-structured, based on a list of topics that I wished to cover, and included both open and closed questions (Mukherji & Albon, 2010). I chose to use a semi-structured interview so I could maintain flexibility and follow lines of interest within the topics to be covered. The interview topics are provided in Appendix E. The interview took up to an hour to complete. Most of the interviews took place in the interviewee's home or a local café. One interview took place in the home of a mutual friend and two interviews were conducted by telephone.

Parents' responses to the interview questions and other relevant information that arose during the interview were recorded using hand-written notes. These notes were written up the same day. Although I did not formally interview the parents after the data collection, on some occasions I found it necessary and appropriate to return to the parents with questions to clarify my understanding of the audio data. These were usually minor, such as identifying a song the child was singing.

5.6.4 Limitations of data collection methods

The principal limitation of this method of data collection was that it provided no visual data. The decision to use audio-only recording was based on the need for the recording process to be unobtrusive. Although movement has been shown to be an integral part of much spontaneous singing (Young, 2006), I decided that it was necessary to sacrifice collecting data on movement in order to more effectively collect data of children singing when they were alone. I hoped that the LENA system would be discreet enough to record all singing without unduly affecting the child's behaviour.

As I was not present when the data were collected, I was also unable to ask the children about their singing. Although research with young children as co-researchers can provide many insights (see, for example, Soto & Swadener, 2005), I made a conscious decision that I wanted the research to be as unobtrusive as possible. This was largely based on my experiences with my

own young children, who seemed to find my questions about their actions annoying. I was also influenced in this by the experience described by Burton (2002), who tried to interview young children about their singing with little success.

5.7 Data analysis

The data for this study consisted of 183 hours and 30 minutes of audio recording and notes from fifteen parent interviews. Overall, my analysis is a thematic qualitative analysis that aimed to arrive at an understanding of how young children use singing. Within this framework of qualitative thematic analysis, I also used simple numerical analysis. As the data I collected was duration based, I performed a simple numerical analysis to reveal the extent of young children's singing at home. The findings of this analysis and a description of how I carried it out are presented in Chapter 6. Analysis of numerical data within a qualitative study can be used to illustrate a point (Creswell, 2009), identify patterns (Maxwell, 2010), and generalise data (Silverman, 2010). In undertaking qualitative analysis, Hammersley and Atkinson (2007) point out that it is important to use approaches and techniques that best help to draw meaning from the data. A numerical analysis can provide a solid foundation upon which to build a qualitative interpretation and can also improve the validity of the research.

In Chapter 7, I use a narrative account as a means of demonstrating how spontaneous singing is situated within a young child's day. According to Barrett (2009), narrative accounts can provide an in-depth understanding of the role of music in a child's life without reducing the complexities of the lived experience. I chose to include numerical analysis and a narrative account within the thematic qualitative analysis because each type of analysis lends a slightly different perspective, thus enabling a deeper understanding of young children's spontaneous singing.

As discussed in Chapter 1, in deciding which vocalisations would be considered spontaneous singing, I included all types of vocal music-making that were initiated by the child or singing that the child voluntarily joined in with. This included humming, rhythmic chanting, singing on syllables or nonsense words, singing recognisable words, and vocal play. I did not include very short utterances (one- and two-note vocalisations), such as sighs, even though they

are often very melodic. A vocalisation was counted as a discrete episode—or instance—of singing when there was a pause of more than 10 seconds, or when the singing was interrupted by speech with another person. Brief utterances of self-talk embedded in singing were included in the singing episode. I excluded instances of singing when adults or other children explicitly asked the target child to sing. Vocal play—or experimental vocalisation—was included when it occurred alongside singing or humming but excluded when it occurred in isolation.

5.7.1 Data handling and preparation for analysis

After each recording, the data were downloaded using the LENA software. Although this software is designed to automatically analyse child language, this function did not prove to be useful for my analysis. The LENA system is essentially designed for the quantitative analysis of large amounts of language data, principally in the field of developmental linguistics. The automatic analysis feature is optimised for recordings of around 12 hours. My recordings were often shorter than this, and I found that the automatic coding was not sufficiently accurate. For example, speakers were often mislabelled. As child speech is the focus of the LENA system, singing is not coded separately from any other vocalisations and is often labelled as crying. Because of these difficulties, I could only use the automatic coding as a guide. The automatic coding of the sound environment—that is, the distinction between vocalisations, electronic sound and noise—was more accurate and was sometimes useful as a visualisation when working through long recordings.

Following download, I exported the data files to Transcriber, a compatible open source transcription programme, to begin the analysis. Using both the LENA codes and the Transcriber wave form, I located and marked all singing behaviours and other relevant features of the recording. I then exported the audio file and the transcription to Transana, a qualitative data analysis programme. Using Transana, I produced a clip of each episode of singing. These clips became the smallest unit of analysis and enabled me to count the number and length of each episode of singing without losing sight of its context within the larger recording. The LENA coding was incompatible with Transana, which necessitated using Transcriber. However, once I became more expert and realised the LENA codes were not particularly helpful, I was able to stop

using Transcriber and export the audio files directly to Transana, where I both transcribed and coded them.

Many researchers who use audio recordings as their principal data source work with the spoken word, which is transcribed in preparation for analysis. Young children's singing is not easily transcribed into a static, symbolic form. Transcription of young children's singing into Western music notation can only be very approximate because it typically does not conform to adult ideas of music (Young, 2006). The singing is often wordless or based on nonsense words and indistinct syllables that are difficult to decipher, and pitches tend to be approximate. This means that much of the singing would be lost if I simply transcribed the lyrics or notated examples in Western music notation. An example of this can be seen in Chapter 7.3, where I transcribe two examples of spontaneous singing into standard music notation. Transcription into music notation was also, for the most part, unnecessary as I was concerned with the meaning of the act of singing rather than what exactly was sung. Therefore, analysis was performed directly from the audio data. The musical content of each clip was described, and clear words were transcribed, but this was used as an aide-memoire rather than a basis for analysis.

Data from the parental interviews was used to provide contextual information about the children and their musical experience. Data from the parental interviews was not coded. However, notes from the interviews were written up, and the main points were entered into a table to provide a degree of comparison between children. The table is presented in Appendix F.

5.7.2 Coding and categorising

As I took audio clips from the recordings, I began coding. Using Transana, I assigned keywords, or descriptive codes to each clip. I began with several areas of interest—or sensitising concepts (Hammersley & Atkinson, 2007)—that were drawn from the literature and developed during the pilot study. Clips were assigned codes relating to the types of singing behaviour, the context in which the singing took place, the social context, the communicative intent, and the function, or purpose, of the singing. Within these areas, I began with a small number of deductive codes that I had developed in the pilot study or that were inspired by the literature and created additional inductive codes and categories as I worked through the data. The process by which I developed

and assigned codes relating to social context and communicative intent is described in detail in Chapter 7.3. In Chapter 8.1, I explain how I developed the initial descriptive function codes into conceptual categories and themes.

I worked through the data many times, focusing on different aspects of analysis and the different research sub-questions. For example, initial coding focused on the type of singing behaviour displayed, and subsequent coding focused on the social context, communicative intent, and function. Each clip was given any number of gerund codes reflecting what was happening in the clip. This resulted in a large number of codes, some of which were later amalgamated. A list of codes and categories is provided in Appendix B. The process of coding and analysis was one of constant comparison. As I developed new understandings through coding new data, I returned to data coded earlier to check and compare the compatibility of conceptual categories and themes.

Initially, the data were organised separately by child. In order to start looking for themes across the data set, I explored the relationships between the keyword groups or categories. I did this by drawing up a matrix and posing questions about how each category related to every other category. This matrix is presented in Appendix G. These questions allowed me to see certain patterns in the data and start to gather the clips into thematic collections—or constructs—based on the interplay between singing behaviours, context, social context, communicative intent, and function.

During the first phase of data collection and analysis, I coded all singing by everyone on the recording. In the second and third phases, I only coded the target child's singing. Singing by other members of the family and general observations on the home musical environment were recorded using analytical memos.

5.7.3 Progressive focusing

As described in Section 5.4, the data collection and analysis took place over a number of phases. During each phase, I used a process of progressive focusing (Cohen et al., 2011) to move towards a clearer understanding of the data and a gradual clarification of my research questions. Progressive focusing took place at the level of analysis rather than data collection. Because of the technology I used to collect my data, it was not practical to undertake theoretical

sampling. Theoretical sampling is a technique that requires a return to the field to gather additional data to “saturate” (Charmaz, 2006, p. 96) a developing theoretical category. As the onus was on the parent to operate the recording device, I was loath to make the process any more complicated than it needed to be. It was important that the parent simply be asked to turn on the device and let it run for as long as possible. Instead, after the first phase of data collection, I became more selective as to which parts of the recording I used as data. I moved from clipping all episodes of singing and other musical behaviours (e.g., playing instruments) by everyone captured on the recording to concentrating solely on the target child singing.

5.8 Ethical considerations

All research projects should be underpinned by moral principles (Mukherji & Albon, 2010), based on a set of values (Pring, 2000). According to the British Educational Research Association (BERA; 2011), educational research should be carried out with “respect for: The person; Knowledge; Democratic Values; The Quality of Educational Research; and Academic Freedom” (p. 5). Prior to commencing a project, researchers need to consider the possible ethical dilemmas that could arise during the course of the research (Creswell, 2009). Ethical considerations permeate all stages of research from initial design through analysis to the final presentation of the research (Mukherji & Albon, 2010). Ethical considerations are particularly important in research involving young children as the imbalances of power that exist between the researcher and the researched can be even more pronounced when the researcher is an adult and the subject is a young child (Farrell, 2005).

In designing and carrying out this research, I followed the guidelines set out by BERA (2011) and the UK Data Archive (www.data-archive.ac.uk). The research proposal gained approval from the Faculty Ethics Committees at Birmingham City University, where I began this research, and the University of Exeter, where I completed it. Ethics certificates are provided in Appendix H. In this section, I discuss issues of consent, privacy, and detriment arising from participation in the research. I found consent to be a particularly important issue and, therefore, discuss it in some detail.

5.8.1 Consent

Informed consent was sought from and given by a parent or guardian of each child participant. The parent was given a written explanation of the project (see Appendix I), a verbal explanation, and the opportunity to ask questions. The parent was asked to sign a consent form for both themselves and their child (see Appendix J).

The BERA guidelines advise researchers to facilitate child participants to give informed consent (BERA, 2011). The nature of the data collection method for this study meant that I was not present during the data collection. Therefore, I asked parents to gain consent from their child prior to commencing recording. During the initial parental interview, I explained the importance of this. I also provided written guidelines on how to go about gaining the child's consent (see Appendix I). These guidelines stressed the importance of gaining *voluntary* consent without resorting to coercion, a common tool used by parents (Dean, 2011). Due to their age, I felt that the children were unlikely to fully understand the project. However, I asked the parents to make sure they explained the research on a level the child might understand and, at the very least, tell the child that his or her voice would be recorded.

An important part of the consent process for the children was the research vest. To take part in the project, it was necessary for each child to wear a research vest containing the recording device for the duration of the recording session. Cuskelly (2005) points out that willingness to accept the requirements of a study can be indicative of a child's willingness to participate. Therefore, a child's refusal to wear the research vest was taken to mean the child did not consent to being part of the study. Parents were asked to be sensitive to the child's wish to wear the vest or not. If met with refusal, the parent was instructed to offer a different vest (they could choose between two different colour options and the adapted T-shirt) and, if the child was still reluctant, to try again on a different day. Continued refusal to wear the vest was interpreted as a wish not to take part and cancelled any verbal consent. Early in the study, one child seemed very keen to take part when her mother explained the recording process, but she refused to wear the vest. Her mother reported that she was very fussy about what she wore, so I adapted a plain T-shirt by sewing a pocket for the recorder on to the front using pretty fairy fabric. The child also refused to wear this and, therefore, was withdrawn from the study.

On several occasions, a child asked to remove the vest during a session. There were a number of reasons for this. Sometimes, the child found the vest uncomfortable or too hot and, sometimes, it impinged on their play, especially when they wanted to dress up. The parents were briefed to try to remedy the situation and ask the child to keep the vest on, but it was explained that, ultimately, the child's wish should be honoured, and the session stopped. Gaining consent from young children is an ongoing process (Flewitt, 2006). Alderson (2005) warns against assuming that a child who indicates a wish to withdraw consent is simply being difficult.

As the recording device regularly picked up voices other than that of the participant, I also gained consent from additional family members and visitors. This was facilitated through the key parent, who kept a visitor consent form and Informed Consent Information Sheet (see Appendix J for consent forms) to hand and requested visitors and other family members to sign it. I made sure my contact details were available for visitors in case they had questions, concerns, or did not wish to be included. Although the consent form was signed by visitors, in most cases consent from husbands and domestic staff was requested and given orally on the recording.

5.8.1.1 Parents and the process of gaining consent

Gaining consent from young children is not straightforward or clear cut, and the parents approached the task in different ways. In this section, I give some specific examples to illustrate the ongoing nature of consent and how parents dealt with the issue of consent. While listening to the recordings, I paid careful attention for indications that the child was unhappy with the recording. Sometimes, a child was at first unwilling to wear the vest. When this was dealt with sensitively by the parent and the child did not complain again, I took that to be consent. In these cases, the parent handled the situation in a way that seemed to be consistent with their parenting style and with sensitivity to the child's personality and their mood on the day. For example, at the beginning of his fourth recording, Alfie grumbled about having to wear the vest. His mother gave him a choice about which colour to wear and told him, truthfully, that it was the last time he had to wear it. He had been happy to wear it on other occasions and on this morning sounded rather tired and grumpy. Alfie's mother seemed to make the judgement that he was just in a bad mood and would have grumbled anyway. She put the vest on him and swiftly diverted his attention. After that, he

did not mention the vest again.

During the initial interview, I gave explicit instructions about the importance of not using coercion to get a child to wear the vest. Although all the parents seemed to understand this, many of them used some sort of coercion. I used my own judgement as a researcher, a parent, and an educator on a case-by-case basis to decide whether this was acceptable or not. As a rule, if the child seemed happy to wear the vest once it was on, I accepted that as consent. If the child continually asked for the vest to be removed, I interpreted that as a desire to withdraw. Harriet is a good example of this. At first, Harriet was very happy and excited about wearing the fairy top and the recorder. However, her mother reported that as soon as Harriet realised that wearing the top was something her mother wanted her to do, she started demanding sweets in exchange. Once she had the sweet, she was very happy to wear the top. This demonstrates that coercion works both ways. In Harriet's case, it did not seem to have anything to do with consenting to wear the top. She simply realised it would be a good way of getting a sweet. We cannot assume that children are always in a powerless position (Greene & Hill, 2005).

A more serious example is that of Karl. During his second recording, Karl seemed distressed at wearing the vest, and his wish to remove it was constantly refused by the parents. Part way through the recording, it became apparent that prior to the recording, Karl had been given a chocolate in return for wearing the vest, and his parents wanted to hold him to his bargain. I felt this was unfair, particularly as the child was evidently unhappy. I decided the most ethical thing to do was to discard the recording and contact the parents to discuss the child's continued involvement in the study. The parents reported that Karl was particular about what he would wear. As an alternative to the LENA vest, I made a small pocket of faux tiger-skin that Karl could pin onto his T-shirt. This seemed to be more acceptable to Karl, and he happily recorded at a later date.

5.8.2 Anonymity, privacy, and child safety

To ensure anonymity, all participants and members of their families are referred to by pseudonyms. As the recordings took place in the child's home and the recording device had a range of approximately 1.8 metres, there was a risk that the research could impinge on family privacy. To counter this, I made

sure that the parents understood the device would record the voices of those around the target child. This advice was given both verbally and on the Informed Consent Information Sheet. In several of the examples included in this thesis, real names were used. In the written examples, I have replaced these with pseudonyms; however, some of the audio examples submitted with this thesis contain real names. I have gained written permission from the parents to include these.

I was aware that there was a remote chance the recorded data could reveal a child to be in a situation at home that could cause real harm (physical, emotional, or sexual abuse) and, therefore, I had a plan in place to deal with this problem should it arise.

5.8.3 Detriment arising from participation in the research

The research took place in the child's home environment within the family's normal routines. The researcher was not present, therefore causing no anxiety regarding the presence of strangers in the home. The greatest imposition on the child was the need to wear the research vest. Farrell (2005) warns that research is often intrusive. My experience researching the spontaneous musical behaviour of my own son led me to understand how simple acts can be intrusive. As described in Chapter 1, I used the video function on a hand-held camera and a small digital voice recorder to document my son's musical behaviours over five non-consecutive days. On the sixth day, he withdrew his consent, frustrated by the presence of the recording devices and, possibly, his mother's unfamiliar behaviour (Dean, 2011).

In planning this research, I hoped the child participants would find wearing the research vest less of an intrusion than being followed around by a camera or other recording device. In practice, most of the children were willing to wear the vest at first and seemed to forget about it once it was on. However, several children did seem to tire of the vest, and the more often they were asked to wear it, the less likely they were to consent. It was largely due to this that I reduced the number of recordings I asked for after the first round of data collection.

Parents and other family members were also involved in this research and, therefore, it was necessary to consider potential detriment to them as well as to the target child. As a parent myself, I understand that parents and

caregivers often have a busy schedule. This research was designed to have minimal impact on parents. The recording device was simple to operate and needed only to be switched on and off. The parental interview took place at a time and place convenient to the parent, usually at their home or a local cafe. The parent was also asked to fill out a simple time log; however, this was optional. Nine parents did this. The greatest imposition for parents was the capture of their voices on the audio recording. I was careful to make it clear to the parents that their voices would be recorded when they were in close proximity to their child, and this was something they agreed to when they gave their consent. As means of reporting back to families, each family who participated in the study received a collection of excerpts of their child singing. For this I chose excerpts of a reasonable length that I thought the parents would enjoy.

5.9 Research validity and reliability

To produce valuable research, the research process must be rigorous. In the positivist paradigm, the terms *validity* and *reliability* have traditionally been used in relation to the quality of research. While some qualitative researchers have discarded these labels in favour of terms such as *trustworthiness* and *credibility* (Lincoln and Guba, 1985), others argue in favour of retaining the terminology even though the approaches to validity in qualitative research are very different to those used in quantitative research (Cohen et al., 2011; Morse, Barrett, Mayan, Olsen, & Spiers, 2002; Robson, 2002). In qualitative research, validity and reliability refer to the accuracy of the findings and the consistency of the researcher's approach (Creswell, 2009). Whatever terminology is used, it is important for qualitative, interpretivist research to be rigorous, accurate, and credible. Morse et al. (2002) stress that validity should be built into the research process through appropriate methodology, data collection, approach to data analysis, and theoretical thinking. Other authors set out a range of strategies for maximising validity. These strategies cover all aspects of research design and typically include prolonged engagement in the field, persistent observation, triangulation, peer debriefing, member checking, negative case analysis, comprehensive data treatment, constant comparative treatment of data, using simple counts and appropriate tabulations, and keeping a clear audit trail (Cohen et al., 2011; Creswell, 2009; Robson, 2002; Silverman, 2010). The need

for reflexivity is also an important part of achieving validity in qualitative research (Greene & Hill, 2005).

A concept that is often discussed alongside validity and reliability is generalisability. In the positivist tradition, research aims to arrive at findings that can be generalised beyond the sample. However, interpretivist research seeks to arrive at understandings of context-specific phenomena, and findings are usually particular to that context (Creswell, 2009). In this study, I used data collected from a relatively small number of middle-class children. The aim of this research was to explore this rich data in depth rather than attempt to generalise findings in relation to other groups of children. Below I discuss how I ensured validity through following appropriate processes of data collection and analysis, peer review, and researcher reflexivity.

5.9.1 Validity in data collection and analysis

Throughout my data collection and analysis, I used a number of strategies to ensure validity. Firstly, an important element in my research design was to make continuous recordings. This was to ensure that all episodes of spontaneous singing were collected rather than limiting the data collection to episodes of singing noticed or valued by the data collector. This provided an element of what Lincoln and Guba (1985) term “persistent observation” (p. 109). By listening carefully to each child's activities throughout the period of the recording, I was able to understand the context of the singing within a fairly lengthy time frame. This enabled an understanding of how each child used singing within their everyday lives.

Triangulation refers to the use of two more approaches to the study of a phenomenon to ensure validity. Typically, triangulation refers to methodological triangulation, which is the use of more than one method of collecting data (Cohen et al., 2011). However, triangulation can take place at different stages of the research process (Robson, 2002). I made use of triangulation at both the data collection and data analysis stages of the research process. I collected two types of data, audio recordings and parental interviews. Although more weight was given to the audio recordings, the parental interviews provided contextual background information about the children and the role of music within the families. I also used triangulation during the data analysis process, using both qualitative thematic analysis and simple numerical analysis to gain a better

understanding of the phenomenon of spontaneous singing at home.

Silverman (2010) is critical of the notion of triangulation in qualitative research. He proposes that valid findings are best achieved through data analysis methods, such as constant comparison, comprehensive data treatment, deviant case analysis, and using appropriate tabulations or simple counts. Constant comparison refers to constantly comparing and re-evaluating old data and current analytical thinking against newly collected data or ideas. In doing this, it is important to include all the data (comprehensive data treatment) and ensure that deviant or negative cases are not ignored, but the analysis is reworked until all data is meaningfully included. I used a process of constant comparative analysis and analysed all the data I collected. In my interpretive analysis of agency in spontaneous singing, some data were excluded. However, these were not negative cases. Rather, it was because I was unable to interpret the meaning and intentions of the singing due to lack of information from the audio recording. Silverman (2010) argues that where there is theoretical rationale, quantification—or simple tabulation—can provide meaningful interpretation of the data within qualitative research. I found that using simple numerical analysis was the best way of gaining a comprehensive overview of my data.

One of the important elements of research validity is how the research is conveyed or presented. Creswell (2009) suggests the use of thick description can enhance the reader's understanding by transporting them to the setting, helping them imagine and share in the experience. In Chapters 7 and 8, I present my interpretive findings through the use of vignettes, which are written with as much detail as possible to enable the reader to imagine the singing and its context. In addition, I add a narrative account of one recording with the aim of placing spontaneous singing within the wider context of one child's day.

Finally, I kept a research journal throughout the entire research process and made analytical memos during the data analysis. This, along with the raw data, provides a record and audit trail of the research process and my analytical decisions.

5.9.2 Peer debriefing/review

Member and peer-checking are strategies which are often used as a measure of reliability in research—that is, that the research is consistent and

dependable. Member checking requires that the researcher returns to participants to share and check raw data, such as transcriptions and/or interpretations. During the early stages of my data collection, I considered ways of engaging parents with the data I had collected. However, I decided against this, as, at that stage, I was not clear how I would facilitate this process, or how it would improve the research. The implications of this decision are discussed in Chapter 10.

Peer checking, or inter-rater reliability, involves the researcher submitting a portion of data, together with a coding schedule, to a colleague to independently code. Coding is then compared to establish accuracy rates. I gave careful consideration to the possibility of submitting a portion of my data for peer checking. However, I decided that peer checking would not contribute to the validity or reliability of my analysis. As an interpretive study, the analysis is based on my interpretation of the data, and it would be expected that another researcher, with different interests, would interpret the data differently. Moreover, my understanding of the data grew out of many, many hours of listening to the children singing within the context of their everyday lives. I decided it was unrealistic and inappropriate to expect a colleague to be able to achieve a similar level of understanding from a small number of audio clips of manageable size. Providing contextual information could have influenced a peer checker's interpretation too much to improve reliability.

Although I decided not to use peer-checking, I did engage in peer debriefing. Peer debriefing typically implies discussion of the data with colleagues. Researching as a distance student, I did not have easy access to academic colleagues. Therefore, I engaged in peer debriefing through presenting my research at conferences. I submitted my findings and audio examples to peer review through conference abstracts, spoken presentations, and written papers. Attendance at conferences enabled me to discuss my work with a number of experienced and esteemed researchers within the fields of music education, cultural psychology, neuromusicology and early childhood music psychology. Notably, at the 2015 Australian Society of Music Education (ASME) conference and the 2016 International Conference for Music Perception and Cognition (ICMPC) I received very positive feedback from leading researchers who attended my presentations. The conferences I presented at are listed in Table 5.4.

Table 5.4*Conferences as Peer De-briefing*

Conference		Location	Presentation format
RIME 2013	The 8 th International Conference for Research in Music Education	Exeter, UK	Spoken presentation
ANZARME 2014	The 36 th conference of the Australian and New Zealand Association of Research in Music Education	Queenstown, NZ	Spoken presentation
ANZARME 2015	The 37 th conference of the Australian and New Zealand Association of Research in Music Education	Melbourne, Australia	Spoken presentation
ASME 2015	The 20 th National Conference of the Australian Society of Music Education	Adelaide, Australia	Spoken presentation and written paper
ICMPC 2016	The 14 th International Conference for Music Perception and Cognition	San Francisco, USA	Spoken presentation
ANZARME 2016	The 38 th conference of the Australian and New Zealand Association of Research in Music Education	Auckland, NZ	Spoken presentation
ECME 2016	The 17 th Early Childhood Music Education Research Commission of the International Society of Music Education International Seminar	Ede, The Netherlands	Full paper accepted but not presented.
NZARE 2016	New Zealand Association of Research in Education Annual Conference	Wellington, NZ	Spoken presentation and poster
WAAE 2017	7 th World Arts Alliance for Education Conference (22–25 November, 2017)	Auckland, NZ	Abstract accepted for spoken presentation

5.9.3 Researcher reflexivity

Researcher reflexivity is important in any research as the position of the researcher and their attitude towards the topic and subjects impacts on all aspects of research design and analysis (Peshkin, 2000; Rogoff, 2003). While the researcher's perspective is an important part of qualitative research, Hammersley and Atkinson (2007) warn that the researcher "must try continually to be aware of how his or her presence may have shaped the data" (p.177). This research, including the coding and themes I generated, reflects my own

interests as a researcher, early childhood music educator, musician, and parent.

Research has the potential to change one's perspective. As a parent of young children (at the onset of this research), I identified and empathised with other parents, and this is the perspective I thought would unavoidably carry through to my research. However, I found that the recording technology I used placed me virtually “with” the children and listening to the world from their point of “hearing”. This enabled me to begin to understand the child's perspective, and I found myself empathising with the children in their interactions with others. Of course, at times I found myself sympathising with the parents, but more often I found myself feeling the difference in power between the adults and the children and able to identify with the frustrations the children experienced. At the 2016 ICMPC conference in San Francisco, I was lucky enough to speak with other researchers who were using the LENA system. It was interesting to discover that they had had similar experiences.

5.10 Summary

In this chapter, I have explained how I designed and carried out my research. I used an ethnographically inspired exploratory research methodology and used the LENA system to record young children's singing through non-participant observation. This novel approach allowed the collection of data in the home, which is a challenging space to access. I collected over 183 hours of audio recording from 15 three- and four-year-old children. The audio data were supplemented by informal interviews with the mothers of the children. The data were collected in three phases in the UAE and New Zealand.

Data were analysed both quantitatively, to establish the extent of spontaneous singing, and qualitatively, to interpret how spontaneous singing is used. For the qualitative analysis, the data were treated using the constant comparative method to construct conceptual themes. I discussed the characteristics of the research design that provide validity to this study. Researching young children in their own homes required careful consideration of ethics. In Section 5.8, I discussed these, along with the ethical issues that arose around parenting styles, consent, and coercion. In the next part of this thesis, I present the findings of the study.

6. FINDINGS 1

THE NATURE AND EXTENT OF SPONTANEOUS SINGING AT HOME

6.1 Introduction

The collection and analysis of the audio data resulted in a large amount of numerical data relating to the number of times singing behaviours occurred and the duration of those behaviours. Maxwell (2010) argues that numerical data can be useful in a qualitative study to identify patterns, present evidence for interpretations, and contribute to internal generalisability. In this chapter, I make use of numerical data to demonstrate the extent of singing behaviours. Analysis of the data is presented using tables and graphs. This is not intended as a rigorous quantitative analysis but to provide a clear visual overview of the data. An understanding of the amount and frequency of singing behaviours provides a useful starting point to the thematic qualitative analysis presented in Chapter 8.

The analysis in this chapter incorporates all behaviours that could more accurately be described as musical vocal behaviours. This includes singing, humming, chanting, and vocal play that occurs alongside singing, humming, or chanting. Later, in Chapter 8, the qualitative analysis takes a stronger focus on singing and chanting, with humming taking a lesser role. I begin this chapter with a description of the children and families who participated in each phase of the study. These details were collected during informal interviews with the mothers of the children. The descriptions are followed by an analysis of the different types of singing behaviours exhibited by the children along with the frequency and duration of these behaviours.

6.2 Introducing the children and their families

In this section, I describe the children and their families. These descriptions are based on data gathered during the parental interviews. Naturally, some parents were more verbose than others, and the amount of information collected about each child differs accordingly. Throughout this section, I refer to the children

and their families in the present tense as this research captures a brief moment in their musical lives.

6.2.1 The children in phase one

As explained in Chapter 5.4, the first phase of data collection took place in the UAE. The children in this phase were all living with both parents and all except Karl had siblings. Three of the families also had live-in maids, and one had a full-time nanny who did not live with the family. The maids all helped care for the children. Although the cost of domestic staff in the UAE is much more affordable than in the UK, by no means can all expatriate families afford—or choose—to employ full-time domestic help. The families' time in the UAE ranged from less than a year up to 13 years. Some families had come straight from the UK, and others had been expats elsewhere prior to arriving in the UAE. All the families lived in large villas with some outdoor space, although during the period of data collection, Karl's family moved to an apartment. Table 6.1 provides a summary of the data collected during the first phase of data collection, including data from the pilot study. The pilot study began in March 2013, and the final recording in this phase took place in January 2014.

Table 6.1

Audio Data Collected in Phase One.

Name	Age (yy:mm)	Number of recording sessions	Total time recorded (hh:mm:ss)
Alfie	4:1	4	24:22:48
Emma	4:9	4	20:15:55
Karl	4:0	2*	4:06:00
Leo	3:6	4	18:45:41
Xanthe	3:3	4	18:03:00
Harriett	3:1	7**	16:48:00
Total		25	102:21:24
* Karl recorded four times but two of the recordings were unsuitable (see Section 6.2.1.3).			
** Harriet made a number of shorter recordings			

6.2.1.1 Alfie

Alfie is four years old. He lives with his parents and his two older sisters, aged seven and five, in a villa in a large housing compound on the outskirts of a large city in the UAE. His family are British and have been living in the UAE for two years. Alfie is cared for at home by his mother, Helen. Neither of Alfie's parents had any formal music education. However, Helen loves to sing and taught herself to play the piano. Alfie's father has recently taught himself a few basic chords on the guitar. Helen reports that she sings to herself all the time. She often sings to the children in the evenings before they go to sleep and also sings songs they can dance to, like *Dingle Dangle Scarecrow* or *Sleeping Bunnies*. Helen plays the piano almost every day while the girls are at school. Sometimes, Alfie dances as she plays. The family have an electric piano, an acoustic guitar, an electric guitar, and several toy instruments. Popular music radio is usually on during the day, especially when Alfie's father is at home. Alfie and his mother attend a weekly toddler music class, which is run by the primary music teacher at the school the girls attend. Helen reports that Alfie sings a lot at home. He sings songs he has learnt and songs from the radio. He sometimes makes up words to fit tunes he knows.

Alfie recorded on four occasions. The first two recordings were for the pilot study, and these were followed approximately three months later with two further recordings. Alfie recorded on a Monday morning at home with his mother; a Thursday morning with his sisters and mother; a Tuesday morning with his mother through to the afternoon when his father and sisters got home; and a Wednesday morning with his mother and her friend.

6.2.1.2 Emma

Emma is four years old. She lives with her parents, older sister (six), baby brother (15 months), and their Ethiopian maid in a large villa close to the centre of a large city. Her family are British and arrived in the UAE about nine months before the data collection took place. Prior to this, they had spent a year in Los Angeles. Emma attends school full-time in Foundation Stage One at a British-curriculum school. Emma's mother, Karen, learnt the clarinet at school, but stopped playing when she was about 15. Emma's father, Peter, has taught himself the guitar and plays at the request of the children. Karen often puts recorded music on for the children. When they were younger, this was usually

nursery rhymes, but now she tries to put on pop music so the eldest daughter “will know what the other kids talk about at school” (interview with Karen, 17/06/2013). The children have a small box of handheld percussion instruments and toy instruments. They also have a large electronic keyboard, two recorders, and are allowed to use Karen's clarinet and Peter's guitar. They have a karaoke machine with a microphone, that is often used in games. During car journeys, the family listens to music from Karen's collection on her iPhone. At home, Karen listens to popular music radio. In the weekends, the family often watches a Disney movie together. Karen reports that she sometimes initiates singing as an activity they can all join in with. Their current favourite is *Doh Re Mi* from *The Sound of Music*. Karen often records the children singing *Happy Birthday* to send to friends and family back home.

Karen reports that Emma loves performing and being the centre of attention. She has recently started putting on recitals, using the microphone from the karaoke machine to perform songs with "very random lyrics" (interview with Karen, 17/06/2013). Emma and her sister often put on shows together, frequently inspired by their collection of dress-up clothes. Emma recorded on four weekdays after school until bedtime when she was with her mother, her siblings, and their maid.

6.2.1.3 Karl

Karl is four years old. He is the only child of an Australian mother and American father who are both long-term expatriates, having lived in the UAE for 13 years and 9 years, respectively. Karl lives with his parents and his Filipina nanny, who has been with the family since Karl was born. Karl's parents both work full-time. Karl attends a Montessori nursery four days a week and is cared for by his nanny. His father's work hours vary, and he is often home with Karl in the afternoons. Karl's mother, Linda, learnt the flute as a child. She played in the school band and took part in musicals, singing and acting. Karl's father never had formal music lessons but often listens to music and has a large and eclectic music collection. Both parents like to sing and make up silly songs. Karl has many toys that make music when a button is pressed, but he does not have any instruments. Karl has his own first-generation iPod that he has restricted use of. His parents have downloaded his favourite songs from their own collections, and Linda reports that Karl tends to listen to the same song over and over again. Outside the home, Linda thinks there is singing during circle

time at nursery, including singing in Arabic as Karl has learnt *Happy Birthday* in Arabic and an Arabic alphabet song. Linda reports that Karl sings a lot at home. He usually sings songs from the radio with improvised lyrics. He also loves to dance and mimics his father's dance moves. Karl loves the songs that accompany the credits on the animated movies he watches (e.g., *Madagascar*). Karl recorded on a Saturday afternoon when he was at home with his parents and nanny and on a Friday when he and his nanny were home alone. A further two recordings were unsuitable as Karl did not consent in one and he was out of the house with his father during the other.

6.2.1.4 Leo

Leo is three years old. He lives with his parents, older brother (five), baby brother (11 months), and their Filipina maid in a villa in a small housing compound. Leo's father is German and his mother is American. Leo's older brother has recently started at a German School. Their father tries to speak German with the children, but English is the dominant language in the home; Leo currently does not speak any German. Leo attends a Montessori nursery four mornings a week and is cared for at home by his mother and their maid, Maria. Leo's mother, Trisha, is concerned that Leo has a speech delay, possibly caused by exposure to two languages.

As a child, Trisha learnt piano for a year and sang in the Sunday School choir. Leo's father sang in his school choir and was an accomplished organist; however, he no longer plays. Trisha often sings to the children, making up songs and changing the words of songs they know. She uses songs to assist in daily routines. She reports that she used to sing to them at bedtime, but they now say a prayer together. Trisha encourages the older boys to sing to the baby when he is upset, especially when they are in the car. The family listen to music in the car, sometimes children's CDs and sometimes popular music radio. They have an iPod in the kitchen. The recordings took place in December and, during this time, Trisha and the children were listening to a lot of Christmas music. The children also have a CD player upstairs in their playroom where they listen to music or stories. Leo still needs help to operate the CD player, but will often ask to listen to music. He also likes to dance to music, and his current favourite is *Gangnam Style* by Psy. The children have a few small percussion instruments and some toys that play music. Trisha reports that Leo seems to enjoy singing at nursery, but he does not sing much at home. Leo made four recordings.

Three of these were on weekday afternoons and one on a weekend morning. Leo's brothers, mother, and maid are present during some of each of the recordings and, on one occasion, a neighbour came to play.

6.2.1.5 Xanthe

Three-year-old Xanthe, her parents, and her eight-year-old sister are from Australia. They have been in the UAE for two and a half years and live in a villa in a large housing compound. Xanthe is cared for by her mother at home. Xanthe's mother, Anna, had piano lessons and singing lessons as a child. She loved the singing lessons but endured the piano lessons only because her parents wanted her to. Xanthe's father learnt the clarinet at school. Anna listens to a wide variety of popular music at home. The children have a bag of musical instruments that are used almost every day and are often included in the girls' games of "schools". According to Anna, both the girls sing a lot at home. They make up songs, dance, and Xanthe learns songs that her sister brings home from school. Xanthe likes watching musicals on DVD. Her current favourites are *Mary Poppins* and *Annie*. Until recently, Anna and Xanthe were attending a toddler music group, but Anna feels Xanthe has now outgrown it and would prefer to attend a class on her own. Xanthe made four recordings, all on weekday mornings when she was at home with her mother. In one of the recordings, the rest of the family are also present for a short time before Xanthe's father and sister leave the house for work and school.

6.2.1.6 Harriet

Harriet is the youngest child in this phase of the study, having only just turned three. Her parents both work full-time, returning home about four o'clock in the afternoon. During the day, Harriet and her baby sister (17 months) are cared for by their Filipina nanny. Harriet also attends nursery three days a week. Harriet's parents are both British; however, her mother, Georgina, speaks French when she is alone with the children. On a typical day, the family eat together and then have a bath and bedtime routine that both parents are involved in. The family chose to record during this time rather than when the nanny was with the children. Because this time is relatively short, Harriet made seven shorter recordings.

Harriet's mother, Georgina, learnt the recorder, clarinet, and piano as a child. Her mother, Harriet's maternal grandmother, played the piano and violin,

and music lessons were considered a normal part of growing up. However, once at secondary school, Georgina's main focus became dance. Georgina also sang in choirs at school. Harriet's father came from a non-musical home and, although his father played the guitar, his mother, Harriet's paternal grandmother, actively discouraged music in their home.

The family sing together a lot, particularly around the bath and bedtime routines. Georgina values this time when the family are together, and she has made singing part of these routines. They sing nursery rhymes, listen to children's CDs (usually Disney), and dance together. Harriet has a wooden xylophone and some maracas. She also has a *Let's Rock Elmo* toy that she got when she was about 18 months old. Elmo sings six different songs, dances, and plays instruments. The whole family sing and dance with Elmo, and the toy has become a key feature of family music-making sessions.

In the car, the family listens to children's CDs and sometimes the radio. At home, they listen to children's CDs or classical music in the kitchen. The nanny often plays her own Tagalog music to the children. Harriet learns songs at nursery, and she and her baby sister attend a weekly toddler music class at the school where her mother works. The nanny takes them, but sometimes Georgina can meet them there and join in. Georgina has noticed that Harriet mostly sings when she is playing on her own. However, she does not play alone very often as she is usually trying to organise her sister to play with her.

6.2.2 The children in phase two

Once again, all three children in this phase of data collection were the children of English-speaking expatriate families in the UAE. The families in this phase were asked to record on two or three occasions. The reasons for this reduction in recording time are discussed in Chapter 5.4. The recordings in this phase were made during May and June of 2014. This is an extremely hot time of year in the UAE. The weather, combined with the fact that two of the children in this phase lived in high-rise apartments, means that these recordings feature very little outdoor play. Table 6.2 summarises the data collected during this phase.

Table 6.2*Audio Data Collected in Phase Two*

Name	Age (yy:mm)	Number of recording sessions	Total time recorded (hh:mm:ss)
Rachel	3:0	3	11:25:23
Maggie	4:2	3	6:54:48
Caitlin	3:1	4	13:43:31
Total		10	32:03:42

6.2.2.1 Rachel

Three-year-old Rachel lives with her parents and five-year-old brother in an apartment some distance from the centre of the city. She is cared for at home by her mother, Jane, and has a babysitter some afternoons while her mother works as a tutor. Rachel's parents were both keen musicians when they were younger. Jane sang in choirs at school and at university. She also sang in her church choir and in a barbershop group. She played the cornet while at school and university and played in a brass band after leaving university. Rachel's father played the trombone at school.

At home, Rachel and her brother listen to children's CDs and to music through TV programmes and games on the iPad. They also own some books with CDs. Sometimes, Jane plays jazz on the iPad at night to help them sleep. The children have several handheld percussion instruments, a recorder, and a toy piano. During the interview, Rachel tells me that she has maracas and pasta shakers. Jane reports that Rachel uses the instruments regularly. Outside the home, Rachel and her mother attend a weekly playgroup session, which always concludes with singing, and they have recently started attending a music group once a week. The family regularly attend church where they join in with congregational singing. Rachel was recorded on three occasions: a Saturday morning when the whole family was present; a Tuesday late-morning to mid-afternoon when Rachel was at home with her mother, and, later, her brother; and a Thursday morning when Rachel was at home with her mother.

6.2.2.2 Maggie

Maggie is the four-year-old daughter of a secondary school music teacher. She lives with her parents and younger sister (two and a half) in an apartment in the same compound as Rachel. Maggie attends school full-time in

Foundation Stage One at the British-curriculum school where her mother, Rose, works. She has weekly music classes at school and often attends rehearsals with her mother after school. According to Rose, Maggie picks up a lot of songs from these rehearsals. While Rose has a music degree and a background in piano and singing, Maggie's father "is not at all musical" (interview with Rose, 18/05/2014). Rose reports that she sings nursery rhymes and children's songs with her daughters and tries to teach Maggie songs that will support her learning at school. At home, Maggie's parents usually listen to popular music radio. The girls have a toy keyboard but no other instruments or musical toys. Maggie, her sister, and their friends often put on shows and concerts for their parents. Interestingly, Rose reported that Maggie and her sister tend to be very possessive about songs. If one sister considers a song to be "hers", the other sister is not allowed to sing it. Maggie completed three recordings, all during the weekends with her whole family present: a Friday morning (Friday is the first day of the weekend in the UAE), the next Friday late-afternoon, and Saturday late-morning.

6.2.2.3 Caitlin

Caitlin's family are Scottish and have been living in the UAE for three years. They live in a villa in a large housing compound in the centre of the city. Three-year-old Caitlin has two older sisters (seven and five), and the family have a live-in maid from Ethiopia. Caitlin's mother, Carla, learnt the saxophone at school and sang in choirs at school and university, and Caitlin's father learnt the oboe. The family have a long car ride to and from school each day and, during this time, they listen to talking books or music from Carla's collection. The older girls usually want to listen to stories, but Caitlin prefers listening to music. At home, the girls often put on music to dance to and put on dance shows together. The children have a few toy instruments, but they are not used very often. Caitlin attends nursery three mornings a week and participates in singing as part of the nursery routine. She also attends a playgroup run by her mother once a week, which always concludes with singing. Before starting nursery, Caitlin and her mother attended a weekly toddler music session. According to Carla, Caitlin mostly sings in the car where she quite often sings non-stop for an hour. Caitlin recorded on four occasions: a Thursday late-afternoon at home with her mother and sisters; Sunday (a week day in the UAE) late-morning at home with her mother; Monday morning at home with the maid

and later her mother; and Tuesday late-afternoon at home with her mother and sisters.

6.2.3 The children in phase three

The data in phase three was collected in New Zealand between January and May (mid-summer to early winter) 2015. Six children were recruited through word of mouth and a rural playgroup. Whereas the children in the UAE were all living in a large city, the children in this group were living in more diverse locations. Esther, Oliver, and Jacob lived in a large city. James lived in a smaller city, and Milly and Thomas both lived in rural areas.

Early childhood education and care in New Zealand is diverse and requires a brief explanation. Several of the children in this study attend *day care*. These are early childhood education and care services that provide all-day or flexible provision and are typically used by working parents. Other children attend *kindergarten*. Kindergartens in New Zealand are run by fully qualified teachers and offer set morning or afternoon sessions for same-age groups of children. Several of the children attend a *playgroup*. Playgroups are parent led, and children attend with their caregiver. Some playgroups, such as the one Thomas attends, employ a qualified leader. There are several other types of early childhood provision, but these are the ones that pertain to the children in this study. Esther, Oliver, and James all attended day care for part of the week while their mothers worked; the other children attended sessions at kindergarten or playgroup but were largely cared for at home by their mothers. All of the children except Oliver had siblings. Oliver was growing up in a bilingual household with both Dutch and English. As in phase two, the parents in this phase were asked to record their children on 2–3 occasions for 4–6 hours, up to a total of 12 hours. Table 6.3 summarises the data collected during this phase.

Table 6.3*Audio Data Collected in Phase Three*

Name	Age (yy:mm)	Number of recording sessions	Total time recorded (hh:mm:ss)
Milly	4:5	2	8:31:21
Esther	4:10	3	7:53:32
Oliver	3:1	3	10:10:27
Jacob	3:7	2	7:36:48
Thomas	3:3	2	5:07:15
James	3:8	3	9:46:24
Total		15	49:05:47

6.2.3.1 Milly

Four-year-old Milly lives with her parents and her two-year-old brother in the countryside outside one of New Zealand's more isolated towns. The family have a rural lifestyle with plenty of outdoor space, pets, and a large vegetable garden. Milly attends kindergarten three mornings a week in town and is cared for at home by one or both her parents. Milly's mother learnt the piano for a couple of years as a child but does not consider herself to be particularly musical. Milly's father enjoys singing and sang a lot in church when he was young. He also enjoys listening to music and often has music playing at home. Milly loves Disney movies. Her current favourite is *Frozen*, and she knows most of the songs from the movie. Milly made two recordings, both on weekdays during the summer holidays when both parents and her brother were present.

6.2.3.2 Esther

Esther is nearly five and is the oldest child in the study. She lives with her parents and seven-year-old brother. She attends day care four days a week while her parents work. Her father travels regularly and her mother works shifts, so Esther is often also cared for by her maternal grandparents. Esther's mother, Ellen, learnt the recorder throughout primary school and then the flute until she was in her early teens. She also sang in her primary school choir and attended holiday music programmes. Esther's father learnt the guitar as a child. Like Milly, Esther loves Disney movies and currently knows all the songs from *Frozen*. Esther recorded on a Tuesday morning at home with her mother after walking her brother to school; on a Sunday morning at home with both her parents; and on a Wednesday afternoon at home with her mother, brother, and a friend.

6.2.3.3 Oliver

Three-year-old Oliver is an only child. His mother is Dutch and his father is originally from Zimbabwe. Oliver's mother speaks Dutch to Oliver, but the family speak English when they are together. During the recordings, Oliver almost exclusively spoke English. Oliver attends day care three days a week and is cared for at home by his mother. Oliver's mother, Kate, has been learning the piano for the past couple of years, and Oliver enjoys playing the piano with her. Apart from the piano, there are no other instruments in the home. Oliver's father likes to sing. Kate has always sung to Oliver, and he now sings many of the songs himself. Oliver sings a lot at home, mostly songs he has learnt, but he also makes up songs. Kate has noticed that he sings to himself in bed during nap time. Oliver and Kate attend a baby gymnastics class that always begins with some music to dance to. Until recently, there was a teacher at Oliver's day care who sang and played the guitar, but she has left and Kate is unsure how much singing they do now. Kate reported that she and Oliver really enjoyed making the recordings. Oliver recorded on Saturday and Sunday mornings at home with his parents and on a Tuesday morning at home with his mother and their house guest.

6.2.3.4 Jacob

Three-year-old Jacob lives with his parents, seven-year-old sister, and five-year-old brother. He attends kindergarten two days a week and is cared for at home by his mother the rest of the week. Neither of Jacob's parents consider themselves to be musical. Kathy had piano lessons for a year as a child but, apart from that, neither parent has learnt an instrument, nor do they consider themselves to be singers. Kathy reports that she sang to all her children as babies but not as they got older. The older children like to listen to music in the car and, at home, the grown-ups sometimes put their own choice of music on. The family have a piano at home, and Jacob's sister is having piano lessons. They also have two recorders, a toy drum, and a ukulele, although the strings are broken on this. Kathy reports that she sometimes hears Jacob sing songs he has learnt at kindergarten, but he does not sing much at home. His older brother sings and plays the piano more often than the other two children. Jacob made two recordings, the first on a Friday morning at home with his mother and the second on a Wednesday morning at his grandmother's house.

6.2.3.5 Thomas

Thomas is three years old. He lives with his parents and younger sister in a rural community outside a small city. Neither of his parents have had formal music lessons, but Thomas's mother, Sarah, loves to sing and his father plays a bit of guitar. Sarah likes to listen to music in the car. She will often sing to the children in the car to calm them down and also sings at home to help with daily routines. Thomas's father listens to music at home and sometimes plays the guitar and sings to the children. Thomas and his sister enjoy watching the New Zealand Top 40 and children's music shows, such as *The Wiggles*, on TV. They have a CD player that they can use and like to put on and change the CDs by themselves. They have a number of instruments and musical toys at home, including a ukulele, xylophone, toy keyboard, and maracas. They use the keyboard regularly. The children also have many song books, such as *Wheels on the Bus*, *Jingle Bells*, and *Do your Ears Hang Low?*, and various lullabies, which Sarah sings to them. Thomas attends kindergarten twice a week and goes to the local playgroup with his mother and sister once a week. At other times, he is cared for by his mother at home. For a while, Thomas and his mother went to a toddler music class, and they currently go to a gymnastics class where there is always music playing in the background. Thomas made two recordings: a Tuesday afternoon after arriving home from playgroup and a Saturday at home with his mother, grandmother, sister, and his baby cousin.

6.2.3.6 James

Three-year-old James lives with his parents and his one-year-old brother in a small city. His maternal grandparents live with the family for much of the year and were present during the week James made his recordings. James attends day care three times a week while his mother works and is also cared for at home by his mother and grandparents. Both of James's parents grew up in very musical homes. James's mother, Marie, plays the violin and also learnt the piano to a high standard. She regularly plays with the local community orchestra and plays guitar and bass guitar at church. James's father learnt the clarinet and saxophone as a child and now plays the drums and sings. Both parents are both actively involved in providing music at church. There is a lot of singing in James's home. The adults sing with the children throughout the day, and the family all sing grace together before their evening meal. Recorded

music is not used much, but when Marie sometimes puts on children's CDs, James listens very intently. The children have many toys that play music. They used to have an electronic keyboard, but that no longer works. James has a small violin that once belonged to his mother, which he sometimes plays with. James attends a weekly music class for three- and four-year-olds. The family attends church regularly, and James enjoys singing at church. Marie thinks they also sing at day care as James has learnt some new songs there. James made three recordings: on a Thursday morning at home with his mother and grandparents; Friday afternoon at home with his mother, grandparents, and visitors; and on a Saturday morning with his parents and grandparents.

6.3 What is the nature and extent of spontaneous singing at home?

To understand the role of spontaneous singing in the everyday home lives of young children, it is important to know how much spontaneous singing the children engage in. Knowing how much or how little a child sings and what type of singing behaviours he or she engages in provides a useful starting point for a qualitative analysis focused on musical agency. The children's singing behaviours can be measured in terms of frequency (the number of times a certain type of singing behaviour occurred) and duration (how long a certain type of singing behaviour lasts). In this section, I demonstrate the extent of spontaneous singing in the lives of the participants.

A total of 183 hours and 30 minutes of continuous audio recording was collected from the 15 children who took part in the study. Within these recordings, 1,475 episodes of spontaneous singing were identified, totalling 9 hours 3 minutes of singing. The amount of singing varied enormously from child to child. Table 6.4 displays the length of time each child was recorded and how much of that time they spent singing. As each child was recorded for a different amount of time, the total time spent on spontaneous singing is also expressed as a percentage to allow for comparison. The total duration of spontaneous singing ranges from 0.5% to 13% of time recorded. On average, the children spent 4.8% of their recorded time engaging in spontaneous singing. The least prolific singers were Jacob and Rachel, and the most prolific were James, Oliver, and Alfie. Possible reasons for this are discussed in Chapter 9. The amount a child sang did not appear to be influenced by their age. The three

most prolific singers were all boys; however, the sample is not large enough to make generalisations about age or gender.

Table 6.4

Extent of Spontaneous Singing

Name	Age (y:mm)	Total time recorded (hh:mm:ss)	Episodes of spontaneous singing	Duration of spontaneous singing (hh:mm:ss)	As % of time recorded
Alfie	4:1	24:22:48	321	2:16:35	9.3%
Emily	4:9	20:15:55	195	0:42:23	3.5%
Karl	4:0	4:06:00	39	0:09:44	4.0%
Leo	3:6	18:45:41	189	0:56:27	5.0%
Xanthe	3:3	18:03:00	115	0:20:44	1.9%
Harriett	3:1	16:48:00	57	0:16:41	1.7%
Rachel	3:0	11:25:23	28	0:06:24	0.9%
Maggie	4:2	6:54:48	44	0:08:58	2.2%
Caitlin	3:1	13:43:31	52	0:33:38	4.1%
Milly	4:5	8:31:21	76	0:28:03	5.5%
Esther	4:10	7:53:32	38	0:23:21	4.9%
Oliver	3:1	10:10:27	149	1:08:25	11.2%
Jacob	3:7	7:36:48	9	0:02:27	0.5%
Thomas	3:3	5:07:15	46	0:13:13	4.3%
James	3:8	9:46:24	117	1:16:28	13.0%
Total		183:30:53	1475	09:03:31	

6.3.1 Singing behaviours

The singing behaviours displayed by the children are similar to behaviours described in the literature (e.g., Moog, 1976; Moorhead & Pond, 1978; Young, 2006). This is an important finding in itself as the quantity of data collected for this study substantially adds to the existing literature and confirms types of singing previously observed. Singing behaviours are more accurately described as musical vocal behaviours as they include humming, chanting, and some instances of vocal play. The children sang using syllables, nonsense words, and clear lyrics that they had learnt or invented. They sang songs they had learnt formally and informally, and they invented their own songs. They also hummed, chanted, sang as they played instruments, and engaged in vocal play. The children often moved quickly between different singing behaviours,

particularly between humming, singing, and vocal play. Most of the singing took the form of brief snatches of song rather than sustained periods of singing. These findings add substantial confirmatory evidence to the existing literature.

The children's singing displayed a wide range of influences from within the home, outside the home, and wider cultural influences through the media. They sang nursery rhymes, children's songs, songs from children's movies (especially Disney movies) and musicals, songs from children's TV shows, and pop songs intended for adults. Karl engaged in beat-boxing, and two of the children in the UAE sang *Happy Birthday* using approximated Arabic. Three of the children in the UAE who attended school or who had siblings at school, sang the tune of the UAE national anthem, which is sung every day at school (in Arabic).

The actual singing (excluding chanting, humming, and vocal play) can usefully be grouped according to the content on which it is based. This results in two distinct categories of singing: *improvisatory singing* and *singing based on learnt songs*. These categories arose in conjunction with the categories of social and self-directed singing, which are discussed in the following section. During the analysis, it became clear that the children use improvisatory singing and singing based on learnt songs in different social contexts.

The category improvisatory singing includes all instances of singing that did not seem to be based on songs that the children had learnt. Of course, I was not familiar with all the songs the children sang, and there is a possibility I may have overlooked some learnt songs. However, learnt songs (usually children's songs and pop songs) were generally recognisable by features such as melodic contour and style. Improvisatory singing included singing on syllables and nonsense words and singing invented songs with words. Improvisatory singing consisted largely of singing using nonsense words and syllables.

Singing based on learnt songs includes variations on learnt songs and singing the tune of a learnt song using nonsense words or syllables. Even in this category, most of the singing contained an element of improvisation. Interestingly, the children rarely sang or even attempted to sing, a learnt song in its entirety. The exception to this is when they were performing a song for someone. Caitlin sang *Once I Caught a Fish Alive*, *Twinkle Twinkle*, and *The Alphabet Song* when her mother or the maid were listening. Emma sang *Jack*

and *Jill* and *Hey Diddle Diddle* when she was performing a show for her sister. Esther attempted to sing complete Disney songs from the film *Frozen*, but had trouble with some of the lyrics. Jacob sang *The Alphabet Song* to his grandmother. He gets the last few words muddled up but seems to intend to sing it in full. James sings *Baa Baa Black Sheep* for his family and, on another occasion, he sings it in French. Leo sings *Santa Claus is Coming to Town* for the maid. Rachel sings *Twinkle Twinkle* to her mother.

Several of the children also sing complete songs when they sing with an adult: Alfie sings *My Ship* with his mother; Harriet sings *Baa Baa Black Sheep* with her nanny and nursery rhymes with mother; and Emma sings *Doh a Deer* from *The Sound of Music* with her mother and sister. The children's performances are discussed more fully in Chapter 8.3.3.4. While there is a significant overlap between humming and both categories of singing, there are only thirteen instances in which a child sings a learnt song and improvises within the same episode of singing.

Humming and chanting are included as distinct categories. Humming ranged from humming tunes that the children had learnt and improvised melodies to rather limited monotonous humming. Humming has not been broken down into similar categories as singing because the children used humming in a more homogeneous way. Chanting was rhythmic and used a sing-song voice on one or two notes. As Moorhead and Pond (1978) observe, the most important element of chant is the rhythm, with the words being made to fit. The children sometimes—but not always—used the descending third ur-chant as discussed by Moorhead and Pond (1978). Chant used either invented words or nonsense syllables.

Table 6.5

Type, Frequency and Duration of Singing Behaviours

Singing behaviour	Number of episodes	Total duration (h:mm:ss)
Improvisatory singing	706	4:18:04
Singing based on learnt songs	445	3:55:34
Humming (exclusive)	306	1:07:28
Chant (exclusive)	31	0:05:58
	1488	
	(13 instances of overlap)	

Table 6.5 shows the total frequency and duration of the two types of singing behaviour, together with instances of exclusive humming and chant. Vocal play is not included as a separate line, as only instances of vocal play that occurred together with singing were included in the data for analysis. The children often moved between humming and singing within one episode of singing and therefore there is considerable overlap between this category and the two singing categories. In table 6.5 only instances of humming and chant that occur on their own are listed separately. An additional seven instances of chant and 117 instances of humming occurred during episodes of singing and are therefore included in either the 'improvisatory singing' or 'singing based on learnt songs' categories. Singing episodes that include humming are indicated on the graph in Figure 6.1. The total number of singing episodes includes 13 episodes that are included in both the singing categories. Figures 6.1 and 6.2 show the frequency and duration of the singing behaviours.

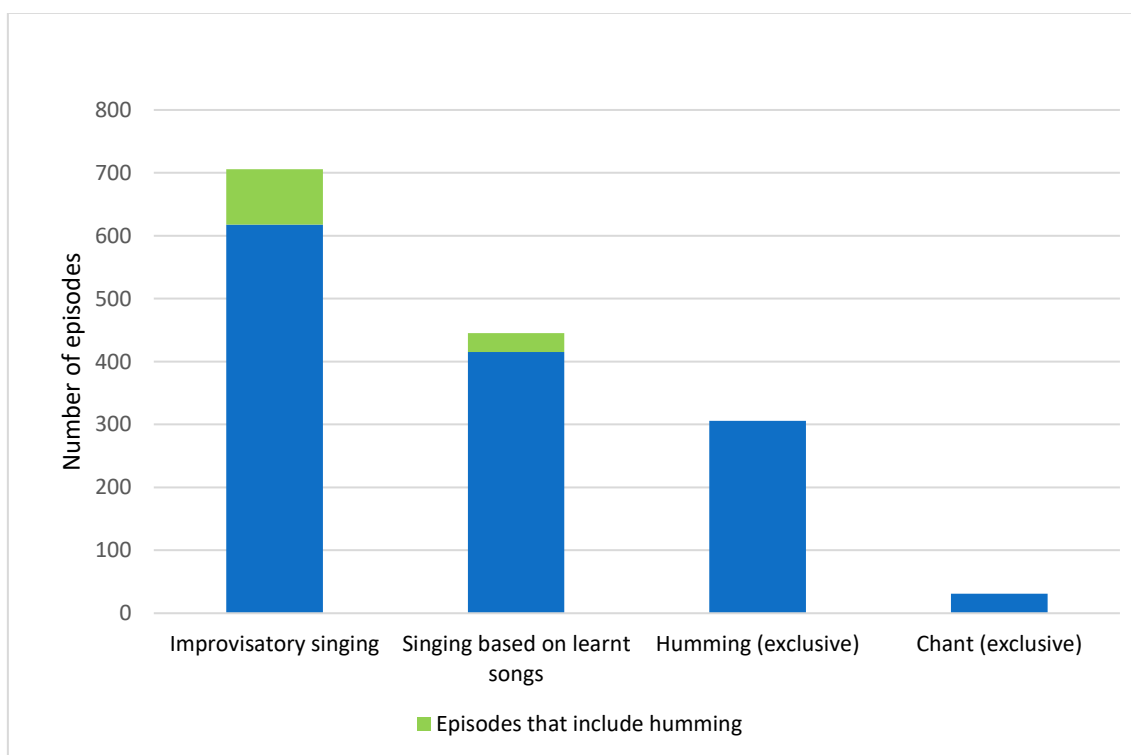


Figure 6.1. Frequency of singing behaviours.

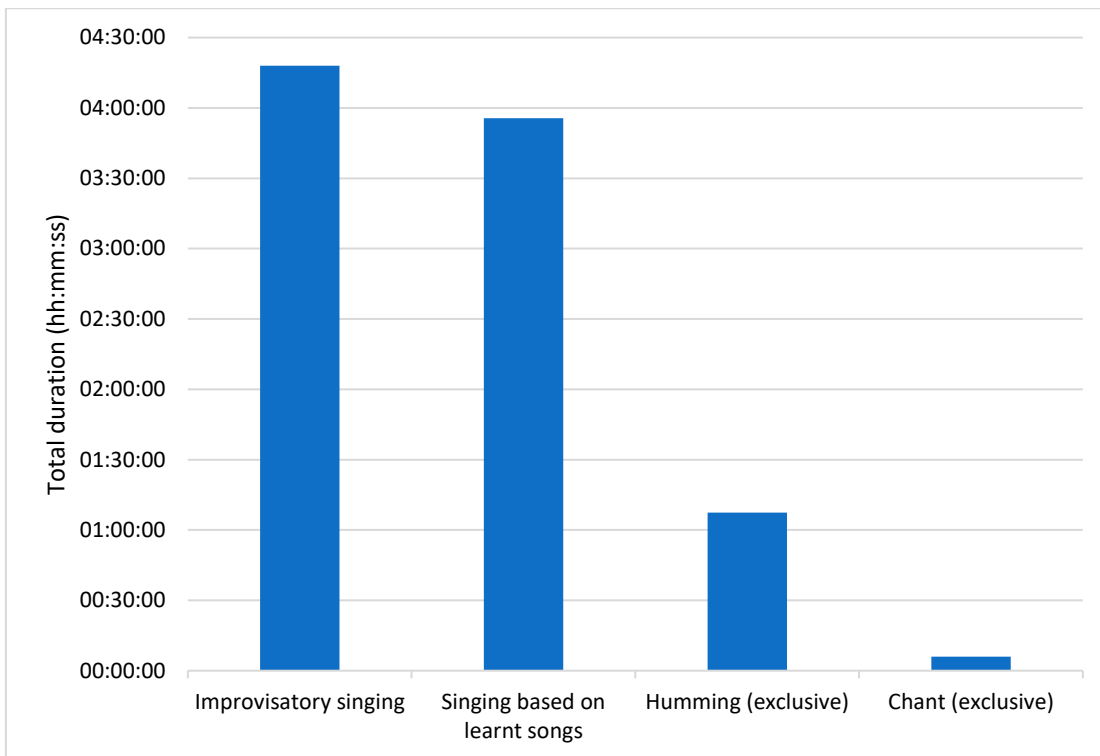


Figure 6.2. Duration of singing behaviours.

6.3.2 The extent of singing behaviours

Figure 6.1 indicates that the most frequently occurring type of singing is improvisatory singing. Improvisatory singing is also dominant in terms of total duration as shown in Figure 6.2. However, on average, episodes of improvisatory singing are of shorter duration than singing based on learnt songs. The average duration of an episode of improvisatory singing was 22 seconds whereas the average length of an episode of singing based on learnt songs was 32 seconds.

Because the number of children in this study is relatively small, it is not necessarily appropriate to make generalisations based on averages, and that is not the aim of this numerical analysis. When the singing of the children is examined individually, a more complex picture arises. Figure 6.3 shows the number of occurrences of improvisatory singing, singing based on learnt songs, and humming for each child. Figure 6.4 shows the duration of each of these singing behaviours for each child.

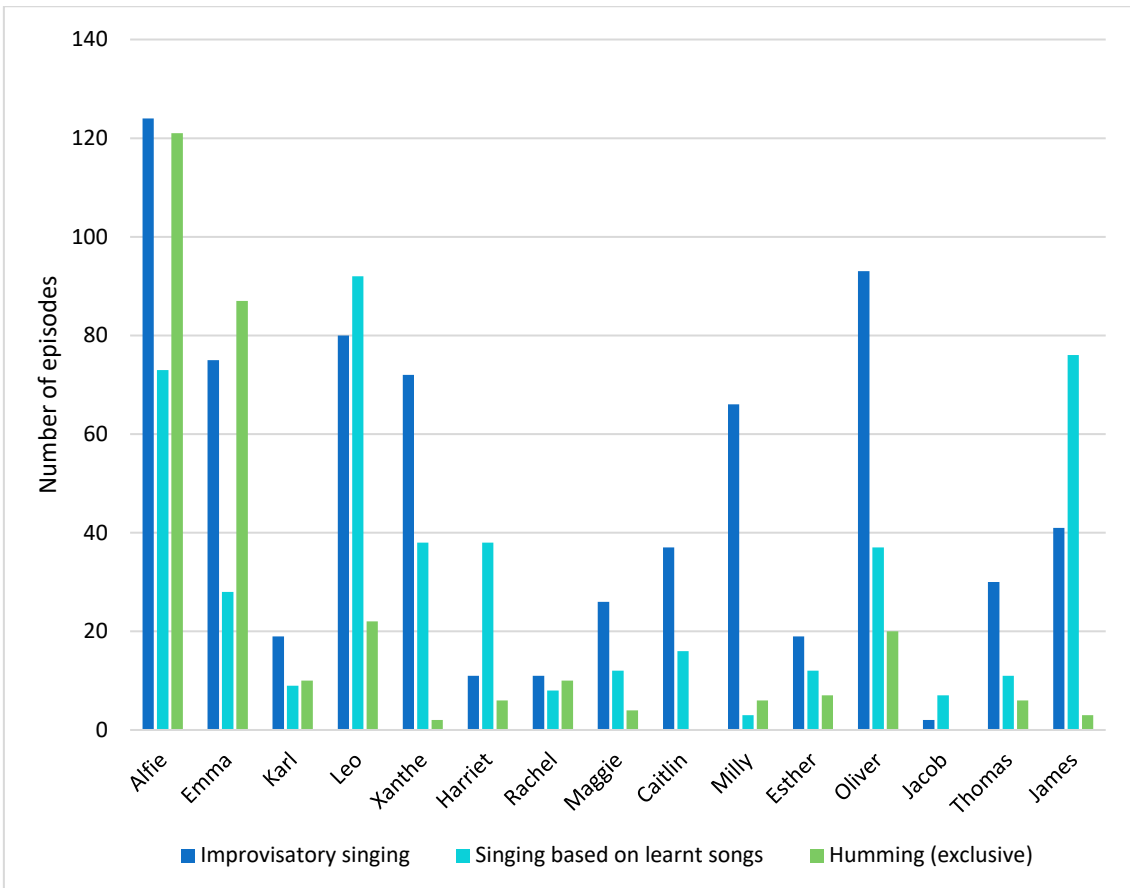


Figure 6.3. Frequency of singing behaviours by child.

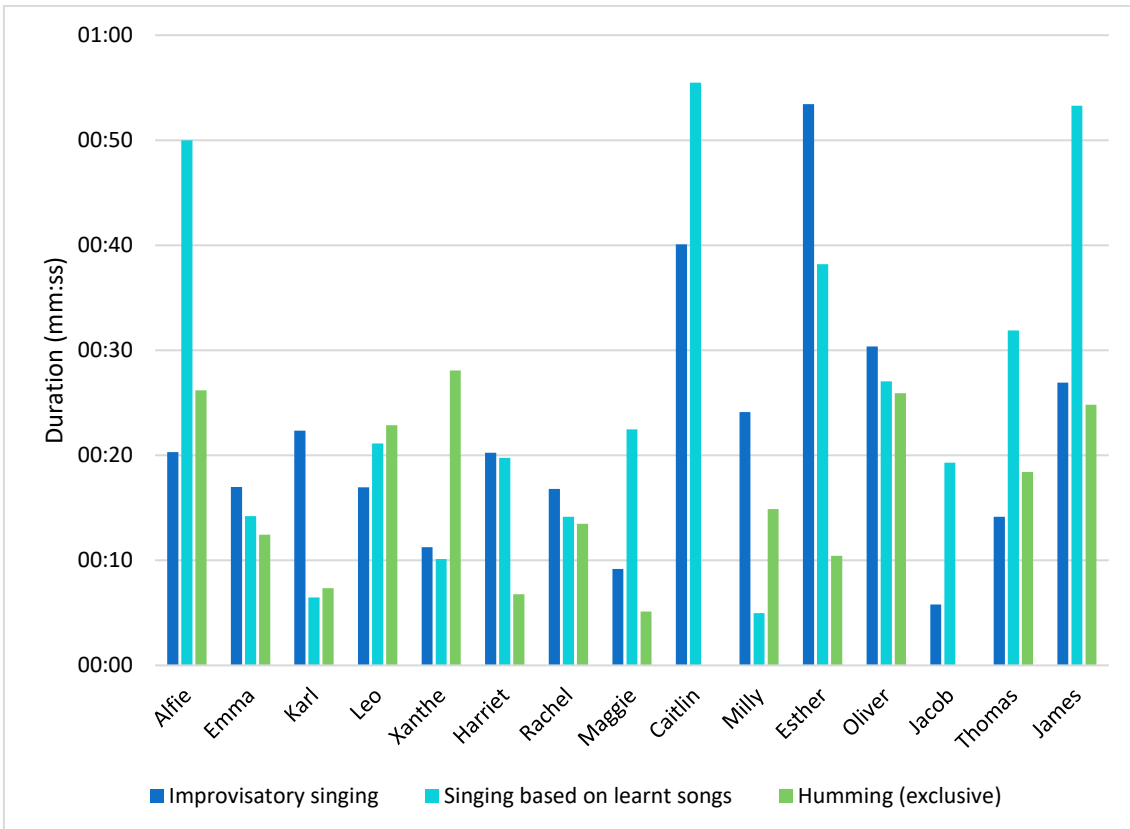


Figure 6.4. Average duration of singing behaviours by child.

In terms of duration, singing based on learnt songs was the dominant singing behaviour for six of the children, including two of the most prolific singers, Alfie and James. Based on number of occurrences, only four children—Leo, Harriet, Jacob and James—sang learnt songs more often than improvised songs. Three children—Leo, Jacob and James—sang learnt songs more often and for longer than improvised songs. The difference between improvisatory singing and singing based on learnt songs in the data collected from Leo is small, and Jacob sang very little overall. James is the only child who sang significantly more learnt songs and for longer periods. Interestingly, James spent a lot of time around adults and also had a large repertoire of songs to draw on. I will return to these points in Chapter 9.

Improvisatory singing was the most frequently occurring singing behaviour for ten of the children. It was the most common singing behaviour for five children in terms of both duration and number of occurrences and for a further five children in terms of number of occurrences. What Figures 6.3 and 6.4 clearly demonstrate is that the patterns of frequency and duration of singing are unique to each child. A lot more data would be required before averages could be applied.

6.4 Summary

In this chapter, I described the children who took part in this study based on data collected through parental interviews. I also described the types of singing behaviours displayed by the children, as evident in the audio recordings. I used a simple numerical analysis to explore how often the singing behaviours occurred and how long they lasted. The most important findings here were that all the children sang spontaneously and that the singing behaviours they displayed were similar to those described in the literature (e.g., Moog, 1976; Moorhead & Pond, 1978; Young, 2006). It was also interesting to discover that improvisatory singing was the most common singing behaviour for most of the children. In contrast to previous studies, the data collection method I used involved continuous audio recording, which enabled the collection of a large volume of data. The fact that this data supports findings from previous studies, is an important contribution to the existing literature. In the next chapter, I look at the contexts in which spontaneous singing occurred.

7. FINDINGS 2

THE CONTEXTS OF SPONTANEOUS SINGING AT HOME

7.1 Introduction

The previous chapter explored the nature of the spontaneous singing, its duration, and the frequency with which it occurred. In this chapter, I describe the singing in relation to the circumstances in which it occurred, focusing on contexts where singing most frequently took place. I begin by looking at the physical and active contexts in which singing occurred, then explore the social contexts of spontaneous singing. The social contexts in which singing takes place have a strong influence on what is sung. I explore the idea that children make use of different social and solitary singing styles.

The specific home environment is of course very influential to a child's musical experience (Ilari & Young, 2016). I look at what the audio data reveals about the home music environment and whether there are factors in the home that influence spontaneous singing. I close the chapter with a narrative account of all the singing that took place within one child's morning. The aim of this account is to contextualise spontaneous singing within a child's everyday life and introduce the thematic analysis in the following chapter.

7.2 In what circumstances does spontaneous singing occur?

The circumstances in which spontaneous singing took place were many and varied. Singing occurred throughout the children's daily lives. Approximately one third of the singing took place while the children were playing. Other contexts where singing was frequently used included: stationary activities, such as looking at books, doing puzzles, and painting or drawing; during mealtimes; while children were waiting for something or transitioning between activities or spaces; during routine activities, such as hand washing; and when children were carrying out instructions. In many cases, contexts overlap as, for example, a child engaged in solitary play while in the bath. Many of the circumstances I

describe are what I call *active* contexts. These are activities the children engage in rather than physical contexts.

While I did not collect any visual data, in most cases there was enough audio information to understand what the children were doing. The children often gave verbal clues as to what they were doing, either through conversation with their parent or siblings, or through self-talk. Other audio clues were the sounds associated with various activities, such as the turning of pages of a book, the click of game counters, vigorous scribbling, chewing, or splashing.

7.2.1 Play

Spontaneous singing occurred most frequently while the children were playing, either alone or with others. When the children were alone, most of their spontaneous singing was associated with play. Thirty percent of all self-directed singing took place during play.

7.2.1.1 Playing alone

The most frequent occurrence of spontaneous singing was during solitary play. Outside play often seemed to be a catalyst for spontaneous singing; however, spontaneous singing also frequently occurred during inside play. The following three examples of spontaneous singing taken from the data all take place outside. These examples are fairly typical in that the children hum and improvise using words, syllables, and nonsense words.

Example 1: Emma planting.

Emma wants to plant something in the garden. Her mother suggests she plant some grapes, and gives Emma four grapes. Emma counts the grapes, then goes outside, talking to herself, planning what she's going to do. She intermittently hums and sings an improvised tune on syllables as she digs a hole and plants the grapes. Emma's singing is interspersed with self-talk, narrating her activity. Her mother brings her something to eat, and Emma hums as she eats. She goes inside to get some water for the grapes. As she waters them, she sings, "It's a grape tree, not a pineapple tree."

Example 2: Esther's tea party

Esther hums an improvised tune as she sets up a tea party for herself, her mother, and the cat in the garden.

Example 3: Alfie's bush

Alfie has been playing in the bushes in the garden. He pretends that a bush is a secret place where the Queen of Silence lives. He comes out of the bush and says to himself, "That bush was great!" This is followed by a joyful outburst of singing (a repeated melodic phrase on syllables).

When the children were playing alone, it was not unusual to hear them sing on and off over extended periods of time. The following example is an account of Oliver playing in his bedroom during his afternoon nap time. Oliver did not seem to be expected to sleep during his nap time, but he had to stay in his bedroom. He therefore used his nap time as an opportunity for an extended period of solitary play. During this time, he entertained himself playing with his toys, talking to himself, and singing. Oliver's mother put Oliver to bed for an afternoon sleep and closed the door. Oliver was alone in his bedroom for one hour and 11 minutes. After an hour, he left the room but was told to return. During his nap, Oliver sang to himself intermittently for a total of nearly twenty minutes. Time codes have been inserted to demonstrate how Oliver's singing is distributed throughout the episode.

Example 4: Oliver's afternoon nap

[0:00:00] Oliver starts singing shortly after his mother leaves. He is playing with a toy vehicle that winds up as you push it across the floor. He sings, "Post-man Pat is [word indistinct]" very slowly, one note at a time. He then uses the tune of Wheels on the Bus and an improvised tune to sing what sounds like a narrative of his play. He sings about a cat, possibly Postman Pat's sidekick, Jess.

[0:01:32] Oliver uses the Postman Pat theme tune as a basis for improvisation, using syllables, a few words, and some humming.

[0:04:12] Hums using a voiced bilabial trill (humming with vibrating lips, making a "raspberry" sound). He then sings a narrative about

Fireman Sam, based on the Postman Pat theme tune. Most of the lyrics are indistinct, but Oliver includes phrases such as “Here’s Fireman Sam and they’re going in...they can stay...was going...then he’s going...he’s going inside...because it’s clo... the door closed”. He breaks off singing to talk to himself.

[0:06:12] Improvises a tune, which resembles Down at the Station. He sings on syllables, and hums with a voiced bilabial trill. Some phrases are sung with words. Although these are not clearly articulated, the lyrics seem to be a narrative of his play with Fireman Sam.

[0:09:14] Hums as he manipulates his toys.

[0:12:07] Oliver leaves his bedroom to ask his mother to fix the fire engine ladder so that Fireman Sam can rescue the cat from a tree. When he returns to his play, he hums the Postman Pat tune, then sings an ascending pattern on syllables. This may be a sound effect for Fireman Sam climbing the ladder.

[0:14:30] Oliver repeatedly makes a siren sound, which eventually becomes song-like and then becomes a version of the Postman Pat tune, humming and using a voiced bilabial trill.

[0:17:43] Oliver accompanies his play with an improvised song, the words of which are unclear.

[0:19:52] Oliver sings an improvised tune with lyrics to accompany his play. He also hums. After a short pause, he continues. His singing is followed by the semi-sung siren sound that intersperses the whole play episode.

[0:21:31] Oliver improvises a song about Fireman Sam, loosely based on the tune of London Bridge.

[0:22:22] Oliver improvises a song, initially about Postman Pat, creating a variation on the Postman Pat tune. He sings on syllables and hums.

[0:27:28] Oliver talks to himself while he plays, then switches to scat-type singing using consonants.

[0:28:23] Oliver briefly sings the first phrase of Happy Birthday on syllables. He vocalises in quasi-speech and hums using a voiced bilabial trill.

[0:30:50] Oliver speaks for different characters in his game and hums and sings on syllables. It seems that he is playing with figurines and accompanying their movement with singing and humming.

[0:34:50] Oliver hums and sings an improvised song on syllables to accompany his play.

[0:44:28] Oliver is rhythmically hitting something that creates a low thump. He improvises a song, using some of the lyrics from Once I Caught a Fish Alive, but to his own tune. He also adds his own lyrics. The lyrics are unclear at first; then he says, "Okay, let's go," and sings, "And which finger was it? It was this finger. Oh no-o-o. [Lyrics unclear] ... It is very sad [sings on syllables] ...you silly."

[0:49:27] Sings one phrase of Down at the Station with his own lyrics about Fireman Sam.

[0:50:09] Oliver makes a vocal siren sound, then sings a song with improvised lyrics about Fireman Sam. Most of the lyrics are difficult to understand. He continues with the siren sounds and bilabial trills, then sings about Fireman Sam again.

[0:52:20] Oliver sings an improvised song, partly based on the tune of Wheels on the Bus. He sings on syllables, with the occasional word.

[0:53:14] Oliver sings, "All get onto the ladder, then we come here." Then sings, "Du-pa, du-pa, du-pa" repeatedly in an ascending and descending pattern, possibly to accompany his characters climbing the ladder.

[0:54:39] Sings an improvised song about Postman Pat. It sounds like narrative, but most of the words are unclear. There is a brief pause, then he continues singing his improvised song, largely on syllables, but with a few words.

[0:56:08] Improvises a melody using elements of the Wheels on the Bus tune.

[0:57:15] Sings, "Wipers on the bus go swish, swish, swish." Hums. Improvises using the Wheels on the Bus tune.

[0:59:15] Sings a phrase of Wheels on the Bus on syllables.

[0:59:42] Sings to tune of Down at the Station using improvised

words.

[1:01:35] *Improvises a narrative to accompany his play. Sings, "Pee-op-pee-op, coming in the [lyric unclear] ... pssshh pssshhh ... [unclear] is putting out the fire."*

[1:02:53] *Improvises a tune singing on syllables.*

[1:03:47] *Sings "Doppa doopa doo daa Fireman Sam. Fireman Sam, you're always there, Fireman Sam pssshhhh." His song is based on the tune of Wheels on the Bus.*

[1:04:34] *Sings a variation of the theme tune from Fireman Sam using syllables.*

[1:08:31] *Oliver drives a toy car around. His driving sounds turn into singing on syllables. Oliver leaves his bedroom and goes to find his mother.*

This example shows Oliver combining characters and music from two different television shows, *Postman Pat* and *Fireman Sam*, along with several popular children's songs. He makes use of the tunes in his own way to facilitate his play with his Fireman Sam toys. The lyrics are rarely clear and only occasionally can a few words be made out. Singing is a prominent part of his play, but it does not seem necessary for Oliver to make himself understood as the song is for himself alone. This is an extensive example from one child. However, with the exception of Jacob, all the children sang to themselves as they played on their own.

7.2.1.2 Playing with others

While the majority of spontaneous singing took place during solitary play, there were also many examples of spontaneous singing during social play with siblings, friends or, in Caitlin's case, with her mother.

Example 5: Leo and Nathan playing trains

Leo and his older brother, Nathan, are playing with their train set. Leo starts singing to the tune of the popular children's song, Wheels on the Bus. He sings, "I want to go on the track track track, track track track, ... him go on the track track track, ... he goes the track track track." Nathan picks up the end of the song, singing, "all in the early morning." Leo sings, "Him go go early-o morning, early-o

morning, early-o morning.” He repeats this quietly several times. After a while, Nathan sings, “Morning baby is chugging all around,” and Leo joins in to sing, “chugging all around, chugging all around.”

Leo and Nathan often sang as they played together. Their singing was improvisatory and loosely based on songs they both knew. They took turns making up words and occasionally sang together. The singing seemed to facilitate their joint play. This is discussed further in Chapter 8.3.2.

Example 6: Caitlin dancing Barbie

Caitlin and her mother are playing 'Princes and Princesses' with the Barbie dolls. Caitlin's mother sings an improvised tune on syllables for the dolls to dance to. Caitlin takes up this idea and sings a sound track for the dance. They sing and dance the dolls together.

The idea for singing for the Barbie dolls initially came from Caitlin's mother. However, once it had been suggested, Caitlin enthusiastically took up the idea. When she plays with the Barbie dolls with her sister during the next recording, Caitlin once again sang a soundtrack for the dolls to dance to.

Example 7: Milly and Peter in the treehouse

Milly and her younger brother, Peter, are sitting outside in their treehouse, eating apples and playing a game in which Milly is the child and Peter is the mother. Milly improvises a silly song about bottoms and then instructs Peter (as the mother) to tell her not to say silly words. Milly goes on to improvise a sung narrative loosely based on songs from Disney's Frozen. When her brother joins in, Milly pauses briefly to tell him what to sing, and their game turns into an extended singing session.

In this example, Milly facilitates Peter's role in an improvised singing session that structures their play together. Milly's singing is initially part of her pretend play, but when Peter joins in, the game seems to be abandoned in favour of singing together. Focused music play is discussed in the next section.

7.2.1.3 Music play

Music play is play that is overtly musical. The purpose of the play is to produce music, or the characters within a game sing or produce music. This includes examples where the children play instruments and sing. Many of the children had real or toy musical instruments at home, and these were sometimes used in music play.

Example 8: Harriet and Elmo

Harriet's Let's Rock Elmo toy sings and plays a number of instruments. Harriet chooses the tambourine for Elmo and enthusiastically sings along with Elmo playing The Alphabet Song. She sings an approximation of the lyrics and melody. When the song finishes Harriet's mother claps and says, "Oh, very good! That was great!"

Example 9: Emma and Amy

Emma and her sister, Amy, are playing with their toy microphone. Amy encourages Emma to perform, and Emma seems very happy to oblige. Emma says, "Amy, I need a microphone to sing through." She sings "Ivan-ka, Ivan-ka," then stops singing to announce, "Welcome to our stadium, and it's called ... um...um... This is our ...um ...stadium and it's called Amy the nature-loving horse." Emma sings, "Oh Amy loves horses and cows and pigs. She never screams at them, she just is a beautiful girrrl. She sings so beautiful. Listen to her now, she sings so beautiful." Emma hands the microphone to her sister, who sings a brief phrase using tonic solfa. Emma then organises her sister into playing a singing game where Emma sings nursery rhymes from a book and Amy joins in "in a kitty voice."

Example 10: Xanthe playing schools

Xanthe is playing at being a music teacher. She improvises a song for the imaginary children in her class using nonsense words. She finishes and says, "So, that's it. That's it, children."

Example 11: Jacob playing the piano

Jacob asks to “do some singing on the piano.” His mother helps him up onto the stool, and he spends some time exploring the range of the piano, describing the low notes as “the deep end.” He sings The Alphabet Song whilst playing (different notes) on the piano. His mother encourages him, saying, “Wow, you did it with piano accompaniment!”

These examples demonstrate some of the ways in which the children explored singing through their play. In these examples, singing and music are both the focus of the children’s play and are also used as vehicles through which to develop play. Emma’s game with Amy is initially motivated by the knowledge she is being recorded, but the game quickly develops momentum of its own and becomes an extended period of music play. During the recordings, Xanthe played at being a music teacher several times, imitating the teacher of the music class she attended. In each of these examples, the music play is facilitated through musical resources. Harriet sang with her Elmo toy, Emma and Amy used a toy microphone as a prop and a book for inspiration, Xanthe had a number of small percussion instruments that she used in her game, and Jacob accompanied his singing on the piano. This was not always the case, and some examples of music play were purely sung. However, musical resources seemed to encourage focused music play.

7.2.2 Stationary activities

It is notable that after play, spontaneous singing most frequently occurred during activities when the child's body was fairly stationary. This was true both for activities that the child had freely chosen, such as doing a puzzle or playing with toys, and activities that the child was obliged to do, such as having a bath or an afternoon nap. In these contexts, singing may act as a substitute for physical action. This idea is discussed further in Chapter 8.

Example 12: Rachel reading Mr Bump

Rachel is looking at the book, Mr Bump, from the Mr Men series. She says, “This is Mr Bump,” then sings an improvised tune: “Mister Bump, Mister Bump, Mister Bump, Mister Bump, Mis-ter Bump-Bump, Mister Bump-y, Mister Bump-y, Mister Bumpy, Mister

Bumpa-Bumpy." She stops singing but continues to talk to herself as she looks at the book.

Example 13: Oliver's puzzle

Oliver and his family have been out shopping and they come home with a fire station puzzle. Oliver and his mother spend a long time doing the puzzle together. While he works on the puzzle, Oliver sings a number of well-known tunes, such as Wheels on the Bus, Down at the Station, and the theme song from Fireman Sam, replacing the words with nonsense syllables. Oliver's mother talks to Oliver about the puzzle, but often Oliver continues his singing while she speaks. When he is pleased with himself for placing a piece, Oliver improvises his own melody.

Example 14: James's puzzle

James is sitting on the floor doing a puzzle. He sings a tune he knows from church, using syllables and some of the lyrics. His mother interrupts him to tell him to move the puzzle to the table. He listens to her, then carries on singing. A few moments later, his grandfather helps him move the puzzle to the table. James is now singing Hokey Cokey. While his grandfather moves his puzzle, James continues singing.

Example 15: Milly drawing

Milly is drawing for her brother. She asks, "Shall I do dangly things down here?" As she draws, she improvises a tune using syllables and the words "dangle dangle." While she draws, her brother is speaking to her, but Milly doesn't interrupt her singing.

Most of this singing appears to be self-directed. Either the children are alone or are not interacting with the people around them. Notice how James, Milly, and Oliver all sing through interruptions. Continuing to sing may communicate their desire not to be interrupted and enable the activity to continue. The children's use of singing to focus more fully on an activity or to create a sonic space conducive to play are discussed in Chapter 8.

7.2.2.1 Eating and mealtimes

A large amount of singing took place during meal and snack times. In fact, all the children either hummed or sang as they ate. This singing could be either social or self-directed. During meals, the children often moved between social interaction and singing to themselves. Occasionally, the children had a snack while playing outside, but most of the children were required to sit at the table during mealtimes. Below, I give examples of children singing, both socially and to themselves, during mealtimes. In Chapter 8, I will discuss some of the possible reasons why singing is so prevalent during meal times.

7.2.2.2.1 Social interaction during mealtimes.

Example 16: Emma asking for ketchup

Emma is having dinner with her siblings. Her mother is busy trying to get the baby to feed himself. Emma taps a beat and sings, "May we have some ketchup, may we?", adapting the tune of Down at the Station. She doesn't appear to expect anyone to take any notice, but she must get some ketchup because she doesn't ask again.

Example 17: Leo eating breakfast

Leo is eating breakfast with his brother. He sings, "Cornflake, cornflake, do you like them, do you like them Nathan?"

Example 18: Alfie's mucky fingers

Alfie and his mother are in the kitchen. Alfie has just finished eating a cupcake. He chants, "I've got mucky fin-gers."

Example 19: Emma asking about pudding

Emma is sitting at the table with her mother, sister, and brother. She finishes her dinner and chants, "What's for the pud-ding?"

7.2.2.2.2 Self-directed singing during mealtimes

Example 20: Oliver having dinner

Oliver is sitting eating dinner with his parents, who are deep in conversation. Oliver sings an ascending and descending passage on syllables, then hums a repeated descending pattern that

becomes the tune of Wheels on the Bus. A short time later, he sings alternating notes like a siren on the syllables "bee-baa." He then repeats just one note, "bee, " slowly at first, then faster. He slows down and reintroduces "baa." Later in the same meal, Oliver hums the tune of London Bridge, followed by a phrase sung with his mouth full. His parents continue their conversation throughout.

Example 21: Maggie eating breakfast

Maggie is enthusiastically eating a cooked weekend breakfast with her family. As she eats, she hums quietly to herself.

Example 22: Rachel eating custard

Rachel is appreciatively eating a pot of custard. She repeatedly hums a rhythmic three-note pattern—two short notes followed by a long swooping note.

7.2.2.2 Playing board games/cards

Alfie, Caitlin, Esther, and Leo all engaged in spontaneous singing while playing board games or card games. The following two examples are from Alfie. In the first example, Alfie is playing *Connect Four* on his own. In the second, he has set up the *Junior Scrabble* board and is waiting for his mother to join him.

Example 23: Alfie playing *Connect Four*

Alfie is playing Connect Four on his own. He sings, "Re-e-ed is here, re-e-ed is here, re-e-ed is there, reds are all over the place."

Example 24: Alfie playing *Scrabble*

Alfie has set out the Junior Scrabble board. He invites his mother to play with him. While he waits for her, he vocally plays with the word "scrabble", saying "Scrr-aaa, scrabble," then sings, "scrabble scrabble scrabble, scar-a-b-u-u-le." After a short pause, he starts making percussive sounds with his mouth and then sings the tune of a pop song he knows using nonsense words. He sings, "...tonight, it's a beautiful night." He continues singing this tune, but switches to using nonsense words that are reminiscent of the first

phrase of the Arabic version of Happy Birthday.

In the second example, it is interesting to hear Alfie use some Arabic words or his version of them. These words are from the Arabic version of *Happy Birthday* that expatriate children in the UAE quickly learn. However, Alfie takes these words and puts them to the tune of another song. In these examples, Alfie is on his own; however, all four of these children also sing while playing games with other people, usually while they waited for their turn. Singing while waiting is discussed in Section 7.2.3.

7.2.2.3 Bath time

Two contexts that inspire similar types of singing are bath time and bed time. Like meal times, children are physically restricted during bath time (in the bath) and nap time (in their bed) and, like meal times, the children use these times to sing. However, during meal times, a parent who may not always approve of singing at the table is usually present, and the child's mouth is often full, both of which can make singing difficult. While restricted to the physical space of the bath or bed during bath and nap times, the child has more freedom to engage in imaginative play. This results in long periods of singing. Harriet and Esther both had baths during their recordings. During bath time, the research vest containing the DLP was placed nearby. Both girls were in the bath on their own, but, being younger, Harriet's parents were within earshot. Both girls sang in the bath.

Example 25: Harriet in the bath

Harriet is singing quietly in the bath. She sings on open syllables and splashes the water rhythmically. When she hears her baby sister vocalising in the next room, Harriet pauses to listen then echoes her sister's vocalisation, "La-le." She repeats the motive getting louder and louder until she is almost shouting, pausing once, apparently to listen for a reaction from her parents. Harriet seems to tire of this and her singing returns to being more self-directed. She sings a repeated staccato motive, "Na na na na," many times. After a brief pause, Harriet chants, "Princess Pok, Princess Pok" repeatedly, then slowly sings, "Princess, princess, princess." She is silent for a moment, before returning to her

original quiet singing on syllables.

Although Harriet is in the bath on her own, her parents and baby sister are close by. Harriet initially sings quietly to entertain herself, but when she hears her sister, she sings loudly to attract their attention. When attention is not forthcoming, Harriet returns to her singing to entertain herself.

Example 26: Esther in the bath

Esther is playing in the bath. Her toys are about to have a race. She says, "Let's start. On your marks, get set, go!" She sings on syllables to accompany the race: "din din din din din, din diladin din din," then says, "I won Mum!" A short while later, Esther improvises a song, "Oh hinky winky dinky doo [puffs] slinky winky dog ... Oh I'm a really good swimmer, my mum can hang on to my back, she's not too heavy, 'cause I was born before her, and look, I'm this tall, I could even give you a shoulder ride. Look, I'm tall, mm mmm mmm I know [lyric unclear] can go small, I'm small, I'm small, and my Mum is see-ee-eeek my mum is smaller. I was a ... When my mum was, when my mum was, when my mum was [unclear] when my mum was born, when bong bong bong b... [She now bases her singing on the tune of Here we go Round the Mulberry Bush] I know I look so funny, look so funny, look so funny, I know I look so funny and this is the way I was born, born, born, born. [Moves on to the tune of Frere Jacques] now it's time for me to celebrate a bit, bu-u-ut I, bu-u-ut it [tries to whistle] I, I, I was lovely and now I get sort of [unclear] Now I leave, come on Mummy, come on Mummy, come on Mu-u-ummy, you will be my [lyric unclear], mummy mummy mummy, mummy mummy mummy mummy...." The singing continues but becomes difficult to hear. Eventually, it becomes self-talk.

In this long episode of singing, Esther narrates her imaginative play. She improvises, sometimes freely and sometimes drawing on tunes she knows. This is a perfect example of Moog's *narrative song* in that it is structured like a

narrative, but it lacks any real meaning (Moog, 1976).

7.2.2.4 Bed time

Evening bed time or afternoon nap time are some of the few times that young children are alone for an extended period. By the age of three, many children have outgrown afternoon naps. However, Oliver, Maggie, and Xanthe had afternoon naps, and all three were recorded singing during these times. These are valuable examples of solitary singing because they cover an extended period of time. They also demonstrate how the children enjoy playing alone. This will be discussed further in Chapter 9.

Oliver was recorded twice during nap time. On neither occasion did he sleep, but he was obviously expected to stay in his bedroom until his parents told him it was time to come out. On the first occasion, which is described below, Oliver stayed in his bed. On the second occasion, described in Section 7.2.1.1, he spent the time playing with his toys. The following example gives a step-by-step account of Oliver singing during his nap time. Once again, I have given timings (from the full recording) to give an idea of the length of each episode of singing and the time between each episode. When Oliver was put to bed, he remained in bed for about twenty-five minutes before getting up to play with his toys. During this time, he used a number of techniques to entertain himself, including looking at books, talking to himself, and singing. His singing totalled just over eight minutes.

Example 27: Oliver's nap

[51.52-52.14] Oliver is in bed for his afternoon sleep. He hums with a voiced bilabial trill ("raspberry" sound) then sings, "Run rabbit run rabbit" over and over while tapping a beat (may be kicking the wall). He slows down, singing a long drawn out "ruuuun rabbit," then continues at the original tempo. He stops singing to talk to himself.

[53.05-8] Oliver sings a brief phrase using syllables.

[1.02.15-26] Oliver is looking at books in bed. He hums then sings briefly with a guttural, back-of-the-throat sound.

[1.05.59-1.06.40] Says "the end of it" then sings, "End of ... it's not the end of, it's the end..." He continues singing, but the words are indistinct and seem to turn to nonsense. He sings slowly as if he's not sure what to sing next. He finishes on a phrase from Wheels on

the Bus, which he sings on syllables.

[1.07.15-1.08.09] After a short pause, Oliver improvises a song about a helicopter. He sings "Tum tum helicopter" several times, adding something different at the end. He then sings The Alphabet Song. When he gets to "T" he gives up and finishes the tune on syllables.

[1.08.54-1.11.07] Oliver sings (using 'la' and other syllables) and hums variations of the tune of Down at the Station. He continues for more than two minutes.

[1.11.20-1.12.36] After a brief pause, Oliver continues singing. He improvises a song with words that seems to be a narrative about a feather. At the end, he returns to the Down at the Station tune, singing on syllables.

[1.13.37-52] Oliver can be heard tossing and turning, and yawning. After about a minute, he starts humming, then sings a song about himself based on the tune of Mary Had a Little Lamb. Again, most of the words are difficult to understand.

[1.14.39-1.15.22] Oliver tells himself a story using different character voices. He then hums and sings snippets of the Down at the Station tune using voiced bilabial trills and another sound, rather like a duck impersonation.

[1:15:49-1:16:15] After a short pause, Oliver hums and sings (on syllables) a variation of the Fireman Sam theme tune.

[1:16:44-1:17:50] After another brief pause, Oliver sings quite a different passage, beginning with a rising and falling pattern on "doo," and moving on to a mix of syllables and indistinct words. He gets out of bed and starts playing with his toys, humming the Fireman Sam tune.

Oliver continued to sing intermittently as he played until his father came to get him up. However, by then, the singing had become an accompaniment to his play rather than a source of self-entertainment.

Xanthe talked and sang to herself for half an hour after she was put to bed before finally falling asleep. In a similar way to Oliver, she improvised melodies with nonsense words and sang snippets of songs she knew (*Baa Baa*

Black Sheep and *Tomorrow*, from the film *Annie*) using a mixture of the lyrics and nonsense words. She also tapped something rhythmically in time to her singing, clicked her tongue, and hummed.

In this section, I have described some of the singing that took place while the children were engaged in stationary activities. These were either activities that the children had freely chosen, or activities where they were expected to behave in certain ways that restricted their freedom of movement as, for example, sitting at the dinner table. In Chapter 8, I will return to these contexts to explore how the children use singing to transform and engage with their experiences.

7.2.3 Waiting

The children often sang when they were at a loose end. A good example of this is when they were waiting for something, often the attention of their mother. Eleven of the children sang while they waited.

Example 28: Milly waiting in the car

Milly and her brother are sitting in the car waiting for their father to take them swimming at their grandparents' house. Milly talks to her brother, then sings, "Really funny dude," followed by nonsense syllables. This becomes nonsense speech. Milly then improvises a song. The words are difficult to make out, but it is something like: "Best for me, best for me, put it in the boot and make it see." She stops singing when her father gets into the car.

Example 29: Alfie waiting for a swing

Alfie is in the kitchen with his mother. He asks if she will push him on the swing outside, but she is busy. Alfie hums, then sings a line from a pop song, "I'm the only one who makes you feel this way," several times.

Example 30: Maggie waiting for a DVD

*Maggie is waiting for her mother to put on a DVD. She quietly sings to an improvised tune, "Gigglebiz, gigglebiz, gig gig gig giggle learning." A short while later, Maggie tells her mother that she wants to watch *Gigglebiz*, a children's television programme.*

Example 31: Rachel waiting for the lift

Rachel and her mother are in the corridor outside their apartment waiting for the lift so they can go outside to play. Rachel talks about which lift is coming, then sings briefly on syllables.

Example 32: Xanthe waiting for Minnie

Xanthe has asked her mother to get her Minnie Mouse toy from upstairs. As she waits, she improves a tune using nonsense syllables.

Singing while they wait seemed to help the children fill in time and entertain themselves. The idea that the children use singing as a way of transforming mundane experiences is explored in more depth in Chapter 8.

7.2.4 Transitions

Like waiting, transitions represent times when the children are not fully occupied. These moments often gave rise to brief episodes of singing.

Example 33: Esther walking to the bathroom

Esther is playing with her brother and their friend. She leaves the room to go to the bathroom and immediately starts singing an improvised song. She starts by addressing herself "Oh Esther, Esther" and continues to sing with words, although these are hard to make out.

Example 34: Harriet going outside

Harriet hums happily as she goes outside to play.

Example 35: Xanthe going to choose a book

Xanthe's mother suggests that Xanthe should go into the toy room and choose her favourite music book so they can sing together. As Xanthe does this, she improvises a short song on syllables.

In the narrative account of Alfie's morning in Section 7.5, there are a number of occasions when Alfie sings while transitioning from place to place. He sings as he moves from indoors to outdoors and vice versa, as he goes upstairs, and as he moves from the kitchen to the bathroom.

7.2.5 Routines and chores

Thirteen of the fifteen children sang during everyday routines. However, Alfie, Emma, Esther, and Harriet were most inclined to do this. Part of Harriet's daily routine was bath time in the evening with both her parents nearby. Harriet's mother reported that they often sing during the bath and bed routine, and this is evident in the recordings. Harriet and her mother sang while Harriet was in the bath, and Harriet also sang to herself when she was alone in the bath. Alfie, Caitlin, Emma, and Oliver all either sang or hummed while washing their hands or during visits to the bathroom. Alfie and Maggie sang while putting on their shoes. In the narrative account in Section 7.5, Alfie sings several times on the way to the bathroom and while washing his hands.

Example 36: Alfie putting on his shoes

Alfie wants to ride his bike outside. His mother tells him to put his shoes on to go outside. Alfie hums the tune of My Darling Clementine as his mother helps him put his shoes on.

Example 37: Emma washing her hands

Emma sings a phrase from the UAE National Anthem while washing her hands.

Example 38: Leo getting dressed

Leo sings "Doo doo doo doo," while getting dressed.

Singing also occurred when the children were helping with chores. Esther sang to herself while tidying her room and, socially, while unpacking the dishwasher; Harriet sang to herself while helping clear the table; Maggie and Xanthe both sang when asked to fetch or carry; Maggie sang when she was asked to tidy the shoes away; and Oliver sang socially while helping his father clean the bathroom. Most of this singing consisted of humming, singing on

syllables, and improvising with nonsense words.

Example 39: Harriet helping to clear the table

Harriet has been asked to help her mother clear the table. She starts taking something to the kitchen, accompanying her steps with accented humming. She is quite reluctant to help, and it seems she is singing herself through the effort of helping.

Example 40: Maggie on an errand

Maggie's mother asks Maggie to take something to the bedroom. Maggie agrees and sings loudly, "Gongy gongy, gongy gongy." As she walks away from the rest of the family, her singing becomes quieter and more beautiful. She continues singing until she returns to the living area.

It is clear from the way Maggie sings that her initial singing is directed at her parents, being raucous and mischievous. Once she is out of the room, her singing becomes self-directed and seems to become an accompaniment to the task. Within this one episode, Maggie's singing moves from being social to self-directed, and the style of the singing changes accordingly.

7.2.6 Carrying out instructions and searching

I found it interesting to hear that some of the children sang while they were carrying out parental instructions and while they were searching for things.

Example 41: Alfie standing in the shade

Alfie and his mother walk to the shop within their compound, Alfie on his scooter. When they arrive, Helen tells Alfie to stand in the shade. Alfie sings, "Scoot, scoot, sco-oo-oot, in the sha-a-ade." He sounds hot and rather breathless.

Example 42: Milly fetching a cup of water

Milly's father, John, is a veterinarian and a local conservation volunteer. One afternoon, an injured shag is brought to the house, and John asks Milly to fetch a cup of water for the bird. Milly goes

inside. She sings an improvised song, " A cup of water for myself and the bird, a little cup of water for myself and the bird ... and the bird, oh lally o, oh laadee, oh lally laadee daadee, oh laalee oh laalee, o lally lally lally." While she sings, she rummages in the cupboard for a cup. She has a drink herself, then fills the cup for the bird. As she does so, she whispers to herself, "For the bird."

Example 43: Oliver carrying books

Oliver's family are tidying the house. Oliver's father asks Oliver to take some books and put them on the desk in the study. Oliver seems reluctant, asking, "Why?" but he does it. On the way, he sings, "The desk, on the desk, the desk, on the desk." He hums the tune of Farmer in the Dell with a voiced bilabial trill. Oliver runs back to his father, making a trumpeting sound, again with a voiced bilabial trill.

In these examples, the children repeat their parents' instructions in improvised song. The children seemed to use singing as a way of focusing on their parents' instructions. This idea is discussed further in Chapter 8. The children act in a similar way when they have set themselves a task to look for something. The examples below demonstrate how singing appears to provide a structure to the children's searching.

Example 44: Milly searching for penguin

Milly goes to her bedroom to look for her toy penguin. She sings an improvised song: "Where are you penguin, pengy pengy, where's pengui-in? Pen-nge-win-nie, penguiny pengy...penguiny, pen-nge-nge-nge-win-nie, pengy wengy peng ... peng."

Example 45: Alfie looking for his cup

Alfie is looking for his cup. Adapting the tune of Three Blind Mice, he sings, "Where's my cup? Where's my cup? Here it is! Here it is!"

Example 46: Emma looking for the pink phone

Emma is looking for a telephone toy. She grumpily asks, "Where's the

pink phone?," then adds emphasis by singing, "Where's the pi-ink phone?" to an improvised melody.

The examples given in Section 7.2 are all examples of singing in physical and active contexts. In the next section, I look at the social contexts of spontaneous singing.

7.3 The social contexts of spontaneous singing

The contexts outlined in the previous section relate to singing in physical and active contexts. However, based on my prior research (Dean, 2011) and the literature discussed in Chapters 2 and 3, an important aim of this study was to explore the idea that children engage in distinct social and self-directed singing behaviours. To begin to understand the social contexts of spontaneous singing, I coded the data according to whether the child was alone, in the presence of others (i.e., there were sounds of people in the background but no interaction was taking place), interacting with others, or singing with others. There was usually sufficient information in the audio data to determine the social context of the child.

To truly make sense of the social context of singing, it was also necessary to make an interpretive judgement about the communicative intent of a child's singing—that is, whether the singing was directed outward, towards others, or inward to the self. It is this intention that distinguishes between social and self-directed singing. Here, there is an obvious difficulty. How can we tell whether the intent of singing is social or self-directed? It is impossible to get inside a young child's mind and, as discussed in Chapter 2.5, young children are not always able to articulate reasons for their singing.

Some of the data were straight forward to interpret. When a child was clearly alone in a room, it was possible to treat all singing as self-directed, although there are some exceptions to this, which are discussed below. Equally, all episodes of a child singing with others and most sung utterances that take place during social interactions can be treated as social singing. However, singing in the presence of others presents difficulties. The fact that a child is in the same room as someone else does not necessarily mean the child is seeking to communicate with that person. Conversely, when a child is not audibly seeking to communicate with someone, they could be doing so in more subtle

ways. I do not believe this issue would be different if I had used video data as the problem relates not to observables but to inferences of the intentions governing a young child's behaviour. In the private speech literature Diaz (1992) strongly warns against using inference to make either social–private distinctions or conclusions regarding the functional significance of children's private speech. However, in real-life interaction, interpreting another's communicative intent is an important part of human communication. As social researchers we naturally—and necessarily—draw on our own experience to understand the social world, and interpretation is an important part of interpretive research. That said, it is also important that interpretations are strongly anchored in observable examples.

I use the label *social* for explicitly social singing. These instances include times when a child sings with others; says "listen to this" or "look at me"; addresses or calls to someone in the song; and when the singing takes place as part of a social interaction. *Self-directed* singing includes all singing when a child is physically alone (except when using song to call to someone); when the child explicitly says something along the lines of "I'm not singing for you" (indicating they are singing for themselves); and singing when the child appears to be alone in the presence of others. The idea of a child being alone in the presence of others is described by Winnicott (1965), who considered the ability to play alone to stem from an infant's experience of being alone in the presence of his or her mother. Winnicott refers to the mother and infant being in the same room but not interacting. He suggests that this allows the infant to experience aloneness with the security of knowing his or her mother is close by. Storr (1997) also places importance on the experience of being alone in the presence of others. Hancock and Gillen (2007) found that two-year-olds playing in the vicinity of adults became immersed in their play and forgot the adults were watching them. I interpreted singing in the presence of others as being self-directed when I could hear the activity of people in the background, but there was no interaction with the child immediately before or after the sung utterance. Where there was insufficient evidence to categorise a sung utterance as social or self-directed, it was labelled *unclear*. Approximately fifteen percent of the data were labelled in this way and, therefore, could not be used in this part of the analysis.

The analysis was further complicated by singing behaviours that could

not comfortably be categorised as distinctly social or self-directed. These were times when the children seemed to be singing to an imagined or non-human, other. This included singing to pets, toys, imaginary playmates, singing with media, and singing for the researcher by way of the recording device—in effect, an imagined listener. Singing to an imagined other usually took place when the children were alone but had the characteristics of social singing. The singing was marked by the child addressing the intended audience, as in the following examples:

Example 47: Esther singing to the cat.

Esther and her parents are working in the garden. Their cat, Daisy, has been chasing skinks. Esther's father says, "Daisy, you're sitting on it!" Esther laughs. Her parents continue discussing the garden, and Esther sings, "Daisy, you're sitting on the skink, Daisy there's no more skinks, Daisy, Daisy, Daisy, you are a lovely puss."

Example 48: Emma singing to her rabbit.

Emma is supposed to be getting into bed, but she runs to the living room to say goodnight to her pet rabbit, Run. She sings, "Go to sleep little rabbit, called Run, don't shake, you're okay. Don't be sick, don't be sick, come below ... [lyric unclear]."

Example 49: Xanthe singing for imaginary playmates

Xanthe is playing schools. She addresses her imaginary students, "Follow me, children," then sings, "Follow the leader, follow the leader, follow leader."

Nearly three quarters of the singing episodes occurred when the children were alone or playing alone in the company of others. That is, there was a parent present, but no interaction was taking place. However, as shown in Figure 7.1, the patterns vary between the individual children. Most of the children sang more often when they were alone or playing alone, but a few sang more often when they were interacting with others. In terms of duration (which is not shown on this graph), on average, the children sang for longer when they

sang with others than when they sang alone.

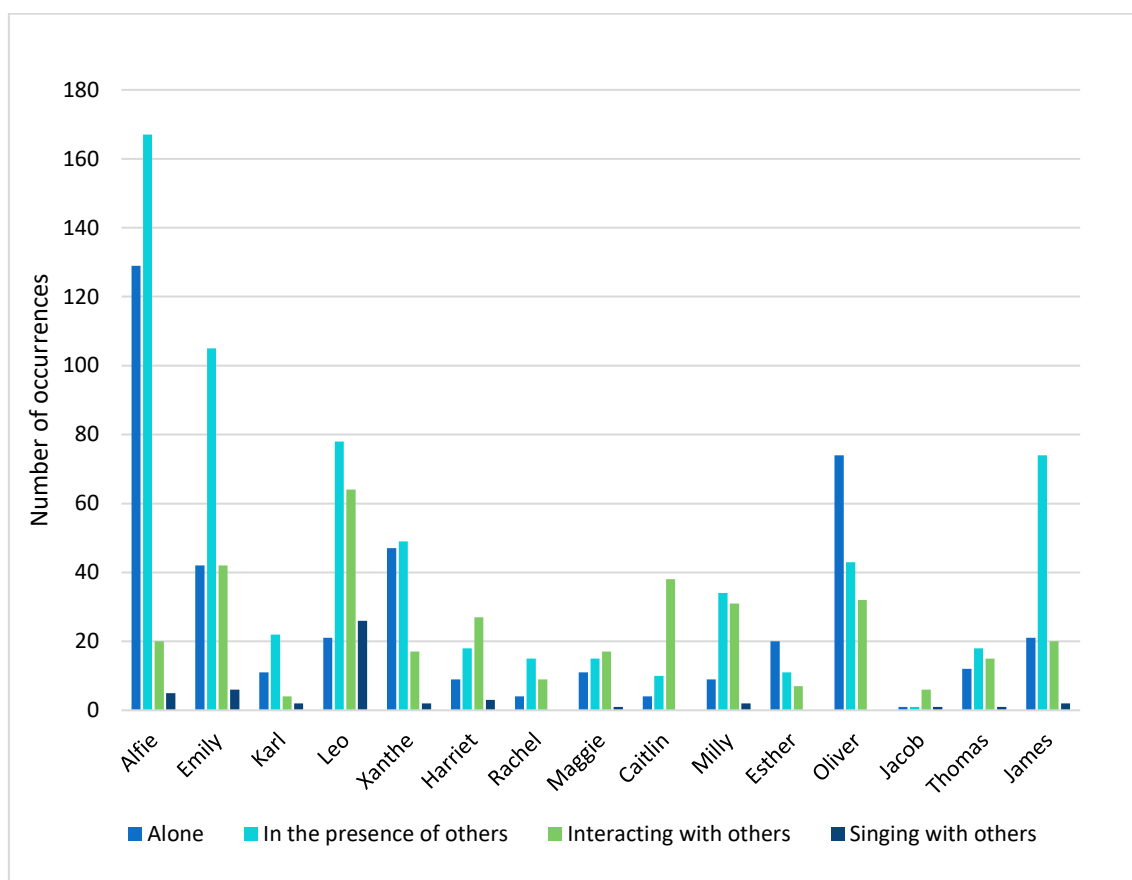


Figure 7.1. Social contexts of spontaneous singing.

Figure 7.1 implies that some of the children did not sing with others at all. It must be remembered that the data only includes spontaneous singing. Several of the children sang with an adult, but the singing was initiated by the adult, so it was excluded from the analysis. Others, such as Caitlin, preferred to sing alone and when an adult joined in, told them to stop. It is noticeable that Leo sang with others significantly more often than the other children. Leo's nanny happily joined in with his singing on many occasions, as did his older brother.

Figure 7.2 gives an idea of the relative amount of social and self-directed singing that took place. Half of the singing could be considered self-directed, and one third social. Communicative intent was unclear in fifteen per cent of the singing episodes, and five per cent of singing was directed at an imagined or non-human other.

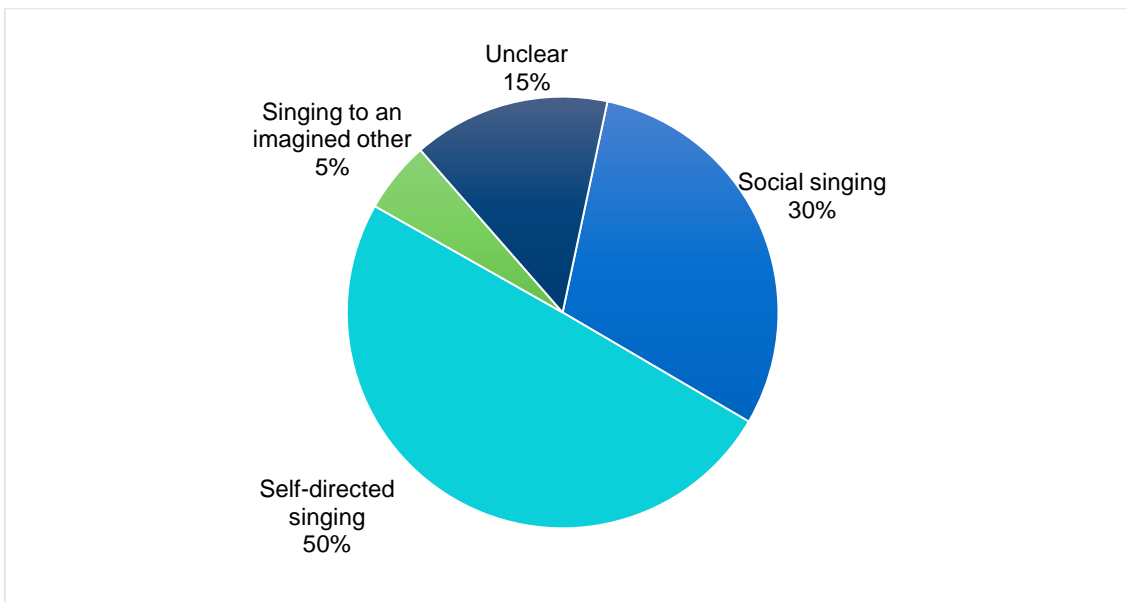


Figure 7.2. Communicative intent of singing.

Analysis of the data shows that young children employ different singing styles according to social context. These singing styles were identified during the first phase of data analysis using clear examples of self-directed and social singing—that is, examples in which the children were alone, or when they were interacting socially with others. I was then able to draw on these style standards when analysing instances of singing in the presence of others, which is a more ambiguous social context.

The most obvious difference between social and self-directed singing is in language content. Social singing often contains real words and therefore carries a clearer meaning than self-directed singing. When interacting with others, the children tend to sing songs from a shared repertoire, which they have learnt at home, outside the home, or from the media. They also improvise songs. Socially improvised songs usually have clear, meaningful words or are adaptations of known songs. They also tend to be short and to the point. There is a general tendency for the socially improvised songs to be more clearly structured, but this is by no means a blanket rule.

Self-directed singing is typically less overtly meaningful than social singing. Known songs are often hummed or sung using nonsense words. Self-directed improvised songs use nonsense words or are sung on syllables more often than using clear lyrics. The children's self-directed improvisations are either very exploratory, containing interesting vocal experimentation; of a narrative nature, based on freely meandering melodic lines; or very limited and

repetitive. When singing for themselves, the children are less likely to adhere to culturally meaningful models. Where words are used, they are often difficult to hear and hard to understand. I believe this is because they are not intended to be understood.

Figures 7.3 and 7.4 show the distribution of singing behaviours within social and self-directed singing based on frequency of occurrence. Because of the importance of language in social singing, the category *improvisatory singing* has been subdivided into two groups: improvising with real words and improvising with nonsense words and syllables. While a similar amount of improvisatory singing occurs in social and self-directed singing, self-directed improvisatory singing tends to use more nonsense words and syllables than social singing.

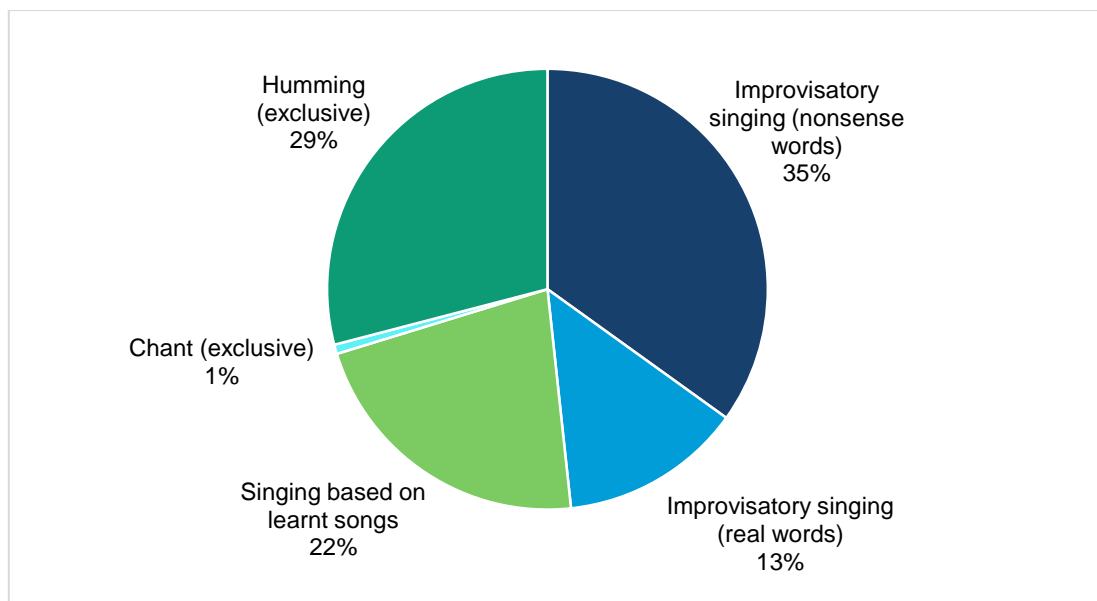


Figure 7.3. Composition of self-directed singing.

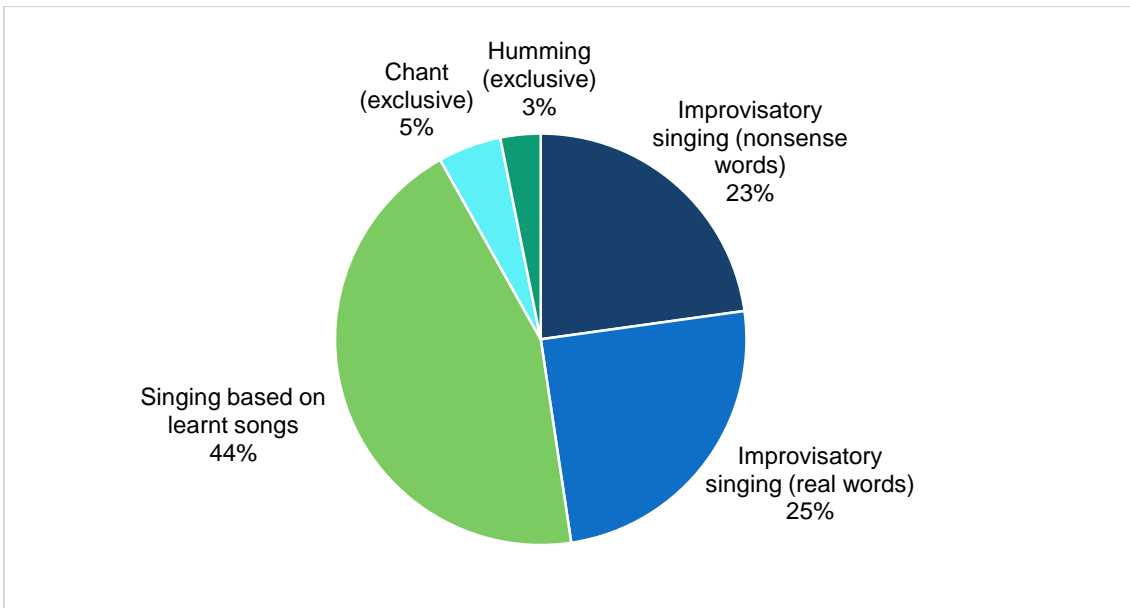


Figure 7.4. Composition of social singing.

The following examples demonstrate some differences between social and self-directed improvisation. The children all had quite different singing styles; therefore, to provide a comparison between social and self-directed singing, these two examples are taken from the same child, Maggie. The first example (Figure 7.5) is a socially improvised song. Maggie was discussing the day's plans with her father. She expressed her desire to go swimming and announced, "I'll put my sandals on." She then improvised this song:

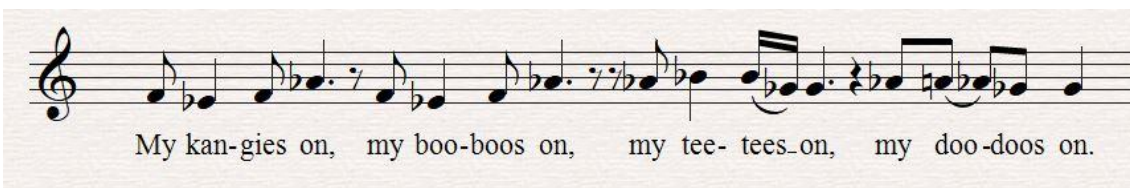


Figure 7.5. Maggie's socially improvised song.

While some of the words are nonsense, the song makes sense as a play on words. The tune is reminiscent of the song *I'd Like to Teach the World to Sing* and, while some of the intonation is approximate, it makes musical sense to adult ears.

The second example (Figure 7.6) is a self-directed improvisation. Maggie had been put to bed for an afternoon nap before going to a birthday party. Her father suggested that she close her eyes and count to twenty. Maggie counted out loud and then under her breath several times. She eventually sang herself

this song, beginning with the word “one.” This improvisation is much freer than the previous one. Linguistically, the lyrics make no sense. Musically, it follows certain patterns but is much more exploratory and unpredictable than the social improvisation.



Figure 7.6. Maggie's self-directed improvisation.

In Section 7.3, I have discussed the different social contexts in which spontaneous singing occurred and the children's styles of social and self-directed singing. I made use of graphs to provide an overview of the children's singing behaviours in the different social contexts. In the next section, I look at factors in the home environment that may influence spontaneous singing.

7.4 Factors in the home environment that influence spontaneous singing

In this section, I give a brief summary of the home musical environments of the most and least prolific singers and consider common factors that may influence spontaneous singing. This discussion is based on data gathered from the audio recordings, with reference to the parental interviews for contextual information. During the first phase of analysis, I coded all the singing I heard in the recordings, including that of family members. In this way, I became sensitised to listening for points of interest in the home music environment. After the first phase of analysis, I chose to concentrate my coding on the target children. However, as mentioned in Chapter 5, I continued to make analytical memos relating to the home music environment. The following assessment of the home music environments is therefore based on my interpretation of the audio data rather than a systematic thematic analysis based on codes.

The most prolific singers in this study were James, Oliver, and Alfie. All

three of these children were growing up in households with parents—and in James's case, also grandparents—who sang a lot and were competent, tuneful singers. The most prolific singer in terms of the percentage of recorded time spent singing was James. As mentioned in Chapter 6, James's grandparents lived with the family for part of the year, and James was around adults much of the time. All four adults were heard singing in the recordings. The family regularly attend church, and many of the songs James sang appeared to have been learnt at church or Sunday School. Both James's parents were involved in providing music at church, and the family sang grace together every evening at dinner time. While James's mother reported that they rarely listened to recorded music, James's life is steeped in live music and singing. As a result, James appears to know an extensive repertoire of songs. It is perhaps because of this that James was the child who sang the most learnt songs. He often sang what Moog (1976) called *pot-pourri* songs, stringing a number of learnt songs together in a single episode of singing.

Alfie was another prolific singer. He spent the majority of each day at home on his own with his mother, Helen. Helen reported that she enjoyed singing, and she could often be heard singing or humming to herself in the recordings. She also reported playing the piano each day while the older children were at school. This was evident in the recordings. Sometimes, Alfie joined in and, at other times, he played nearby, occasionally humming the tune she was playing. Helen often had music playing on the radio, and this was reflected in Alfie's song repertoire. During the day, Alfie's mother usually allowed Alfie to entertain himself while she carried out household chores. Alfie seemed to enjoy playing on his own and sang extensively as he did so.

It was clear that Oliver enjoyed singing. Like Alfie and James, Oliver's parents also sang a lot, especially his father, who had a particularly fine singing voice. Oliver was an only child who, like Alfie, seemed very content playing on his own. Oliver spent a lot of time singing while he was alone in his room for his afternoon nap. This time spent alone in a contented state seems to have facilitated his self-directed singing.

The children who sang less than the average for this study were Xanthe, Maggie, Harriet, Rachel, and Jacob. Xanthe's mother appeared to value music and singing. She sang to Xanthe, talked about singing and music, and encouraged Xanthe to sing. However, she often tried to take the lead in music

and singing activities. On the whole, she organised Xanthe's time more than the other parents, suggesting activities and guiding Xanthe's participation. Xanthe did play on her own but not for extended periods.

Maggie's mother was a secondary school music teacher and, as expected, there was a fair amount of singing in their household. Maggie herself was a tuneful singer. Because Maggie's parents were both working full-time, Maggie's recordings were made during the weekends when the family were home together. This was obviously important family time and, as a result, Maggie spent very little time playing on her own. This was also very much the case in Harriet's family. Harriet's recordings were mostly made in the evenings when the family were together after a day of work and childcare. During these times, a lot of social interaction, including social singing, took place, but Harriet spent little time playing on her own. The fact that most singing in the study was self-directed singing, the lack of time to play alone may have negatively influenced the incidence of spontaneous singing for both Maggie and Harriet.

The least prolific singers in the study were Rachel and Jacob. Rachel sang very little compared to the other children. Although she spent some of her recording days at home alone with her mother and spent time playing alone, Rachel engaged in very little self-directed singing. While her parents both reported having musical backgrounds, neither parent was heard singing in the recordings, nor did they listen to recorded music. In addition, Rachel spent more time than the other children using electronic devices. While some children were recorded singing along to music on TV, this occurred far less often than children singing to themselves as they played alone.

The least prolific singer was Jacob. Jacob's mother did not consider herself a singer and, in the recordings, she does not appear to be a very confident singer. However, she did sing with Jacob and encouraged Jacob to sing. Jacob's mother's behaviour indicates that she felt it was important to sing with her children. While her behaviour was likely to have been influenced by the aims of the study, it is unlikely that she would sing or agree to take part in the study if she perceived no value in it.

While I was interested in the possible relationship between the home environment and the children's singing, this was not the main focus of the data collection; therefore, the data were limited to parental self-reporting and incidental information from the recordings. However, despite these limitations,

there are a number of environmental factors that seem to affect the spontaneous singing of these young children at home. Firstly, the children who sing the most have parents who sing to themselves. While many of the parents sang to and with their children, these parents sang to themselves, presumably for their own benefit. These children, then, had parents who acted as role models, using singing as a resource to care for the self or as a *technology of the self* (DeNora, 2000). Secondly, the children who sang a lot had plenty of time and space to play on their own. This invites the question, does solitude provide a space for singing or do children sing to provide ontological security and emotional support for their state of being alone? This question is perhaps impossible to answer, but it does make us consider the importance of alone time and privacy for young children. I discuss this further in Chapter 9. Thirdly, the prolific singers had large repertoires of songs, and they used these songs in both their original form and as material for improvisation. This indicates that there is value in young children learning a repertoire of standard songs as it provides them with material that they then have at their disposal to use in ways that are enjoyable and useful to them. These uses of spontaneous singing are discussed in Chapter 8.

7.5 Alfie: A narrative account

The aim of this study is to explore spontaneous singing at home. This places great importance on the physical and social context of the singing. In this section, I give a narrative account of one of the fifty recordings made. The purpose of this account is to place spontaneous singing in context and to introduce some of the themes that will be explored in Chapter 8. The following is a narrative account of the first recording made by Alfie. I chose this recording for three reasons. First, Alfie was 49 months old when the recording was made, placing him roughly in the middle of the age range covered in this study. Second, Alfie and his mother were home for an extended period of time (four hours) and were engaged in routine activities, including housework, solitary play, and meal time. Third, during the recording, Alfie makes extensive use of singing in a number of different ways that usefully demonstrate the breadth of the singing activity of young children at home. Alfie was one of the most prolific singers in the study, and this recording was chosen as a good example of spontaneous singing at home rather than as a representative example.

Alfie and his mother, Helen, have arrived home after dropping Alfie's older sisters at school. Helen puts the research vest on Alfie and suggests he might like to go outside to ride his bike. Alfie asks if he can have a cupcake first. Alfie chooses which cupcake he would like, singing a brief improvised rising and falling phrase on syllables. Alfie hums as he eats, breaking off occasionally to speak to Helen and, at one point, chanting, "I've got mucky fingers." When he has finished eating, Alfie asks to play outside. He wants to take the research vest off, "Cos it might get mucky," but Helen tells him not to worry. Alfie hums as Helen helps him put his shoes on. He then heads outside, running across the lawn to the play equipment, humming as he runs.

Alfie plays outside on his own for about fifteen minutes. He engages in imaginary play, talking, singing, and humming to himself as he does so. He adopts different character voices, using his voice expressively as part of his play. Alfie's vocalisations during this time are almost constant—a mix of self-talk, singing, humming, and vocalising. Occasionally, there are a few moments of silence but, most of the time, Alfie creates a sound track for his play. Initially, his singing is on syllables and sounds improvised, but later, he settles on a pop song and sings a few lines of the chorus several times. After a while, he hears his mother whistling My Ship's Home from China, a song they learnt at the music class they attend together. Alfie immediately starts singing this song.

Alfie goes inside to tell his mother he's hungry. He goes to wash his hands, singing to himself on syllables as he walks to the bathroom. While he washes his hands, he talks to himself quietly and then sings again on his way back to the kitchen and hums while he eats the rest of his cupcake.

Once Alfie has finished his cupcake, he heads back out into the garden to play. Alfie plays outside for about half an hour. At one point, his mother comes out to warn him not to go near the swimming pool and to help him put his shoes on. Later, he goes to the door to tell his mother he is hungry again. Helen gives him a banana, which he takes outside. While he plays, Alfie talks to

himself and hums. He hears his mother singing a pop song and takes up the song, singing, "I'm the only one to make you feel that way" several times and in different ways. He also hums the tune. Later, he goes back and asks his mother to help him put his shoe back on. When Helen speaks to him sternly for walking mud through the house, Alfie continues humming, as if to ignore her. Still eating the banana, Alfie goes back outside, humming with his mouth full. Once he's finished the banana, he takes the skin back to the house and calls out for his mother. While he waits for her, he hums. After a while of waiting (Helen calls out that she is busy upstairs), Alfie gives up and continues playing. He hums, sings the tune of a pop song on syllables, improvises, speaks rhythmically, and talks to himself. Again, there are few extended periods of silence. Eventually, Alfie makes his way inside to go to the toilet, singing on syllables as he goes.

Alfie and his mother have a conversation about paper aeroplanes. Alfie has a crazy idea for a plane and explains how Helen could make it. Helen responds slightly sarcastically, "Wow, I wish I was as clever as you." Alfie seems to recognise her sarcasm. He is quiet for a moment, then he says, "Yeah," and hums to himself. A short while later, Helen scolds Alfie and, again, he responds by humming.

Alfie goes upstairs with his mother to help her change the bed linen. He wants to play in the piles of sheets. Alfie hums briefly as he climbs the stairs. He asks his mother to throw all the sheets in a pile then lies in the sheets, pretending to be a baby. His baby talk is interspersed with babyish singing on syllables and humming as he pretends to self-soothe.

Helen finishes changing the beds and allows Alfie to watch television. He watches a children's movie about pirates that Helen has recorded for him. Alfie watches largely in silence, occasionally speaking to his mother about the programme. After about twenty minutes, he seems to lose interest in the movie and starts humming intermittently. He hums the tune of Cat's in the Cupboard, hums tunelessly into his cup, and improvises a tune. When some

background music plays on the movie, Alfie hums along. Alfie watches TV for about 45 minutes.

The cleaner arrives and wants to vacuum the living room, so Helen takes Alfie upstairs to play on the trampoline. Alfie bounces on the trampoline and sings a few words from a pop song, "No one else is ..." He breaks off to tell his mother to watch him do his amazing trick that makes them both laugh. Alfie starts singing, "One, two, three, four, five, once I caught a fish alive" as he bounces. He sings the song over and over, changing the words, which get more and more silly. Once, he stops singing to chant, "I can jump the highest." The singing and bouncing continue for about 13 minutes until Helen suggests they go downstairs. As they walk downstairs, Alfie asks, "Mummy, please may we watch Christmas Mickey downSTAIRS". The final word is sung on a high-pitched note and is followed by some singing on syllables.

Helen starts making the lunch. Alfie tells her exactly which yogurt he wants: "Not the monkey one, I want the elephant one, but not strawberry again." Helen complains, "You're so fussy," and Alfie hums briefly in response. Alfie sits down at the table for lunch and sings, "Oh where, oh where has my baby gone, oh where, oh where can he be?" This turns to self-talk and is then sung again, partly with nonsense syllables. As he eats, he partly hums, partly sings the tune. Helen hums the tune that Alfie was singing earlier, I'm the Only One. Alfie slowly says the words: "I'm ...the ...on-ly ...one ...to ...make you feel that way," singing the last three words. He then immediately starts singing My Ship's Home from China: "My ship's home from China, with a cargo of tea, all laden with presents for you and for me. They brought me a fan, just imagine my bliss, as I fan myself, going like this ...like this ...like this ...like ...this." Alfie continues humming the song. Helen joins in humming, then sings the words, "For you and for me." Helen and Alfie then start singing together, taking turns.

Alfie: They

Helen: Brought me a

Alfie: Fan

Helen: Just imagine my

Alfie: Bliss

Helen: When I fan myself, going

Alfie and Helen together: Like this, like this, like this.

Alfie says, "Let's do that again" and immediately starts singing. This time they alternate on each word until Alfie sings, "Of tea, all laden with presents for you and for ..." and he pauses to allow his mother to sing "me". They continue, alternating on each word until "fan", when Alfie seems unsure of the song and Helen steps in to help him. When they finish, Alfie asks to do it again, and they repeat the song in the same way twice more. Alfie giggles when he accidentally repeats a word that his mother has already sung. Helen starts to lose interest, and Alfie has to remind her what to sing, picking up the song in the middle of a phrase. He also encourages her, "Mummy, come on." When they finish for the third time, Alfie says, "Let's do it again," and starts singing. However, Helen seems to be doing something else and says, "Hang on," so Alfie continues without her. Helen tells Alfie, "Eat up, we'll do it in a minute, okay?" Alfie agrees but continues to hum. He then starts singing with his mouth full, and Helen tells him to stop singing and eat, at which point Alfie sings, "growl growl growl." Alfie asks to get down, but Helen insists that he eat more of his lunch. He hums as he eats.

After lunch, Alfie asks to play outside again. As he puts on his shoes, he hums My Ship's Home from China, then sings the last phrase several times in a silly voice. Outside, he sings a nonsense word (something that sounds like "violim") over and over until, finally, he says to himself, "Oh no, I just had the wrong channel," and he sings, "I found myself going like this." Alfie plays outside for about 20 minutes. He talks to himself using different character voices, hums, and sings while he plays. In his singing, he improvises using the My Ship's Home from China tune, and freely improvises on syllables. He also uses tongue clicking and voiced bilabial trills. When he wants to be pushed on the swing, Alfie calls out to his mother, using his voice in many different ways.

Alfie runs inside when he sees a dragonfly. Inside, his

mother is speaking with her mother on Skype. Alfie listens to the conversation and speaks with his Nana for a while before going back outside to play. He starts humming as soon as he leaves the room and the conversation. Alfie plays outside on his own for about 15 minutes. While he plays, he hums, sings snatches of a pop song ("no one else is, going be alright"), and talks to himself. Helen calls him inside as it is nearly time for the school run. Alfie continues humming the pop song, but there is some recorded blue grass music playing nearby. He stops humming and says, "I love this." It is not clear whether he means the music or something else. Alfie says goodbye to his Nana on Skype and goes to wash his hands. As soon as he's alone in the bathroom, he starts singing. He sings the same pop song, on syllables. He stops singing and becomes absorbed in vocal play, perhaps appreciating the echoing acoustic of the bathroom. He washes his hands, singing, "Bye, bye, bye, byee, bye."

Helen starts getting Alfie changed to go on the school run and to gymnastics. She sends him off to the toilet. In the bathroom, Alfie sings his pop song on syllables. He stops to talk to himself, then improvises on syllables. Helen comes in and gets cross with Alfie because he is being slow. In response, Alfie sings an improvised tune on syllables. Alfie sings, again on syllables, as Helen removes the research vest. She leaves the DLP running while they continue to get ready to leave. Alfie can still be heard singing and humming from a distance.

7.5.1 Commentary

In this four-hour episode, Alfie demonstrated a range of singing behaviours and used his singing for a number of different purposes. He hummed and sang songs he had learnt and improvised tunes. He sang using lyrics—both learnt and invented—syllables, and nonsense words. He also engaged in vocal play, experimenting with his voice. Alfie sang when he was alone, in the presence of his mother without interacting, and while interacting with his mother. However, the majority of his singing was self-directed. Alfie largely used his singing as an accompaniment to his solitary play. He also sang

to accompany routine activities, such as toileting, washing hands, and eating.

Much of Alfie's singing occurred while he was playing alone in the garden. Alfie appears to use his singing, along with self-talk, to structure his play. His singing adds to his play experience, intensifying his engagement. When Alfie was lying in the pile of sheets pretending to be a baby, he used singing and humming to imitate a baby self-soothing. This suggests that Alfie is consciously aware that singing can be used to self-soothe. Sometimes, it seems as if Alfie sings to keep himself company. Music is social, and singing when he is alone may connect Alfie to his family and everyday routines. This will be discussed further in Chapter 9. Alfie also used singing and, particularly, humming, to entertain himself while he ate.

Alfie used singing as a means of communicating with his mother. He sang to gain her attention and to emphasise spoken messages, but he also sang to engage with his mother on a different level. The passage at lunch time when they sang *My Ship's Home from China* together is an interesting demonstration of how singing can be used in social interaction and to affirm and develop relationships. This communication is deeper than a simple spoken interaction. Alfie and his mother express their shared experience at the music class where they learnt the song, they express their shared love of singing, and they demonstrate their musical abilities. Alfie and his mother both sing tunefully. They are both able to sing internally, singing alternate phrases out loud. They coordinate their timing and both find humour in the experience. As a social musical agent, Alfie is able to draw his mother into the game and hold her there for some time. Another interesting way in which Alfie used singing was in response to his mother's criticism and irritation. This is discussed in Chapter 9.

This narrative interlude acts as an introduction to the qualitative analysis of the children's singing at home. It provides an introduction to the situated use of singing moment by moment in the daily life of a young child. The ways in which Alfie and the other children in the study use singing are examined fully in Chapter 8.

7.6 Summary

The purpose of this chapter was to contextualise spontaneous singing at home and explore the different circumstances in which spontaneous singing occurred. I began the chapter by describing some of the physical and active contexts where spontaneous singing was most often heard, including during play, when the children were engaged in stationary activities, when they were waiting or transitioning between places or activities, and when they were carrying out instructions. I then described the social contexts of spontaneous singing and how these contexts influence the type of spontaneous singing that is produced. The home environment also influences spontaneous singing. To explore the relationship between the musical environment of the home and spontaneous singing, I looked for common features in the musical home environments of the most and least prolific singers. In the final section of this chapter, I provided a narrative account of a four-hour period in one child's day, highlighting the ways in which Alfie used spontaneous singing during this time. This account demonstrated how spontaneous singing is integrated into a child's day.

The findings presented in this chapter reveal that spontaneous singing was typically woven throughout the children's daily lives, occurring during many of their everyday activities and in their interactions with others. Spontaneous singing was most often produced when the children were playing alone, and the children had distinct ways of singing in different social contexts. This is an important contribution to the existing literature, as most studies in the past have concentrated on singing in social contexts, with solitary contexts being largely ignored (e.g., Bjørkvold, 1989; Moorhead & Pond, 1978; Sundin, 1960/1998). I found that the children who were the most prolific singers had parents who sang to themselves, knew a wide range of songs, and spent time playing alone. In the next chapter, I extend some of these ideas to explore how the children act as musical agents in their everyday lives at home.

8. FINDINGS 3

MUSICAL AGENCY AND SPONTANEOUS SINGING AT HOME

8.1 Introduction

In Chapters 6 and 7, I described the singing behaviours that occur at home and the contexts in which they take place. I explained how children exhibit different singing behaviours in social and solitary settings. In this chapter, I consider how spontaneous singing at home provides evidence of the children acting as musical agents and using singing as a tool of personal and social agency. I use a theoretical framework of musical agency to examine their singing in interactions with others and for themselves. As discussed in Chapter 4, the concept of musical agency allows the children's actions as constructors of their own experience to be highlighted and for a child perspective to be adopted (Sommer, 2012). The term *function* is often used to discuss how music is utilised (e.g., Clarke, Dibben, & Pitts, 2010). Although I coded the data according to function, I have tried to avoid using the term in this chapter. Describing the functions of music implies taking the view of an outsider. Adopting a lens of musical agency enables a focus on the intentions behind the musical action to examine how the child uses singing in an agentic way to make sense of their experience and to influence themselves and others. Considering musical and extra-musical intentions and purposes is an interpretive process which requires reflexive consideration as a researcher, musician, educator, mother, and, more generally, as a social human being.

As discussed in Chapter 4, Karlsen (2011) developed an ethnographically inspired lens of musical agency for use in educational research. While Karlsen states that her lens can be used in any situation, care is needed when applying a conceptual framework developed from research on adults to young children. I found I could not analyse my data purely in terms of Karlsen's categories for musical agency. Instead, I used the principles of Karlsen's lens to develop my own categories. I did this through a process of qualitative thematic analysis. Focusing on the musical actions of the children,

the contexts of these actions, and my interpretation of their intentions, I coded as much of the data as I could for function. I then grouped the data into categories of musical agency based on the function coding. Both the first-level codes and second-level categories were developed inductively but were influenced by sensitising concepts from the literature (Hammersley & Atkinson, 2007). I found the categories of musical agency could then be meaningfully arranged into two conceptual themes: singing to act on the self and singing to manage social interaction. Figure 8.1 illustrates these conceptual themes and the categories of musical agency within them. Acting on the self, the children sing to manage their experiences, to manage—or regulate—the self, and to explore personal identity. Within social interaction, the children sing to manage relationships, as a means of communication, and to express identity.



Figure 8.1. Conceptual themes and categories.

As discussed in Chapter 3, singing is fundamentally a social activity. However, throughout this study, I found that young children at home use singing more often as a personal device to act on the self than as a social tool.

Therefore, I begin this chapter by looking at how young children use spontaneous singing to act on the self. I then move on to examine how spontaneous singing is used to manage social interaction. I demonstrate ways in which the children use singing as a tool to transform their experiences and to influence themselves and others.

It is important to note that not all the data were able to be interpreted in terms of musical agency. This was particularly the case for self-directed singing. Social singing is intended to be understood by others and, therefore, the children seem to imbue it with meaning. Self-directed singing appears to be intended only for the singer and contains fewer reference points for the listener. Hence, it is more difficult for the listener to infer the meaning and purpose of self-directed singing. The episodes of spontaneous singing that could not be interpreted in terms of musical agency were not used in this part of the analysis.

8.2 Singing to act on the self

The analysis shows that the children use singing to manage themselves and their experiences in a variety of ways. I use the phrase *to act on the self* rather than *self-management* or *self-regulation* because the children use singing to act on themselves in ways that go beyond what is implied by those terms. The children do sing to regulate their behaviour, but they also sing to engage with and enhance their experience of the present moment and to explore their self-identities.

8.2.1 Singing to manage experience

As described in Chapter 7, most of the singing took place when the children were alone or playing alone in the presence of others. Singing when they were alone often appeared to be a way in which the children managed their experience. The children appeared to use singing to both transform their experience of the present moment and to engage more fully in an enjoyable or engrossing experience. As Young (2006) points out, singing can "enhance, extend, and literally amplify" (p. 277) an experience.

8.2.1.1 Singing to transform experience

The children appeared to use singing to transform mundane everyday experiences into something more special. Singing was heard in a number of routine contexts that potentially held little interest for the children. These were

times when the child was waiting, engaged in routines such as hand-washing, or when the child was physically restricted by the expectation they would stay at the table during mealtime or in bed during nap time. In these situations, self-directed singing appeared to be used to relieve boredom and provide self-entertainment. Through singing, the child seems to be able to transform a boring or mundane experience into something more engaging. This was a very common use of singing. Eleven children sang while they waited, and thirteen children sang during everyday routines.

Example 20 (p. 142) described Oliver sitting at the table during a meal while his parents were engaged in an adult conversation. Excluded from his parents' conversation, Oliver turned to singing to entertain himself. His singing was improvised and exploratory, and he tried out a number of different tunes and melodic patterns. His focus appeared to be on his singing. He sounded content and did not demand attention from his parents. Self-directed singing like this is also associated with other stationary activities, indicating that singing may be used to compensate for an absence of physical movement. This idea is discussed further in Chapter 9.3. In addition to physical movement being restricted, at mealtimes there is little to play with, so the material environment is also reduced. This combination of restricted movement and limited material environment seems to encourage the children to make use of their voices—which are always readily available—to entertain themselves.

As mentioned in Chapter 7, bath time and bed time are similar to meal times in that the children are physically restricted. However, in the bath and in bed there are fewer restrictive rules about behaviour and, within the physical confines of the bath or bed, the children have more freedom to entertain themselves. This can lead to extended periods of musical play. The most obvious example is Oliver's nap time. Oliver was put to bed for a nap during two of the recordings, but only on one occasion did he stay in bed for any length of time. As described in Example 27 (p. 146), Oliver entertained himself in bed by looking at books, talking to himself, and spending a considerable amount of time singing. Singing was one way in which he transformed a potentially uninteresting time lying on the bed into an engaging experience.

The examples in Chapter 7.2.3 describe the children singing as they wait. Some of this waiting takes place in social contexts, such as Milly and her brother waiting in the car and Rachel and her mother waiting for the lift.

However, based on the behaviour of the child and the style of the singing, in these cases the children seemed to sing to act on the self rather than as a social interaction. The children appeared to use singing to entertain themselves and help pass the time. In the example below, Alfie is waiting for his mother to play a board game with him. Based on the four recordings of Alfie, it seems that Alfie, his mother, and his sisters often play board games together. The game Alfie has chosen has something to do with food and shopping. Alfie has it all set up, ready to start.

Example 50: Alfie waiting to play a game

Alfie calls out, "Mummy, hurry up...Mummy, come on." He waits, then starts vocally playing with the word "chippies." This turns into an improvised song, starting with the word "chipsies." The rest of the lyrics are unclear, but the tune sounds as if it is inspired by a pop song.

Alfie did not want to play this game alone and his mother was busy, so he had to wait. While he waited, he improvised this song, inspired by items from the game, to entertain himself. As with Oliver at the dinner table, Alfie's body was stationary while he waited. He chose to wait (he could have chosen to go and find his mother), and he appeared to use singing as a resource to assist him in that process. Both Alfie and Oliver used singing as a means of self-entertainment.

The mothers of Alfie, Harriet, Leo, and Thomas all reported in the interview that they sing to their children during daily routines. The data I collected shows evidence that as they get older, the children sing for themselves during these routines. This is likely to be learnt from the parents. The examples given in Section 7.2.5 show the children singing while putting on their shoes, getting dressed, and washing their hands. Parents sing to their children during daily routines to distract the child from fussing, as relief from a mundane task (Barrett, 2009), or to motivate the child. For example, in my data, Leo's mother improvised a song to motivate Leo to get dressed. In addition to singing during daily routines, the children also sang while undertaking simple chores. Singing in this case seemed to act as a motivating device and a way of focusing the attention. It seems likely that this is also behaviour that is learnt

from parents.

Nine of the children were recorded singing during transitions between activities or spaces. As described in Chapter 7.5, Alfie often sang as he moved from place to place: as he ran out to the garden, as he climbed the stairs, and as he went to wash his hands. These transitions usually involved movement from place to place, but the singing did not appear to be coordinated to the movement of the body. At other times, the children did coordinate their voices and their movement (see Section 8.2.2.1). Therefore, the lack of coordination between voice and movement here seems to indicate a different purpose for the singing. Bjørkvold (1989) and Young (2006) both refer to children following their movements with their voices. During transitions, it appears that the children imitate the idea of movement rather than their actual movement. Singing at these times usually takes the form of a brief outburst and seems to be a type of release. As the children release their concentration from an activity or release their bodies into action, they match this with a vocal release. Esther's singing in Example 33 (p. 149) seems to signal a release from playing with her brother and their friend and movement onto the next activity. Alfie leaving the room after talking to his Nana on Skype sounds similar (see Narrative Account, p. 167).

8.2.1.2 Singing to engage with experience

The previous section demonstrated how the children use singing to transform everyday experiences. My analysis suggests that children also sing to engage with experience in a number of other ways. Singing can be used to enhance engagement with and enjoyment of an experience; provide a means through which to reflect on or make sense of an experience; and focus the attention more fully on an experience. In Chapter 9, I will also discuss how singing may be used to create a sonic space for play.

The children appear to use singing as a means of enhancing their enjoyment of an experience. An obvious example of this is Esther playing in the bath. Esther uses her bath time for an extended period of uninterrupted imaginative play (Example 26, p. 145). Her play is narrated and enhanced through her improvised song. Another example is Rachel, who is looking at the book *Mr Bump* from the *Mr Men* series by Roger Hargreaves. Rachel improvises a song using the words "Mr Bump." Her singing may facilitate an enjoyable engagement with the book (Example 12, p. 140).

In the previous section (Section 8.2.1.1), I described how the children

seemed to use singing to transform the mundane aspects of mealtimes. However, sometimes, it appeared that the children were truly enjoying their food, and their singing was a way of whole-heartedly engaging with their meal. In Chapter 7.2.2.1, I give an example of Maggie eating a cooked breakfast with her family on a weekend morning. A cooked weekend breakfast is both a culinary treat and a social occasion when the family eat together in a relaxed manner. Humming may be a way for Maggie to engage more fully in the enjoyable experience of eating (Example 21, p. 143). Another example I give is Rachel appreciatively eating a pot of custard. Her rhythmic humming seems to express her enjoyment (Example 22, p. 143).

8.2.1.2.1 Singing to reflect/make sense.

On occasions when the children use clear lyrics, it becomes apparent that singing is also used as a mode of thinking and reflecting or making sense of experience. This echoes the way private speech is used.

Example 51: Esther thinking about Monopoly

Esther has been playing chess with her mother, who has now gone outside to hang up the washing. Esther is packing away the chess and looking for another game to play. She says, "Monopoly" several times, sounding it out slowly and with emphasis on different syllables. She then sings quietly, "Monopoly, monopoly, mo-no-opoly, mo-no-poly."

Example 52: Thomas considering the flag

Thomas's mother and grandmother are discussing how to make a flag to put on a birthday cake. Thomas asks what the flag is for, then he sings quietly to himself, "A flag flag flag, flag-o, flag-o, flag. A flag flag flag flag flag, a flag-a a flag-a."

Example 53: Maggie watching TV

Maggie is watching a children's TV programme that includes counting. The presenter says, "Six gingerbread men," and Maggie sings, "I'm a gingerbread, you can't catch me."

In these examples, the children use singing as a means of reflecting on and making sense of things around them. Esther sings to make sense of the word *Monopoly*. Without any visual information, it is difficult to know whether she is reading and making sense of the written word or whether she is simply exploring the sound of the word. Thomas sings while he considers the idea of having a flag on the birthday cake. Maggie's singing is triggered by an extra-musical association (Karlsen, 2011). She makes a connection between the six gingerbread men on TV and the traditional story of *The Gingerbread Man*. The song she sings does not appear on the television show she is watching, so it was presumably learnt elsewhere.

8.2.1.2.2 Singing to focus the attention

There is evidence that the children use singing to focus the attention. This is particularly apparent when the children are following instructions given by their parents or are searching for something. As discussed in Chapter 7.2.6, Alfie, Milly, and Oliver all improvise songs while carrying out parental instructions. Alfie's mother tells him to scoot in the shade, and Alfie sings "Scoot, scoot, scoo-oo-oot, in the sha-a-ade." (Example 41, p. 151). Milly's father sends Milly inside to fetch a cup of water for the injured bird and Milly sings, "A little cup of water for myself and the bird" while she carries out the task (Example 42, p. 151). Oliver's father asks Oliver to take some books to the desk in the study. As Oliver does so, he sings, "The desk, on the desk" (Example 43, p. 152).

The children also use singing to focus their attention when searching for things. In the examples given in Chapter 7.2.6, Milly sings to herself as she searches for a lost toy. Her singing is partly (or rhetorically) addressed to the toy: "Where are you Pengy?" (Example 44, p. 152). Alfie sings an adaption of a learnt song when he is looking for his cup (Example 45, p. 152), and Emma addresses her family through song when she is looking for her toy phone (Example 46, p. 152).

It is interesting to reflect why these specific examples use clear, meaningful words when they seem in every other way to be self-directed, and, as previously discussed, meaningful lyrics are unusual in self-directed singing. It may be because holding the wording of the instruction in their minds is an important part of carrying through with the action. Singing the instruction may help the child retain the information. Similarly, when the children are searching

for something, they hold themselves to their search through a mix of language and music. Children have been shown to use private speech in a similar way to hold a thought in place (Smith, 2007). However, the children also seem to use singing to focus the attention in ways that do not use words relating to the task. In the following example, Harriet uses humming as a means of retaining focus.

Example 54: Harriet's bedtime story

Harriet is having a bedtime story, and her mother asks her if she can find an "H" in the book. Harriet hums and taps while she searches.

Oliver also used wordless singing to focus on a task. He spent a long time working on a puzzle with his mother. Although his mother talked to him throughout the activity, Oliver only occasionally answered her. Instead, he spent much of the time singing snippets of songs he knew, replacing the words with nonsense syllables. I suggest Oliver's singing served two purposes. Firstly, he sang to focus his attention. He was very excited about the new puzzle, and singing may have helped him direct his energy towards completing it. Secondly, he appeared to be using his singing to indicate to his mother that he was concentrating or that he was working hard on the puzzle (Example 13, p. 141).

8.2.2 Singing to manage the self

The children appeared to sing as a mean of self-management. This included singing to co-ordinate their bodies, regulate emotions, and regulate behaviour.

8.2.2.1 Singing to regulate bodily coordination

The children could be heard singing while making gross motor movements, such as jumping, running, or dancing. Some of this singing was coordinated with the movement. This was particularly noticeable with repetitive movements like jumping on a trampoline. Due to the nature of the recording, it was only possible to detect body-song coordination when the movement made a sound. Silent movements were not able to be detected. The lack of visual data meant this was a fairly small category. However, the children clearly coordinated their singing and their movement on a number of occasions. Alfie and James both sang while jumping on a trampoline; Caitlin sang while jumping

on her parents' bed; Alfie and Rachel both sang while they scooted; and Rachel sang to accompany her dancing.

Example 55: Alfie scooting

Alfie is scooting to the local shop on a very hot day. He sings his own version of a pop song very rhythmically in time with the movement of his foot. Each syllable is emphasised as he puts his foot down.

Example 56: Rachel scooting

Rachel and her mother have gone outside to play. Rachel is learning to ride her scooter. She gets on her scooter and hums as she tries to coordinate her pushing leg and balance.

Example 57: Rachel dancing

Rachel is dancing in the kitchen. There is no music to dance to, so she sings Twinkle Twinkle Little Star to accompany her dance.

When movement and song are coordinated spontaneously, it is difficult to judge whether the child is using the song to coordinate the body or whether the movement is inspiring the singing. Young (2006) found that even with visual data, it was difficult to know whether a child was singing to accompany a movement or moving to accompany a song. Due to the exclusively audio nature of the data, this study cannot provide answers to questions such as this. However, it is clear that the children do coordinate their singing and their movement. In some cases, the child's singing seems to propel their movement. When Alfie is scooting on a hot day, his singing is full of effort, making it sound as if the motivation for moving is coming from his song. Rachel also sings while she scoots. She is just learning to scoot and is finding it difficult. Her rhythmic humming may help her coordinate her balance and pushing. When Rachel wants to dance but has no recorded music, she provides her own music, singing *Twinkle Twinkle Little Star* to accompany her dance. In some cases, it seems that singing may help coordinate the body. In other cases, the singing may simply reflect the joy of the experience of gross motor movement.

8.2.2.2 Singing to regulate emotion

Often the children's singing seemed to be an expression of or an engagement with their emotional state. These outbursts of sheer joy, delight, or excitement seem impossible to contain.

Example 58: James's sticker

James has taken advantage of the fact that no one is watching to climb up and help himself to a sticker. He sings happily.

In this example, James's singing conveys his delight at gaining a sticker. A similar joy was expressed by Alfie when he found the bush where the Queen of Silence lives (Example 3, p. 134). These examples demonstrate how the children engage with their emotional state through their singing.

A number of singing episodes suggest that the children use singing to self-soothe. However, it is not clear whether the singing is used to alter an emotional state or to engage with an existing state. An example of self-soothing comes from Emma, who sat quietly for a long time sucking her fingers and humming quietly while she waited for her sister to read her a story. Emma seemed very tired, and the combination of her humming and sucking her fingers appeared to assist her achieve or maintain her calm emotional state. It is common for babies and toddlers to hum while falling asleep (see Nelson, 2006; Sole, 2017).

8.2.2.2.1 Singing to protect the self-esteem

A fascinating use of singing to emerge from this study that has not been identified elsewhere in the literature is singing to restore a sense of self. There are a number of examples where the children sing or hum quietly to themselves after being rebuked or criticised by their parent. The singing is in response to a social interaction, but it appears to be directed towards the self. The following examples demonstrate this.

Example 59: Emma and the craft supplies

Emma and her mother are in dispute over which craft supplies Emma is allowed to use. Emma says, "I need just one more thing," but her mother loses her patience and snaps, "No, that's it." As her

mother moves away, Emma hums quietly to herself.

Example 60: Alfie's shoe

Alfie's shoe has come off while he was playing outside. He comes in to ask his mother to help him put it back on, and in the process, traipses mud into the house. His mother sternly tells him to stay on the mat and not walk mud through the house. Alfie hums briefly.

Example 61: Xanthe in her sister's room

Xanthe has been interfering with her sister's belongings. Her mother scolds her, and Xanthe sings briefly on syllables.

These examples indicate that the children use their singing to make an emotional recovery and restore a sense of self after a minor knockback. Although singing is frequently used to express joy or excitement, it can also be used to deal with less pleasant emotions, such as fear or hurt. The expression of emotion is not confined to self-directed singing and is actually more common in social situations where the children communicate their emotions through singing. This is discussed further in Section 8.3.1.5.

8.2.2.3 Singing to regulate behaviour

Self-regulation is sometimes equated with self-control or inhibiting first response. As discussed in Chapter 3.5.1, Winsler et al. (2011) found that some children sang or hummed when faced with a laboratory-based test where they had to wait before opening a present. There were several examples in my data that demonstrated children using singing to exercise self-restraint or control their behaviour.

Example 62: Leo's treasure hunt

Leo is playing treasure-hunting with his mother, who is out of the room hiding the "treasure". Leo calls out, "Are you ready Mama?" When his mother replies, "No," Leo sings on "la" to the tune of London Bridge.

Example 63: Emma's surprise

Emma's mother leaves the room, and Emma decides to hide from her, then jump out at her to give her a fright. Emma talks to herself about her plan, "I'm going to say 'boo' and she'll, she'll jump off her seat, like craziness." She sings a brief phrase on syllables, then hums to herself.

In the first example, Leo seems to use singing as a self-regulating device to control his urge to rush out and peek. He also seems to express his excitement at the anticipation of hunting for the treasure. Similarly, in the second example, Emma's singing seems to be used as a restraining device, preventing her from jumping out too soon. Like Leo, Emma's singing also seems to express her delight with her plan.

In Section 8.2.1.2, I described how the children were able to use singing to focus their attention on a task. While enhancing engagement, focusing attention on a task also has a regulatory function. The children appeared to use singing as a means through which to retain information and maintain their focus on carrying out a parent's instruction. Milly also whispered the instructions to herself, indicating that she was using two similar but different ways of remembering the errand she is on.

8.2.3 Singing to explore self-identity

Within this study, there are a number of examples where children seem to be exploring and expressing their identity. In this section, I discuss how the children explore their identity when singing to themselves and, later, in Section 8.3.3, I will look at how the children use singing to express their identity and present themselves to others.

Example 64: Leo's narrative

Leo is playing on his own with some stickers. He talks to himself, then starts humming and making shooting sound effects. It sounds as if he is sucking his thumb. He starts singing loudly. Initially, the words are unclear but seem to be a narrative about playing, also mentioning Maria, the maid. He then sings, "But I don't want that. But I like Santa Claus. That how ... that how he gonna do that, that

how he gonna do that, you can't do that, you can't do that." He hums, then sings very loudly, "Guys! These are good guys, not bad guys in there." He then hums again briefly.

Example 65: Alfie taking up his mother's tune

Alfie is playing on his own within earshot of his mother. In the distance, his mother starts whistling the tune of My Ship's Home from China and Alfie continues it, quietly singing "I found myself going like this, like this..."

Example 66: Alfie with the wrong channel

Alfie is playing outside on his own. He sings the tune of My Ship's Home from China using nonsense words. He gets "stuck" on a word that sounds like "violim," singing it over and over again. Suddenly, he says, "I just had the wrong channel," and continues singing the song with the proper words.

These examples demonstrate the children exploring their self-identity through singing. Leo sings a narrative about his experiences and the people in his fantasy and real worlds as a means of exploring his place in those worlds. Barrett (2011) describes similar episodes in a study of a young girl's identity building through singing. In Example 65, Alfie explores his identity through making a connection with his mother. In the final example, Alfie is exploring his identity as a singer who is confident in his ability to sing the song well and to use it as a basis for improvisation.

In this section, I have described ways in which the children used singing as a means of acting on the self as a tool of personal agency. In the following section, I look at how the children use singing in social interactions.

8.3 Singing to manage social interaction

As described in Chapter 7, the children were frequently heard singing during social interactions. Within these interactions, the children appear to use singing to manage relationships, as a means of communication, and to express their identity. These three functions are very closely linked. The nature of social interaction means that when we interact with others, we are constantly

communicating in many different ways, both verbally and non-verbally. Relationships are based on communication, and through relationships, we form our identities.

8.3.1 Singing as a means of communication

Singing is frequently used as a means of communication. The children sang to communicate direct messages that could otherwise have been spoken; to add emphasis to something they had said; and to seek attention. The children also sang to communicate in more complex and subtle ways, particularly to communicate thought and emotion. Because our emotions go beyond language, how a child feels can sometimes be expressed through singing in a way it cannot be with words (Campbell, 2010).

8.3.1.1 Communicating information

The children sometimes chose to sing rather than speak to communicate information. Twelve of the fifteen children used singing in this way. Chant was a frequent choice for sung communication. The use of chant rather than standard speech adds emphasis to the message the children are trying to convey. The examples in Chapter 7.2.2.1 show Alfie and Emma communicating through chant while eating. Alfie draws his mother's attention to his "mucky" fingers, perhaps enjoying the fact that his mother will not like him in that state (Example 18, p. 142), and Emma chants her question, "What's for the pudding?" to capture her mother's attention (Example 19, p. 142). In Example 67 below, Esther's chant both communicates some basic information and also expresses her joy at being ahead in the game.

Example 67: Esther playing cards

Esther is playing cards with her parents. She chants, "I'm winning, I'm winning!"

As well as chant, the children also used improvised and adapted songs to communicate information. These songs tend to be brief and use clear improvised lyrics, as in this example:

Example 68: Leo racing

Leo is playing inside with his neighbour. He zooms along on a ride-

on and sings, "Ha! You've got to have a race with me!" adapting the song You've Got a Friend in Me from the movie Toy Story.

In this, and Examples 16 (p. 142), 17 (p. 142) and 45 (p. 152), the children base their improvisations on songs they have learnt, changing the lyrics and sometimes slightly varying the tune. With the exception of Emma, who seems to stop mid-phrase, the children all sing complete musical phrases.

In the following examples, the children improvise a tune as well as the lyrics. The first example is very fleeting, being just three notes.

Example 69: Xanthe's picture

Xanthe has drawn a picture that she wishes to show her mother. She adds a sense of occasion by singing, "Close your eyes," before showing her.

Example 70: Thomas finding a car

Thomas's grandmother is decorating a cake for Thomas's uncle, Joe. She asks Thomas to help her find a car to put on the cake. Thomas sings, "A big one, a big one, a big one." Still singing (improvising on syllables and humming), he goes to find a car. Thomas finds a car and sings, "Wanna put this on ...this on ... Joe's cake." He then switches to a speaking voice and repeats the sentence.

Thomas's improvised song is drawn out and slightly hesitant. It seems as if he is partly singing to himself, considering whether the car is appropriate for the cake, and partly to his mother and grandmother. He switches to a speaking voice once his mind is made up. Unfortunately, his mother thinks the car is too big for the cake.

8.3.1.2 Providing emphasis

The children were often heard singing during a normal conversation. This singing, although not an essential part of transmitting information, added emphasis to spoken communication. According to Young (2006), singing can infuse the spoken word with emotion and can give it "emotive and motive power" (p.274).

Example 71: Alfie asking to watch TV

Alfie asks his mother "Mummy, please may we watch Christmas Mickey downSTAIRS?" The final word "stairs" is sung on a single high-pitched note, adding emphasis to his spoken request.

Example 72: Leo's friend

Leo's brother asks Leo who he likes best at nursery. Leo puts forward the name of a friend, but his brother says, "No, no, Gavin." Leo says, "Alright, I like Gavin." They talk about Gavin briefly, then Leo sings "Gavin, Gavin, Gavin, Gavin" to the tune of Twinkle Twinkle Little Star.

Example 73: Alfie opening the door

Alfie and his mother are getting ready to go and collect Alfie's sisters from school. Alfie says, "I know how to open the door, Mummy" and then sings a phrase from My Ship's Home from China: "Like this, like this."

Example 74: Alfie's rusty scooter

Alfie and his mother are at the shop in their compound. Alfie asks if he can walk back (he came on his scooter) because his scooter is a bit rusty. He sings, "Scooter, rusty, make it not rusty, make it colour it was."

In these examples, the children transmit information through standard speech, but the messages they convey are emphasised through the addition of singing. These examples also demonstrate how speech and singing can be interchangeable for young children and are not necessarily distinct means of communicating.

8.3.1.3 Seeking attention

From the time they are born, infants use their voices to gain the attention they need to survive. The evidence from this study suggests that singing is an important means through which young children seek the attention of their parents. Thirteen of the fifteen children in this study used singing to gain their

mother's attention. This ranged from addressing the mother in a singing voice to singing in loud or silly ways, which attracted negative attention.

Example 75: Alfie seeking his mother's attention

Alfie's mother has a friend visiting. Alfie has asked if he can watch TV and is trying to get his mother's attention. He begins rhythmically chanting "Mummy, Mummy" over and over again in a speaking voice. This changes to become a descending melodic pattern, which evolves into a melody based on two contrasting ideas, the second being approximate octave leaps. This is then repeated. It appears that Alfie has almost given up getting his mother's attention and has turned his attention to entertaining himself with his singing.

Example 76: Milly seeking her mother's attention

Milly is drawing. She wants her mother to draw her a stone but must wait while her mother helps her younger brother get changed. Milly rhythmically kicks the breakfast bar and sings, "Draw the stone, [lyric unclear] the stone, [lyric unclear] the stone, draw lots of stones, na-naa-a-aa, draw lots of stones for me, draw lots of STONES [shouts]." She sings to the classic descending third ur-chant with a dotted rhythm. Milly's mother is still busy talking to her brother, and Milly's chant ends with a frustrated shout.

Example 77: Caitlin seeking her mother's attention

Caitlin asks her mother to help her with something, but her mother tells her to wait a minute. Caitlin sings loudly to the tune of Once I Caught a Fish Alive, "Monday, Tuesday, Wednesday..." She continues on nonsense syllables.

Example 78: Harriet seeking her mother's attention

Harriet's mother, Georgina, has been singing with Harriet and her sister. The song is one they sing at the toddler music group they attend. The phone rings and while Georgina is speaking on the phone, Harriet starts singing very loudly. She sings, "Tap your knees, tap your knees, everyone tap your knees, tap your knees,

everyone tap your knees, everyone tap your knees, everyone tap your knees, tap your knees." When Georgina gets off the phone, she speaks to Harriet's sister, and Harriet keeps up her full-volume singing until Georgina turns her attention to Harriet, asking her to sing quietly and discussing what they will have for dinner.

Example 79: Karl seeking his mother's attention

Karl corrects the way his mother says something, and she calls him "bossy britches." She sings an improvised phrase, "Big time bossy britches, Karl James." Karl repeats his mother's chant, changing the words to: "Here comes bossy britches Mummy, yeah!" which he repeats three times, followed by, "Mummy's a bossy britches, yeah!" Mummy jokingly protests that it was her song. This encourages Karl, and he chants, "Here comes Mummy the bossy britches," over and over until his mother tickles him and chases him, both of them giggling. Karl continues chanting, but his mother quickly tires of the game and tells Karl he is too noisy. His mother turns her attention to something else. Karl continues chanting quietly to himself and starts playing with something he is not supposed to have. His mother intervenes. Karl starts up his chant again, and, after a few repeats, tells his mother, "You have to come and catch me when I say 'bossy britches.'" He wants to engage his mother in another game of chase, but his mother is busy with something else. Karl continues his chanting until his mother gets cross.

In these examples, the children all attempt to gain and hold their mother's attention and, in all the examples, the mother is busy with something else. Milly and Caitlin both want their mother to help them, Alfie wants his mother to answer his request, Karl wants his mother to play with him, and Harriet just wants to be the focus of her mother's attention. The children make use of volume and repetition in their singing, and Milly adds a loud percussive accompaniment. The children achieve different levels of success, with only Harriet immediately gaining her mother's calm, quiet attention. For Alfie, his singing seemed to distract from his need for attention, and he turned his focus

to his own singing.

8.3.1.4 Communicating thought

Much of the children's singing, while appearing to be directed at others and having communicative intent, did not transmit information. The children appeared to sing to express something that was on their mind or an association they had made.

Example 80: Alfie using flashcards

Alfie is using flashcards to practice recognising high frequency words with his mother. He reads "going" and sings, "Going to the park, going to the park," using an ascending stepwise pattern and tapping the rhythm as he sings.

Example 81: Harriet having dinner

Harriet and her family are having dinner. Harriet's father explains what vegetables Harriet has on her plate: "That's sweet potato, and this is carrot." Harriet sings, "Hot tato, hot tato ...hot tato, hot tato, hot tato" (the Hot Potato song from the children's television show, The Wiggles).

Example 82: Leo building

Leo and his friend are building with Magnatiles, flat building bricks that use magnets to clip together. While he plays, Leo sings the theme song from the children's TV show, Bob the Builder.

Example 83: James and the gate

James's grandmother asks James if he let his brother out through the baby gate. James admits that he did, then chants, "Who let the dogs out?" over and over.

These examples show the children making reference to extra-musical associations through singing. The children seem to use singing to promote mutual understanding. Alfie demonstrates that he can use the word he recognises in a sentence, possibly repeating in song what he and his mother have practised on other occasions. Harriet makes a connection between the

sweet potato on her plate and the song *Hot Potato* from the television show, *The Wiggles*. Leo also thinks of a television show, *Bob the Builder* as he engages in construction play. The example from James also shows an association with a known song, *Who Let the Dogs Out?* by Baha Men. There is an element of humour present in James's singing, which is overlooked by his grandmother.

Several examples show the children engaging in communicative acts that are more indirect. In the following examples, Xanthe and Milly seem to want to be understood, but they do not interact directly with their mothers.

Example 84: Xanthe's socks and shoes

Xanthe is fiddling with the fastener on her shoes. Her mother explains that when she goes to school, she will have to wear socks and shoes and "won't be able to take them off all the time." Shortly afterwards, Xanthe sings, "Socks and shoes," prompting her mother to ask, "Did you take your shoes off? And your socks?" which Xanthe has indeed done.

Example 85: Milly in the garden

Milly is in the vegetable garden with her mother. She sings, "Oh wow wee, oh wow wee," then in a speaking voice, "Oh wow wee." She pauses, then sings, "Wow wee wow wee," then says, "Look at my wow wee." Her mother tells her it is a pea flower.

In the first example, Xanthe subtly indicates to her mother that she has taken her shoes and socks off. The second example shows Milly using her singing to engage her mother and demonstrate that she shares her mother's interest in the wonders of the garden.

8.3.1.5 Communicating emotion

In a similar way, the children appear to use singing to communicate how they feel.

Example 86: Xanthe walking home

Xanthe and her mother are walking home from the shop at the

entrance to their housing compound. Xanthe's mother praises Xanthe for being such a good helper in the shop. Xanthe says nothing but bursts out singing a well-known tune (the UAE national anthem) on the syllables "daa" and "dee."

Example 87: Milly going swimming

Milly's father is taking Milly and her brother swimming. Milly excitedly sings, "We're going to swimming, we're going."

Example 88: Oliver in the cupboard

Oliver is playing inside the cupboard. He asks his father to shut the cupboard door. When this is done, Oliver joyously sings nonsense syllables to the tune of Down at the Station.

Example 89: Rachel looking for ice cream

Rachel is helping her mother unpack the groceries. She asks where the ice cream is. Her mother says she will find it in a minute, and Rachel excitedly sings, "Yeah yeah yeah."

Example 90: Alfie in the boot

Alfie and his mother are about to drive to the small shop within their compound. Alfie asks if he can sit in the boot of their estate car. When his mother agrees, he sings happily, "Sitting in the boot, sitting in the boot."

Xanthe's singing seems to express her pleasure and pride at being praised. Milly and Rachel both use singing to voice their excitement: Milly at the prospect of going swimming and Rachel at the thought of eating ice cream. Through singing, Oliver lets his father know how much fun it is to be shut in the cupboard, and Alfie lets his mother know how pleased he is to be allowed to sit in the boot.

Singing can also be used to express less joyful emotions. In the example below, Leo's singing appears to express relief.

Example 91: Leo escaping the baddie

Leo's brother, Nathan, has been pretending that there is a baddie in the house. Leo thinks the baddie is real and is very frightened, despite his mother's reassurances. His mother takes the boys upstairs to the playroom, and Leo locks the playroom door to keep the baddie out. After a couple of minutes, Leo seems satisfied that they are safe. He sings an improvised phrase on "yay."

These examples demonstrate that young children use singing to communicate in a number of different ways, both directly and indirectly. The children sing to transmit information in a value-added way, to emphasise a message, to seek attention, and to communicate thoughts and feelings that can not necessarily be translated into spoken language.

8.3.2 Singing to manage relationships

There are many occasions in the recordings when the children seem to manage their relationships with others through singing and musical utterances. Singing appears to be used to affirm relationships and to create points of contact with others. This can be heard when the children join in with others who are singing or pick up on a song that someone close to them was singing. Singing also seems to play a role in caring for others and helps facilitate cooperative play. The children use singing to negotiate their position in relation to others. Of course, relationships are not always easy, and singing is not always used in a positive way. Singing is used to taunt, annoy, and poke fun at other family members. In this section, I explore how the children go about affirming and managing relationships through singing.

8.3.2.1 Connecting and affirming relationships

On many occasions, the children spontaneously joined in when someone else was singing. Through the act of joining in with another's singing, the children demonstrated their belonging to the family group and also within a wider cultural group of people who are familiar with that particular song. The children sang to reinforce their connections with others and affirm their belonging. Singing together can create a strong sense of unity and group identity.

Example 92: Harriet joining in

Harriet's baby sister says "Ba ba ba," and Harriet's nanny starts singing Baa Baa Black Sheep. Harriet joins in.

By joining in with the nanny's song, Harriet expresses her belonging, indicating that she is part of a unit consisting of herself, her sister, and their nanny.

In the narrative of Alfie's morning in Chapter 7, Alfie was heard affirming his relationship to his mother through song. Alfie joined in with the song his mother was singing as a way to connect with her and capture her attention. Once he had her attention, he drew her into a song of his choice. Alfie obviously enjoyed singing with his mother. Together they explored their relationship and their identity as singers. When Alfie's mother was singing with him, she was momentarily completely engaged and focused on him. This time seemed precious to Alfie. As he went about his day, Alfie often joined in when his mother was humming or singing to herself. His humming appeared to be self-directed and may have given him a sense of being emotionally close to his mother. Like Alfie, James also enjoyed the personal connection with his mother that singing afforded.

Example 93: James singing with his mother

James's mother sings Baa Baa Black Sheep in French, trying to remember the words. When she pauses, James fills in the gap for her. They work out the song together, then James switches to Row, Row, Row Your Boat. He sings the version, "Throw your teacher overboard and listen to her scream." He asks his mother to sing and they sing together—mother singing the traditional version and James the teacher version. James tells his mother to sing the teacher version.

Example 94: Leo and Maria

Leo and his brother are playing a game of Memory with their maid, Maria. Leo improvises a song based on Maria's name. Maria laughs gently and quietly joins in.

Leo creates a point of contact with their maid, Maria, by including her

name in an improvised song. Maria joins in with Leo's song, thereby affirming their relationship. In the following example, Milly connects with her father and brother by singing a commentary on a brief moment in family life. Her song seems to gather them all in, in the moment.

Example 95: Milly and the pink princess

Milly hears her father talking to her little brother about dressing up as a pink princess. She improvises a mini narrative about it: "A pink Peter princess, Daddy thought he's a pink pretty princess."

Sometimes the children use singing as a way of drawing people in to an interaction. On a weekend morning when Rachel is at home with her family, she uses singing and dancing over an extended period of time as a way of drawing other family members into social interaction. She seems happy that everyone is there together and tries to capture their attention.

8.3.2.2 Entertaining or comforting others

There were several occasions when the children sang to younger children or to animals. In these situations, it seemed that the child was singing to comfort or entertain others. This singing was different from performing as the focus was on the receiver rather than the singer. Singing as performance is often more about the performing child and his or her identity in relation to others. Leo, Emma, and Thomas all sing to comfort younger siblings. Esther sings a song to her cat (Example 47, p. 155), and Emma sings to her pet rabbit (Example 48, p. 155)

These examples demonstrate empathy and care. Singing to entertain and comfort others is included here rather than in the communication category because through their singing, the children demonstrate that they care about the younger child or pet. Their singing builds on their relationship by communicating warmth, love, and security. It is important to note that the social context of the family environment elicits these singing behaviours. Only the children who have younger siblings or pets are afforded the opportunity to sing in this way.

Example 96: Leo singing to baby

Leo and his brother have been playing roughly with their baby brother, and he begins to cry. Leo apologizes and starts to sing The Alphabet Song to him.

Example 97: Emma playing with her brother

Emma is playing with her baby brother. She sings Ring a Rosie using baby language syllables.

Example 98: Thomas soothing the baby

Thomas's mother is looking after her baby niece. The baby wakes up from a sleep while Thomas's mother is baking. She asks Thomas to go in and talk to the baby while she washes her hands. Thomas goes to the baby and immediately starts singing to try to calm her down. Throughout the morning, Thomas frequently sings to his cousin to entertain and soothe her.

8.3.2.3 Facilitating cooperative play

As described in Chapter 7.2.1.2, singing is sometimes heard as part of cooperative play. This singing seems to facilitate play in several ways. It can be an accompaniment to the play, a narration of aspects of the play, or as a means by which to move the play in a certain direction, possibly to avoid conflict.

Example 99: Harriet playing with her sister

Harriett wants her baby sister to play at being asleep. She says, "Sleep now please!" and then sings an improvised song, "Close your eyes, close your eyes, close your eyes".

Harriet's baby sister is probably too young to be a satisfactory play partner in pretend play. In singing to her baby sister, Harriet may be re-enacting something she has seen her parents or nanny do. She seems to know that singing may be a better way to facilitate the baby's participation than by simply demanding that she sleep.

Example 100: Leo and Nathan

Leo and Nathan are playing with boats together in the garden. Nathan sings an improvised song, "Time to fly, on a plane, fly on the water, on water... [continues]." Leo hums and occasionally attempts to join in. When Nathan stops singing, Leo takes over the song to narrate his own part of the game, singing, "Him need a safe, safe place...help, help."

This is part of an extended period of intermittent singing around the water play, with both boys improvising and adapting known songs to narrate their play and communicate their role in the game.

Example 101: Milly and Peter

Milly and her brother are playing a rough game with toy dinosaurs, who are roaring and trying to eat each other. Milly quite suddenly switches to a gentler mode of play. She starts singing, "Flutter flutter flutter," gently and in a high register. She ignores her brother's roars and continues to sing instead of engaging with him. Slowly, Peter's play begins to change and adapt to what Milly is doing. His voice becomes gentler and higher until eventually Milly stops singing to speak to him. They move on to a new game.

This episode demonstrates how a child can use singing to bring someone around to their way of doing something. Milly tires of the rough dinosaur play, but instead of telling her brother to stop, she alters his play through singing. Through her soft, gentle song she demonstrates to Peter how she wants to play. She continues to sing until Peter has sufficiently adapted his way of being to match hers. When Milly is satisfied at the transformation, she stops singing and restarts the conversation with Peter. This is also an example of how the children use singing to influence others. Further examples are given in the next section.

8.3.2.4 Influencing others and negotiating power

The finding that most surprised me in this study was the way in which the children used singing to influence others and negotiate power. The children

sang to assert themselves, attain or maintain control of an interaction, act defiantly, and to evade or resist control by others.

Example 102: Xanthe and her mother

Xanthe and her mother are playing a game that her mother says Xanthe invented a few days earlier. They have a picture book and take turns pressing a picture (as if it were a button) and improvising a song about that picture. Today the game is initiated by the mother, but Xanthe seems willing to participate. She begins by singing loudly on nonsense syllables to the tune of Twinkle Twinkle Little Star. Xanthe's mother asks, "Oh, what's that one called?" Her response indicates that she does not consider it to be a proper song. Xanthe makes up a nonsense name and her mother responds, "No, in real words," but Xanthe repeats her nonsense talk. Xanthe's mother has a turn, singing an improvised song about a ball. On Xanthe's turn, she continues to sing using nonsense syllables rather than words. The game continues until Xanthe's mother gives up.

In this example, Xanthe sings as a way of asserting herself while avoiding conflict. Early on in the game, Xanthe's mother appears to take control, disapproving of Xanthe's boisterous improvisations. Koops (2012) found that musical play in the home was inhibited when adults tried to take control. In this example, Xanthe communicates her displeasure at her apparent lack of agency by refusing to cooperate with her mother's idea of the game. The game turns into a battle of wills. Nevertheless, she continues to play until her mother tires of it.

Example 103: Caitlin and Uma

Caitlin is counting. She starts to sing, "One, two, three, four, five, once I caught a fish alive, six, seven, eight, nine, ten, then I let it go again." The maid, Uma, begins to sing. Caitlin pauses, then continues singing, but this time using improvised lyrics. She sings, "Why do... anybody picks the thumb, anybody it's the number," followed by nonsense lyrics. Uma says, "No, no, sing nicely." Caitlin says, "Okay," but her singing gets sillier. "[lyric unclear] go in their

mouth, [unclear] go in the mouth, anybody put stuff in your mouth, fish go in your mouth, fish go in the mouth, chairs go in the mouth, eyes go in the mouth, hairs go in their mouth, nose go in their mouth, lips and teeth go in their mouth [laughs]." Uma tells her to sing nicely again and suggests, "ABCD." Caitlin agrees, but starts a new nonsense song to the tune of Frere Jacques. The song evolves into a version using the names of animals: "Cheeky little monkey, cheeky little monkeys, crocodiles too, crocodiles too. Elephants and zebras, elephants and zebras, giraffes too, giraffes too, then I see the spider, then I see the spider, crocodiles too, crocodiles too. Elephants and zebras, elephants and zebras, giraffes too, giraffes too, crocodiles too, crocodiles snap, crocodiles snap."

This episode demonstrates how power is negotiated on an ongoing basis. I had the opportunity of observing Caitlin participate in music classes over the course of a year prior to her participation in the study. Caitlin was a very sunny and sociable child and was also very strong-willed. She enjoyed being the centre of attention. In this interaction, Caitlin appears to want to be the performer, and she is not prepared to share her stage with Uma. As soon as Uma tries to join in with the song, Caitlin starts improvising, knowing that Uma will not know the words or be able to anticipate what comes next. Singing an improvised song puts Caitlin completely in control of the song and the performance situation. Caitlin and Xanthe are both strong-willed, sociable children, who enjoy being the centre of attention. When they sing, they often do so as performers, wanting others to listen and wanting to maintain control. These examples demonstrate that they are capable of using singing to subtly control a social interaction. Leo also uses singing to control a social interaction but in a very different way.

Example 104: Leo, Nathan and Maria

It is nearly Christmas time and Leo, his brother Nathan, and their maid, Maria, are playing Uno. Maria starts singing Joy to the World, and Nathan protests, "We don't know that one." After a pause Leo says, "I know You better watch out" and starts singing the song, Santa Claus is Coming to Town. After a few lines, Maria joins in.

Leo is the child of a friend and is therefore well known to me. He is a very easy-going, peaceable child. His brother, Nathan, is much more determined and has a clear idea of how he wants things to be. Maria joined the family when the baby arrived, and Leo was more accepting of her than Nathan. Here, Leo uses singing to try to keep the peace between his brother and Maria by diverting attention away from Nathan's slightly confrontational stance. His singing also affirms his relationship to Maria.

The children also sang to ignore or defy an adult's directive, rebuke, or criticism. In this way, they resisted adult control whilst avoiding conflict. On occasion, singing was used to be subversive.

Example 105: Alfie deflecting his mother's irritation

Alfie's mother is hurrying Alfie to get ready for the school run and is getting quite cross. Alfie responds by singing an improvised tune on nonsense syllables.

Alfie sings here to deflect or ignore his mother's irritation. Through his singing, he indicates to her that he does not engage with her rushing.

Example 106: Caitlin ignoring her mother

Caitlin and her sister are playing with play-dough. Caitlin starts speaking rhythmically, "gu gu gee," continuing in a silly voice. She settles on the tune of Wheels on the Bus with lyrics "gaa gaa gee gurr." Caitlin breaks what her sister was making, and when her sister complains to their mother, Caitlin continues singing, but the singing becomes more introverted.

Initially, Caitlin demands attention through her singing and, perhaps, breaking her sister's play-dough creation was also a way to seek attention. When her mother becomes involved to try to sort out the problem, Caitlin continues singing without a break. However, she no longer demands attention. Rather, she sings to ignore her mother and her sister. By singing, she places herself out of reach and refuses to listen to the reprimand her mother is giving her.

Example 107: Karl climbing

Karl is climbing something he is not supposed to. His nanny tells him to come down. Karl defiantly sings a phrase in pop style, "You gonna stand there and watch me."

Karl does not openly refuse to come down. He uses a sung response to soften his refusal. A sung response is less likely to be interpreted as being rude or disobedient.

Example 108: Maggie in her room

Maggie has been sent to her room for being silly. She plays quietly until her father comes in, when she starts singing loudly using nonsense words.

Maggie sings defiantly to demonstrate to her father that she has not been beaten. Even though she has been sent to her room, her parents have not got the better of her.

Example 109: Maggie tidying the shoes

Maggie and her sister are wearing their parents' flip-flops. They show their father, who is unimpressed and tells them to put all the shoes away. Maggie says, "Okay," then sings an improvised song: "Put-ty back, put shoe back, doo dee day, doo dee day, put shoe back." She continues, changing the vowel sounds in some of the words until it becomes nonsense. Maggie's singing is cheeky and slightly defiant.

In Chapter 9, I discuss the children singing to motivate themselves while undertaking simple chores. While Maggie's singing here could be motivational, she was making a show of doing what she was asked, so it seems to be more defiant, deflecting her father's annoyance. Chores such as this hold more potential for conflict than routines as they are always in response to a parent's request. Through her silly singing, Maggie maintains a show of control while actually doing what she is told.

Relationships between family members are continually negotiated and

are not always positive. In the following example, Alfie sides with his older sister to use chant to goad his other sister.

Example 110: Alfie and his sisters

Alfie and his sisters are getting in the car, ready to go to school. The younger sister, Ingrid, chants, "Why are we waiting?" Alfie and his older sister, Sara, join in. Alfie chants, "Ing's a whingy girl," and Sara continues Ingrid's chant, "Why are we waiting? Why are we waiting?" Ingrid gets cross and tells them both to "Shush!" Sara continues regardless and Alfie joins in, amid shrieks from Ingrid. Alfie sits quietly while the girls argue about the name of a teacher. Sara quietly takes up the chant again, and Alfie joins in. Ingrid gets upset, and Sara whispers to Alfie to encourage him to continue chanting. Sara then starts singing Twinkle Twinkle Little Star, and Alfie joins in. Ingrid continues grizzling at them. She complains, "I'm going to tell Mummy about you two," to which Sara replies, "All we're doing is singing adorably. It's not like punching." Ingrid says she does not want them to sing. Sara starts singing, "Ingrid is the kindest girl, settle down."

The final comment from Sara, "All we're doing is singing adorably," demonstrates that she is explicitly aware of the non-threatening nature of singing in personal relationships. It is possible that the other children understand this as well. It is precisely the idea of singing as non-threatening that enables it to be used in negotiating power positions.

8.3.3 Singing to express identity

There is evidence in my data that the children used singing as a means of expressing and asserting their personal identities. They sang to present themselves to others in a number of different ways. Firstly, they asserted their individual identities through the expression of musical preference. Secondly, they sang to hear their own unique voice, and thirdly, they sang to reinforce their own identities as singers.

8.3.3.1 Expressing musical preference

We are all individuals and have our own personal musical preferences.

Even very young babies express musical preference (Trehub, 2006). Being able to express musical preference is a mode of agency, and having another person accept your preference provides a powerful sense of identity. The children in this study took delight in expressing their musical preferences, especially when choosing recorded music.

Example 111: Leo choosing music

Leo pushes a chair over to the kitchen bench where the stereo is situated. His mother asks "Leo, whatcha doing? Do you want to listen to some Christmas music?" Leo replies, "No, I want to listen to Gangnam Style." Mother says, "Oh, no. Let's listen to some Christmas music." She puts on a recording of Jingle Bells. After a few seconds, Leo complains, "I don't want that one." His mother compromises, "Do you want to listen to Gangnam Style one time and then we'll listen to Christmas music?" She puts on Gangnam Style and Leo dances vigorously, jumping up and down. In the chorus, Leo joins in with a few words. His brother turns up the volume, but their mother tells him to turn it down. When the song finishes, Leo announces, "It's off!" and is happy to let his mother put the Christmas songs on again.

This example demonstrates that Leo knows what sort of music he likes. His mother allows him to listen to the song he asks for even though she does not like it and would rather listen to Christmas songs. By doing this, she accepts and affirms Leo's self-identity. While Leo's preference is different to his mother's, his brother shares his enjoyment of the music, enabling them to identify both with each other and the music. Many of the children sing along to music on various forms of media, such as television, films, iPad apps, CDs and radio. They demonstrate their musical and viewing preferences and knowledge of the songs and, through this, their personal identities.

8.3.3.2 Asserting one's own voice and one's identity as a singer

The children sometimes appeared to sing to assert themselves, both generally and specifically as singers. In Example 112, James is surrounded by

people, but his singing does not seem to be directed at anyone. In this busy and noisy situation, it may be that he is singing to distinguish his voice as one that is unique among many (see Fernyhough & Russell, 1997). In Example 113, Esther seems to both copy and compete with her mother to assert herself as someone who hums while she thinks.

Example 112: James at the table

James is sitting at the table with family and a number of visitors. There are a lot of people and the noise level is high. James sings a line from I Saw Three Ships. Later, he improvises using nonsense syllables.

Example 113: Esther playing chess

Esther is playing chess with her mother, Ellen. During her turn, Ellen hums and, when it comes to Esther's turn, she also hums in an exaggerated manner.

8.3.3.3 Performing

Most of the children performed songs to others and, in doing so, asserted their identities as singers. Caitlin, Emma, and Xanthe, in particular, enjoyed performing. These three avid performers preferred to use improvised songs for their performances whereas the other children were more likely to sing learnt songs. Following on from Example 9 (p. 139), Emma used her toy karaoke set to perform a long sequence of nursery rhymes and improvised songs, referring to a book of nursery rhymes for inspiration. She was egged on by her sister but needed little encouragement as she is a natural performer and loved to be the centre of attention. In Example 8 (p. 139), Harriet sings along with her Elmo toy, and her mother, Georgina, applauds appreciatively. When the song finishes and the next one begins, Georgina comments on Harriet's baby sister's dancing. Not to be outdone by her sister, Harriet sings with Elmo as loudly as she can.

In the following example, Caitlin's mother has just arrived home and Uma, the maid, tells her that Caitlin has been singing.

Example 114: Caitlin performing an improvisation

Caitlin says, "I just singing ..." and starts to improvise, "Aisha, Aisha, Aisha, Aisha, peek-a-boo, peek-a-boo, Aisha is there, Aisha is there, peek-a-boo, peek-a-boo, Aisha's have, Aisha's got a boo boo, Aisha's got a, Aisha's got favourite, Aisha's got a princess, Aisha's got a horse, is is is is [lyric unclear] Miss Carmell. Trudger's cats, cats have pants [difficult to make out, turns to nonsense words ending with] peek-a-boo, ding dong ding dang doo dee dang."

Initially, Caitlin has her mother's attention, however, by the time she finishes, her mother's attention is elsewhere, and the singing is not acknowledged. It could be that the loss of her mother's attention coincides with the appearance of nonsense words in the improvised song. A performer needs an audience. Alfie, Caitlin, and Xanthe all used the trampoline (or, in Caitlin's case, her parent's bed) as a stage for performing. In all three cases, the mother kept a watchful eye on the bouncing and, therefore, provided a captive audience.

8.4 Summary

In this chapter, I have described how the children make use of singing in their everyday lives. These findings were based on an interpretive analysis within a framework of musical agency. Analysis of the data revealed that the children use spontaneous singing as a tool of agency to act on themselves and others. The children drew on singing as a cultural practice to realise their personal and social agency in a wide range of situations. This included singing to manage experience, to manage the self, explore self-identity, as a means of communication, to manage relationships, and to express identity. Some of the findings were particularly unexpected. I was especially surprised at the extent to which the children used singing to influence and negotiate their position in relation to others. While this has been noted previously in the literature (Knudsen, 2008), it has not been explored in detail. It was also interesting to hear that the children sang to maintain their self-esteem and restore a sense of self when they had been scolded or criticised. This phenomenon has not been previously identified in the literature. These ideas, along with others introduced in Chapters 6, 7, and 8, will be discussed in more detail in Chapter 9.

9. DISCUSSION

HOW DO YOUNG CHILDREN USE SPONTANEOUS SINGING IN THEIR EVERYDAY LIVES AT HOME?

9.1 Introduction

Over the last three chapters, I have presented the findings of this study in relation to the research questions. As previously stated, the aim of this study was to examine the ways in which young children use spontaneous singing in their everyday lives at home. In doing this, I hope to advance understanding of young children's musical home lives from a socio-cultural perspective. In this chapter, I present a summary of my findings and discuss these findings in relation to the literature that informed this study, as reviewed in Chapters 2 to 4. Relevant findings from recently published literature are also brought into the discussion. Over the last three chapters, I have described my findings in detail. In this chapter, I will draw out the points that are most in need of discussion. These are issues that are particularly important in terms of understanding the phenomenon of young children's spontaneous singing at home and issues which have been overlooked in the literature to date. I will particularly focus on young children's self-directed singing and personal agency and on singing as a means of negotiating social agency.

9.2 The nature and extent of spontaneous singing at home

My first research question relates to the nature and extent of spontaneous singing at home. In terms of spontaneous singing behaviours, my findings confirmed many of the conclusions in the existing literature, particularly; that all children sing spontaneously (Barrett, 2009, 2011, 2016; Custodero, 2006; Young & Gillen 2007, 2010); the amount of singing varies enormously between children (Sundin, 1960/1998); children use their voices musically in many ways, including humming, chant, melodic singing, and vocal play; and

children spontaneously sing improvised, learnt, and adapted songs (Barrett, 2011; Custodero, 2006; Moog, 1976). My data agreed with Moorhead and Pond's (1978) and Young and Gillen's (2007) findings that singing and music play are integral parts of other forms of play and are embedded in the flow of young children's activity. The children in my study, like those observed by Moorhead and Pond (1978) and Young and Gillen (2007), moved freely between speech and singing and did not always seem to distinguish between these different forms of vocal production. Like Sundin (1960/1998) and Veldhuis (1984), I found most spontaneous singing was fleeting rather than sustained. However, my findings do not agree with all the literature. Somewhat surprisingly, Whiteman (2001) found that humming and singing without lyrics was rare among children in an early childhood setting. In my study, humming was very prominent. This could perhaps be explained by the fact that Whiteman used video to collect his data. It may be that the video camera was not close enough to the children to reliably record humming.

In the literature, singing behaviours are given many different labels. Social forms of singing are largely referred to as *chant* (Moorhead & Pond, 1978; Veldhuis, 1984) or *song formulas* (Bjørkvold, 1989). Solitary forms of singing within group settings are referred to as *song* (Moorhead & Pond, 1978), *monologue* (Veldhuis, 1984), *fluid song* (Bjørkvold, 1989), or *free-flow vocalising* (Young, 2006). Solitary songs are often described as fanciful and fluid (Bjørkvold, 1989), have words that often do not make sense (Moorhead & Pond, 1978), and act as a commentary on a child's activity (Sundin, 1960/1998) or inner imaginative life (Moorhead & Pond, 1978). These types of singing are all evident in my data. Like Moog (1976), Young (2006), and Tafuri (2008), I chose to categorise my singing data according to the type of material used and organised my data into two fairly flexible groups: singing learnt songs and improvised singing. Learnt songs were rarely sung in full and improvised songs often touched on learnt material, so both groups contained *adapted* songs (Moog, 1976).

Several researchers describe children singing *narrative songs* (Barrett, 2011; Forrester, 2010; Moog, 1976). While I did not specifically code narrative song, I noticed the children in my study used two types of narrative singing. The first type was a descriptive narration of the child's play. For example, as Oliver played with his toys, he sang a description of what they were doing, "He's going

inside...the door closed." (Example 4, p. 134). The other type fitted Moog's (1976) description of narrative song: "Any words are sung so long as they seem to tell a story, but the child sings without trying to tell the story to another person, carrying on as if he were quite alone." (p. 115). An example of this is Milly, who sings:

Example 115: Milly's stream of consciousness narrative

"And the rain is falling, look at the leaves on the tree, oh no, there's a tissues, oh no oh no and this is where cats walk."

These stream-of-consciousness narratives were often more melodically interesting than the descriptive narratives. The difference in musical content seems to reflect the child's focus. Descriptive narratives were used as an accompaniment to enhance play whereas stream-of-consciousness narratives seemed to be the focus on the child's attention as musical play. Both Milly and Esther sang stream-of-consciousness narratives that seemed to be heavily influenced by Disney songs. Disney movies often contain narrative songs that move the story forward or provide insight into the emotional state of a character. Milly and Esther both sang improvised songs that were stylistically modelled on these Disney narratives. However, they did not seem able to improvise a tune and meaningful lyrics simultaneously. Their priority seemed to be musical rather than narrative. Narrative songs illustrate how the children use improvised singing in both creative and utilitarian ways. Singing can be enjoyed as an expressive, aesthetic experience in itself, and it can also be used to lend interest to other activities.

A feature of this study is the recording method I used, which allowed me to determine the extent of spontaneous singing in general and of different types of singing in terms of both frequency and duration. To my knowledge, no other studies have assessed spontaneous singing in this way. However, with the increased use of mobile recording technologies, future research may be more likely to include this approach. My analysis indicates that the most prevalent form of singing in terms of both frequency and duration is improvisatory singing. This is contrary to much of the existing literature. Within the literature, studies that took place in educational settings (Bjørkvold, 1989; Moorhead & Pond, 1978; Sundin, 1960/1998) all refer to chant as being the dominant type of singing. This does not appear to be true in a home environment. Moorhead and

Pond (1978), Sundin (1960/1998), and Bjørkvold (1989) all state that chant was used to communicate between children. It is likely that the absence of same-age peers in the home may limit the incidence of chant, and chant is not a salient feature in other home-based studies (e.g., Barrett, 2009; Custodero, 2006; Young & Gillen, 2007). In my data, chant usually occurred during social interactions and was directed towards both adults and siblings. Tafuri (2008) states that most spontaneous singing collected at home by parents in her study were known songs but notes that this was because invented songs were difficult to capture. In contrast, a recent study by Custodero, Cali, and Diaz-Donoso (2016) shows that invented singing was the most prevalent type of singing displayed by children travelling on the New York subway.

In addition to the prevalence of improvisatory singing, children rarely sang an unaltered version of a learnt song. Even when their singing was clearly based on a song they had learnt, they almost always sang with an element of improvisation. It could be argued that children adapt learnt songs because they are unable to remember the complete song. However, the evidence I collected shows that children are able to sing complete songs, but these are usually only sung when the child is performing for or singing with someone else. Why do the children not sing learnt songs in their entirety? Young (2002) suggests that young children rework songs to meet their own play needs. Mang (2005) surmises that improvised songs allow children to concentrate on doing something else or on the communicative intent of their singing. Based on my findings, I agree with both these suggestions. It does not appear to be in the child's interests to perform complete songs as a straight rendition of a known song may not be as useful as an improvised version. Improvisation demonstrates that the children can take material they have learnt and use it in ways that are meaningful and interesting for them. This indicates agreement with Sundin's (1960/1998) assessment that children have two ways of being musical: one way of musicality that conforms to adult expectations and another way that suits their own needs. When they sing to themselves, children have no need to conform to adult ideas of musicality and, therefore, they use the songs in their own way to fulfil their own needs. All fifteen children in the study improvised, demonstrating that they were all able to make use of musical material in ways that suited their own needs.

The durations of different types of singing behaviours are not discussed

in the literature. This is primarily due to the limitations of data collection methods. In my data, improvisatory singing was dominant in terms of frequency and duration. However, as mentioned in Chapter 6.3.2, the average duration of an episode of singing based on a learnt song tended to be longer than the average duration of an episode of improvisatory singing. There are two possible explanations for this. Firstly, when singing is based on learnt songs, the children may have more material to draw on and, therefore, the singing comes more easily. I think this is an unlikely explanation, and the data does not really suggest this. Secondly, the social setting may be different. There did not appear to be much of a difference between the average durations of social and self-directed singing, so the children tended to sing for the same length of time, regardless of the social context. However, the children did sing for longer if they were singing with someone else. Singing with others usually necessitates singing learnt songs that are known to all the singers. While there are examples of children improvising together, when improvising, they usually took turns rather than singing simultaneously. The children sang for longer when they sang with someone else, and they chose to sing learnt songs for this. It appears that social context is extremely influential on spontaneous singing. This is discussed further in the next section.

9.3 Contexts for spontaneous singing

The second research question addresses the contexts and circumstances in which spontaneous singing occurred. Context is a key component of this study. The home is a unique location, both physically and socially. At home, children often have freedom to make choices regarding both their activity and their level of social interaction. These choices are not always available in an educational setting. It was a benefit of the data collection method I used that I was able to collect singing across all contexts within the recording. Diary methods, both written and video, make it difficult to judge which contexts are most conducive to singing because parents can only capture singing when they notice it. With these methods, singing that takes place outside the notice of the parents remains invisible.

As in Young and Gillen's (2007) *Day in the Life* study, singing occurred throughout the children's days. However, singing was particularly prevalent during solitary play, during stationary play activities, and at times when I would

describe the children as being at a loose end. I argue that social context is more influential on the children's spontaneous singing than the active context. The children sing in different ways when they interact with others and when they are alone. Most singing took place when the children were alone or playing alone in the presence of others.

In the literature, Moorhead and Pond (1978) stress the importance of freedom for spontaneous singing. They assert that musical play (including spontaneous singing) occurs when children have the freedom to pursue their own interests. My data supports this. In my data, most spontaneous singing occurred when the children were engaged in free play. As Barrett (2016) found, this could be solitary, parallel, or social play. However, there were not many activities that did not lend themselves to singing. Singing occurred during very exciting, engaging activities, such as bouncing on the trampoline, through to less interesting activities, such as waiting for their turn during a board game. Depending on the child, singing could be part of any and all activity. It is likely that one of the reasons singing and musical vocalising is so useful for children is that it is freely available as a means of expression and exploration at all times (DeNora, 2013).

A considerable amount of singing took place during stationary activities. Young (2006) describes a type of singing which takes place when children's bodies are still and proposes that young children sing themselves into a state of calm concentration where their bodies are still and their attention is focused. My data supports this suggestion. Singing appears to provide a means through which the child can enhance their concentration when they are engaged in stationary activities that they have freely chosen, such as doing a puzzle, looking at a book, or playing with toys that require fine-motor manipulation.

There are other situations where the child's movement is restricted when singing may become a substitute for movement. These are situations that the child has not freely chosen, such as sitting at the dinner table, having a bath, or taking an afternoon nap. In these situations, the child is restricted in some way with limited opportunity for movement, and there is little motivation or need to create or maintain a state of concentration. In these situations, I suggest the children sing as a substitute for movement. Movement is inherent in music and singing when one is static can perhaps reflect an active state of mind, even when the body is still. Hancock and Gillen (2007) argue that a child's preferred

state is play and that play involves movement. Young (2006) describes children singing to reflect their movement and moving to reflect their singing. I suggest that when a child's opportunities for movement are restricted, singing can be harnessed to enliven a static situation and temporarily raise mundane experience to the realm of play. Several studies have involved children in physically restrictive circumstances. Forrester's (2010) research took place when his daughter was confined to her high-chair at meal-times; Koops (2014) considered children singing in their car seats; and, in a recent study, Sole (2017) explored toddler's crib singing before they went to sleep at night. Custodero, Cali, and Diaz-Donoso (2016) observed children riding in the subway. The nature of behavioural expectations means that these children, too, would have been physically restricted to some degree. It may be that these situations, where movement is restricted, are particularly conducive to singing.

During freely chosen activities when the children's attention is focused on the activity, singing seems to act as an accompaniment or tool of concentration. When engaged in activities that hold little interest, singing appears to become a form of self-entertainment. Koops (2014) studied children singing in the car and found the children improvised more freely in the car than the children she had previously studied at home. Koops's study was based on parental observation, and it may be that the parents, who were also restricted to the car, paid closer attention than at home. However, this is an example of when the body is still, the mind can roam, and this can be expressed through singing. In my study, Caitlin's mother reported that Caitlin would often sing improvised songs non-stop for up to an hour when they were on the school run in the mornings.

The children also sang when they were engaged in activities that held little interest. These included routine activities, such as hand-washing, waiting, and transitions between activities or places. It is documented that parents use singing as a way of overcoming the mundane nature of childcare routines (Barrett, 2009; Custodero, 2006). I propose that by the age of three or four, the children do this for themselves.

In terms of musical agency, singing can be harnessed as a tool for concentration, a form of self-entertainment, and can perhaps encapsulate the essence of movement when the body is still. Spontaneous singing often took place when the children's bodies were relatively still and they were concentrating on an activity that held their attention, or when their movement

was restricted and they sang to entertain themselves.

While the physical or active contexts described here seem particularly conducive to spontaneous singing, the social context appears to be more influential on spontaneous singing. As described in Chapter 7, the children tend to use different singing styles for social and self-directed singing. While this has been noticed and commented on in the literature, these differences have not been closely examined.

Although this study was based in the home, the children were recorded in a number of different social configurations. They were at home with just one caregiver (mother, nanny, grandmother), both parents, grandparents, siblings, or the whole family. Throughout the recordings, the children moved between interacting with others and playing alone. The children usually controlled these patterns of interaction themselves, choosing when they wanted to interact with others and when they preferred to play alone. For some children, this included the choice of whether to play with siblings while and for others, there were no playmates available.

Young (2006) found that two- and three-year-old children sang more during their play than three- and four-year-olds. Her explanation for this was that the older children interacted with their peers more. It may be the case that a lot of spontaneous singing took place at home because there was an absence of same-age peers to play with. In a footnote in their 2016 study, Custodero, Cali, and Diaz-Donoso note that private singing may be used as a resource to take the place of play with peers and freedom of movement. I agree that singing may be used to substitute for freedom of movement, and I acknowledge that culturally, music refers to shared experience. However, I am less convinced that it takes the place of interaction with peers. I discuss this more fully in Section 9.5.1.

As mentioned previously, Sundin (1960/1998) proposed that children have two ways of acting musically: one way to conform to adult expectations and another way when they are alone. The children in my study appeared to understand social expectations around singing. Their behaviour implied that they knew that certain types of singing behaviour were accepted by adults, and they adopted these behaviours when interacting with others. The difference in singing styles was largely based on language content. When singing to interact with others, the children used learnt songs and improvised songs with words

that conveyed meaning. In social interactions, the children are presumably motivated by the need to be understood. When the children were alone, they did not appear to have the same motivation to make their singing meaningful. In these situations, there was no need to sing with meaningful words or to sing complete learnt songs. When singing to themselves, the children seemed to be more interested in experimenting with nonsense words and adapting learnt songs for their own needs. Musically, social singing more closely reflected learnt songs, and self-directed singing tended to be less structured. The fact that the children used distinct singing styles for social and self-directed singing indicates that they exercise control and choice over what and how they sing. The children took a cultural form (singing) and used it in ways that were useful to them in a given situation. Although not referring specifically to social and self-directed styles of singing, Barrett (2003) observes "the way a child shapes a musical work such as a song reflects membership of particular cultural communities and awareness of the values and behaviours appropriate to the contexts of these communities" (p. 201).

Three quarters of the singing I collected in this study occurred when the children were alone or playing alone in the presence of others. This could indicate that the children sing as a way of keeping themselves company (Barrett, 2016) or, simply, that speech takes precedence during social interactions, thereby reducing the incidence of spontaneous singing in interactive situations.

There have been several recent publications dealing with solitary or private singing. Sole (2017) studied 18- to 36-month-old children singing in their beds before sleep; Custodero et al. (2016) observed children on the subway in New York and noticed that most of their singing was solitary; and Gluschankof (2016) reported on the private singing of seven-year-olds in the *MyPlace, MyMusic* study (Ilari & Young, 2016). These studies are discussed in more detail in Section 9.5.1. However, it is interesting to note that there is increasing interest in the self-directed musical activities of young children and perhaps an acknowledgement that young children have privacy needs and an internal private life. I believe this is important as a balance to the dominant focus on social interaction in the lives of young children. While studies in the past have referred to solitary singing, it has usually been glossed over in favour of more social forms of singing.

Through the careful consideration of the contexts in which spontaneous singing takes place, we can begin to understand how singing is useful to young children in their everyday lives at home. In the following section, I examine how the unique home environment can influence a child's spontaneous singing.

9.4 Factors in the home environments that influence spontaneous singing

My third research question considers factors in the home environment that influence spontaneous singing. In Chapter 7, I identified three environmental factors that appeared to enhance the spontaneous singing of these children at home. The most prolific singers: had parents who sang to themselves, had a large repertoire of songs to draw on, and had time and space to play on their own. In this section, I will discuss the first two of these factors and the impact of the physical and social environment on spontaneous singing at home. Solitary play will be discussed further in Section 9.5.1.

Research has shown that parents and family are very influential in children's musical lives (Campbell, 1998; Lum, 2009). Several studies have examined the extent to which parents sing to their young children (e.g., Barrett, 2009; Custodero, 2006; Mehr, 2014; Young & Gillen, 2007), but the effect of parents' own self-directed singing on their children has not been investigated. Brand (1986) found that parental attitudes towards music had a more significant effect on the musical achievement of seven-year-olds than whether the parents played an instrument themselves. Interestingly, in my study, one of the least prolific singers, Rachel, had parents who both had formal musical training. In the interview, Rachel's mother described how she had been a keen musician as a young woman. However, there appeared to be very little musical activity in the household and, perhaps because of this, Rachel did not engage in much spontaneous singing.

According to Koops (2012) and Berger and Cooper (2003), adults can have either an inhibiting or enhancing effect on young children's musical play. Musical play is enhanced when adults describe, comment, and encourage (Berger & Cooper, 2003) and when their involvement is invited, brief, and relaxed (Koops, 2012). When parents become over-involved (Koops, 2012) or critical (Berger & Cooper, 2003), children quickly lose interest in their musical play. Koops (2012), like Moorhead and Pond (1978), concluded that young

children need to feel in control of their musical play, and agency and freedom to choose is important for musical play. Both studies suggest the need for sensitive adult support. My analysis agrees with these findings. As mentioned previously, most spontaneous singing in my study took place when the children were alone and had complete control over their play. Spontaneous singing appeared to be enhanced and extended when adults were prepared to act as an appreciative audience; however, this was only the case if the child chose the activity. This can be seen in Caitlin's long improvisations for her mother and their maid (Example 114, p. 205). Conversely, when Xanthe's mother attempted to steer the direction of the singing book game described in Chapter 8 (Example 102, p. 198), Xanthe used her singing to challenge her mother's control, and the game quickly foundered.

The children in my study were all growing up in middle class homes where there were a large array of toys, books, and media. How the physical environment might influence spontaneous singing or musical play is not well covered in the literature, with a couple of notable exceptions (Ilari & Young, 2016; Young & Gillen, 2010). The physical environments of the children in this study appeared to facilitate spontaneous singing in a number of ways. Several of the children sang while they played outdoors, and most sang while playing with toys. The toys, equipment, and media the children had access to often seemed to act as catalysts for singing. Oliver, for example, had a passion for fire engines, and he often drew on the tune or lyrics to the popular children's TV show, *Fireman Sam* in his spontaneous singing (e.g., Example 4, p. 134). Leo and his brother, Nathan, improvised songs while playing with toy boats and trains, the singing reflecting and enhancing the play (Example 100, p. 197). Xanthe had access to a box of instruments, which facilitated her play at being a music teacher, and Harriet's Elmo toy had become a focus for family music-making (Example 8, p. 139).

Spontaneous singing was also influenced by what the children were allowed to do at home and who was prepared to engage with them. Caitlin was allowed to jump on the bed, and this facilitated a sung performance for her mother. Leo had access to the music player in the kitchen, and this enabled him to choose what music was played, admittedly with some negotiation (Example 111, p. 203). Access to unsupervised outdoor play enabled both Alfie and Emma to engage in imaginative play in which spontaneous singing played an

important part. One of the reasons that Leo sang with others more often than the other children was because his brother and the family maid were willing to sing with him. Here, it becomes clear how young children's agency is contextually situated and dependent on a number of interrelating factors.

The children in this study who were prolific singers seemed to have a fairly large musical repertoire. It was noted by Moog (1976) that children need a good repertoire of learnt songs if they are to improvise. Most of the children in the study had a repertoire that included children's songs, songs from TV and DVDs, and, in some cases, songs from adult popular culture. Two of the most prolific singers, Alfie and James, had an extensive repertoire. Much of Alfie's repertoire came from adult popular culture, which he learnt from the radio, and James sang a number of songs from church. This reflected the fact that music had a strong presence in both their homes.

As mentioned previously, the amount of singing varied enormously from child to child. Parents reported that other siblings sang a lot more or less than the target child. This has been commented on by other researchers, particularly Sundin (1960/1998). As a parent and educator, my explanation for this would be that every child is different. As a researcher, I would like to know why there can be such a difference in singing between siblings. The differences in singing habits between siblings suggests that while the home environment is clearly influential, it is not the only factor in determining the extent of a child's singing. It is also important to note that even growing up in the same household, the childhood experiences of siblings can be quite different, depending on factors, such as birth order, gender, and genetic inheritance.

As Ilari and Young (2016) point out, children's home musical experiences are the product of a range of different influences. This study provides further evidence that the musical agency of young children at home is mediated by both the physical and social environment.

9.5 Spontaneous singing and musical agency

The fourth research question in this study is concerned with how musical agency is demonstrated in spontaneous singing at home. In Chapter 8, I described how the young children in this study use singing as an agentive tool in their social interactions and to act on themselves. As mentioned in that chapter, I was inspired in my analysis by the theoretical lens put forward by

Karlsen (2011). While Karlsen's lens provided a framework for my interpretation, I developed my own categories of analysis. These categories, based on data collected from three- and four-year-old children, did not correspond exactly to Karlsen's categories. Karlsen intended her lens to be used in education; however, the works that inform her framework, particularly DeNora (2000) and Batt-Rowden and DeNora (2005), are based on research with adults using recorded music. Young children's spontaneous singing, while having some similarities, is sufficiently different to require an adjusted framework.

Karlsen's lens of musical agency is divided into two dimensions: a collective dimension and an individual dimension (see Figure 4.1, p.78). Each of these dimensions contains a number of different manifestations of musical agency. My framework can also be visualised as two dimensions; however, rather than a collective/individual focus, my dimensions refer to social musical agency, where singing is used to influence others, and personal musical agency, where singing is used to act on the self. The personal dimension is very similar to Karlsen's individual dimension. However, the social dimension differs. Karlsen's collective musical agency reflects the ways in which music is used in group situations by the collective. I take a more psychological stance, describing how the individual acts musically in relation to others. There are two reasons for this. Firstly, collective music-making did not feature prominently in my data. This was largely because in the home setting, there were limited opportunities for collective music-making. Secondly, as a researcher, the aural perspective I had from the audio data collected at a point on the child's chest was very much from the child's perspective. When the child was in a group situation, my perspective was not of the whole group equally—as it would have been if I had been a physical observer—but of the group from the target child's audio perspective. Like Karlsen, each of my dimensions contains several manifestations of musical agency, as described in Chapter 8. In Figure 9.1, I represent my categories as a flower diagram rather than a lens. This illustrates how the categories are closely related and overlapping.

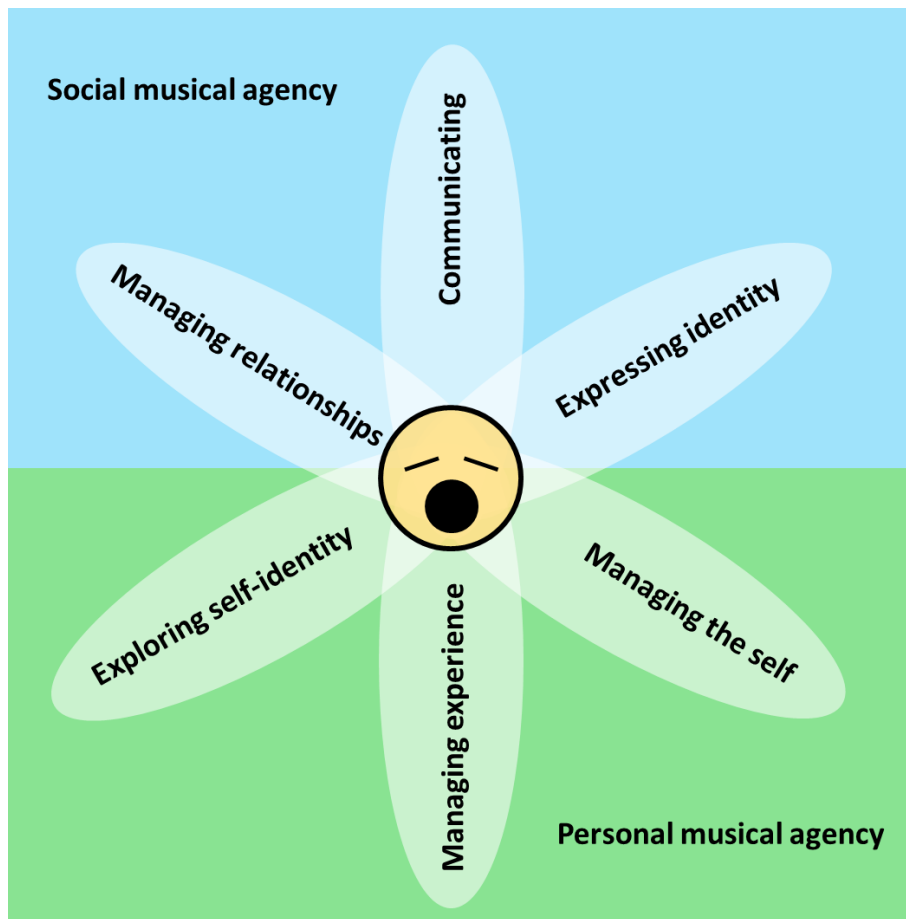


Figure 9.1. Manifestations of musical agency in young children.

The relationship between Karlsen's manifestations of musical agency and the categories I developed from my data can be seen in Figure 9.2. Where Karlsen describes eleven manifestations of musical agency, I identified just six. Briefly, in the personal dimension, my categories of *self-regulation* and *self-identity* relate fairly closely to Karlsen's. However, instead of Karlsen's categories of *self-protection*, *matters of being*, and *medium for thinking*, I have a single category *managing experience*. Some aspects of Karlsen's categories are represented within this category. While it could be argued that all young children's spontaneous singing develops music-related skills, I did not collect specific evidence of this and, therefore, do not have a category that relates to Karlsen's *developing music-related skills*.

In terms of Karlsen's collective dimension, her categories *regulating and structuring social encounters* and *knowing the world roughly* equate to my *managing social interactions* and *managing relationships*. However, Karlsen's category *affirming and exploring collective identity* relates to exploring collective identity whereas my social identity category relates to how young children

present their own personal identity to others. Karlsen's final two categories, *coordinating bodily action* and *establishing a basis for collaborative musical action*, were not significantly represented in my interpretation of the data.

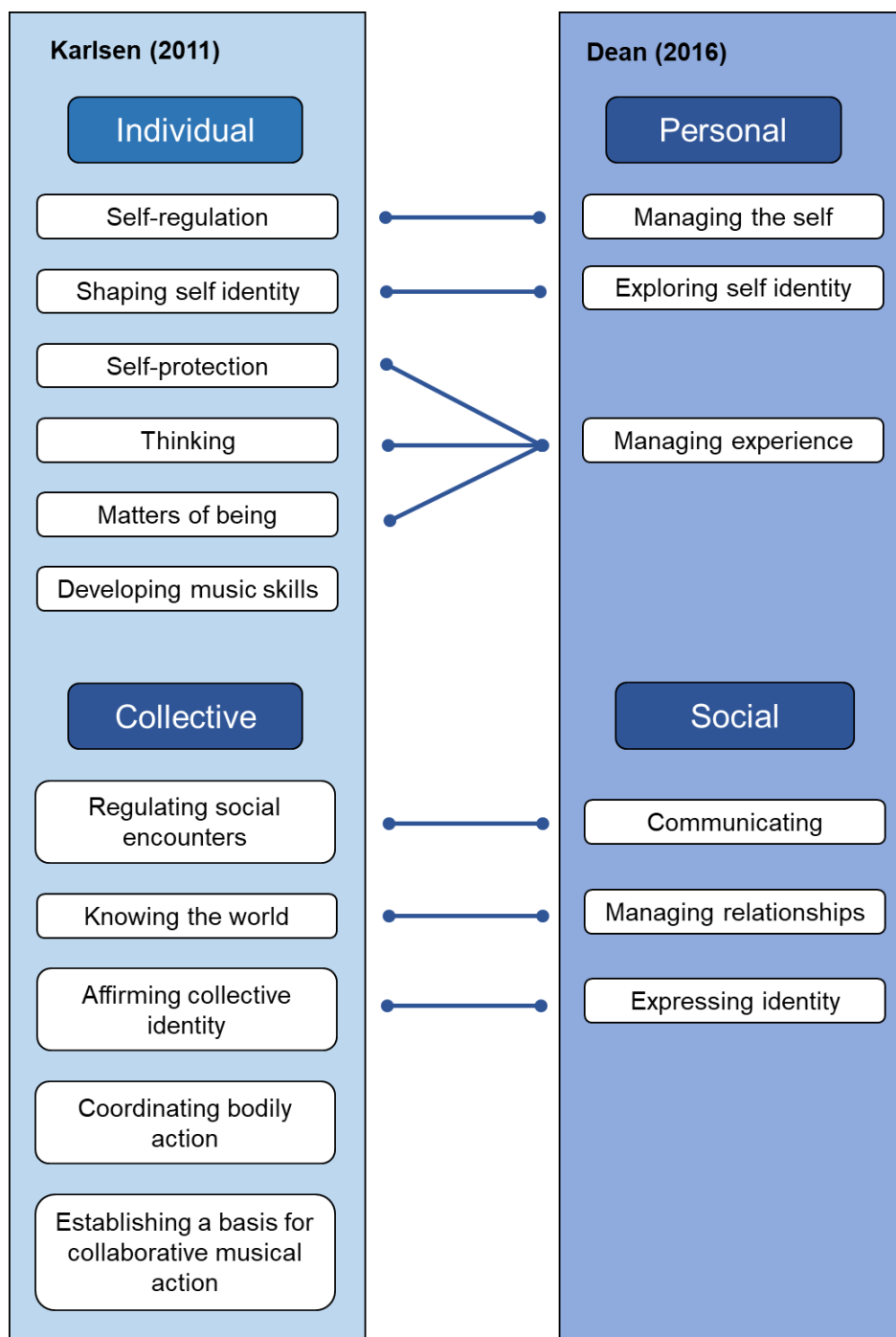


Figure 9.2. Comparison of categories of musical agency.

Karlsen's framework—as a synthesis of sociocultural ideas of musical agency—provided a valuable model for my study, which enabled a focus on musical action. This focus highlighted singing, not only as a way of acting

musically, but also as a means of action in the wider sense, as part of being-in-the-world. Taking the view that agency resides in practice (Esser et al., 2016), my interpretation of the data indicates that the practise of spontaneous singing provides a space in which young children can exercise agency to develop their place in the world. Singing is a cultural tool that children use to create and exercise agency. The power to act musically is drawn from the social context, using singing as a tool.

In the following sections, I will discuss some aspects of how singing was used as an agentic tool by the children to manage their experience and influence those around them.

9.5.1 Spontaneous singing and personal agency

My interpretation of the data in this study suggests that the children used spontaneous singing as a tool of personal agency to act on the self in a number of ways. The children used this self-directed—or intrapersonal—singing to manage and structure their experience; to manage or regulate themselves and their behaviour; and to explore their self-identity. In this section, I will summarise the ways in which the children sing to act on the self. I will begin the section by discussing self-directed singing in general and how our focus on social interaction and the methods we use for early childhood research may cause young children's solitary activity to be overlooked.

From a sociocultural perspective, music is a cultural product, and musical engagement is considered to be a social act. This focus has meant that within the sociocultural research tradition, more importance has been placed on social or group music-making than solitary music-making. Although some researchers have indicated a need for periods of solitary music-making (Young, 2012), there is still a bias towards social musical activity. There appears to be a similar bias within the play literature where the majority of research has taken place in settings where children engage in social play. While this research can tell us a lot about singing or play in group settings, it tends to ignore those settings where children do not have access to peers. Although middle-class Western children are spending an increasing amount of time in education and care settings, at home, many children spend considerable time with only adults for company. In middle-class Western homes, children are also expected to entertain themselves from time to time while their parents are engaged in

routine household chores. I consider this necessity to entertain oneself—without extensive peer interaction—to be what makes the home an important location for the study of children's singing.

The recent publication of studies by Gluschankof (2016), Sole (2017), and Custodero et al. (2016) indicate a shift towards an interest in the solitary, or private, music activities of young children. These studies all have something to offer in relation to solitary singing and singing to act on the self. As part of the *MyPlace, MyMusic* study, Gluschankof (2016) examined the private musical activities of seven-year-olds. *MyPlace, MyMusic* was a collective research project that examined the home musical lives of 17 middle-class seven-year-olds in twelve different countries (Ilari & Young, 2016). While these children are beyond the age range of this study, Gluschankof (2016) makes some important observations about music-making in private. She found that the children "negotiate their musical worlds" (p. 67). In public, they meet adult expectations, but in private, or with their peers, they act as "agents of their own musical experience" (p. 67), engaging in music-making in their own ways. This supports my own findings and also reflects the view of Sundin (1960/1998) that children have more than one way of being musical.

Also with an interest in the private, or solitary, musical worlds of young children, Sole (2017) examined the solitary singing of nine middle-class North American toddlers, aged 18–36 months, before they fell asleep at night. Twice a week, over a period of four weeks, parents listened outside their child's bedroom door after they had put their child to bed and made notes about what they heard. A recording was also made for the researcher. Sole was particularly interested in the developmental functions of this private singing and describes how singing was used by the toddlers to practise language and singing skills. However, more relevant to this study, she also considered the social and emotional function of private singing. Sole proposes that singing is used as a tool to self-soothe, reflect on musical bonds, make sense of relationships, and process the transition between being with parents and being alone. Sole concludes that the time these children spent alone in their cots before they went to sleep was an important time, both for practising musical skills and as a time of musical reflection.

In contrast to Sole's study, which took place in the privacy of the child's bedroom, Custodero et al. (2016) looked at singing in a very public space, the

New York subway. The authors analysed data collected by field observers travelling on the subway over three Sundays. Sixty-nine episodes of musical behaviour were observed from children, aged approximately six months to ten years. These behaviours were recorded using an observation protocol form. Although this study took place in a very different setting and is framed through Winnicott's theory of the *transitional object* (cited in Custodero et al., 2016), the aims of the study are very similar to mine. In particular, the authors state that they were "interested in the characteristics of musical behaviours and how frequently they occurred...Our larger aim was to consider whether possible functions of musical engagement...were observable" (Custodero et al., 2016, p. 57). Although the subway is a very different setting to the home, neither the subway nor the home are educational settings, and in neither are the children with groups of their peers. Importantly, the authors found that the majority of the singing they observed was invented and solitary (I would call this self-directed as it took place in the presence of others). This supports my findings that most singing at home is self-directed and improvisatory.

Custodero et al. (2016) describe the dominant function of the music-making they observed as being "to comfort and entertain self" (p. 65). The authors explain that the categories *comfort* and *entertain* were combined because the difference is based on motivation, which is impossible to discern from observation alone. Their study was based on a pilot study undertaken in Taipei (Custodero, Chen, Lin, & Lee, 2006). While I agree that the motivation for singing is difficult to infer from observation, I consider these two functions to be so different that to combine them removes an important distinction. Custodero, Chen, Lin, and Lee (2006) were observing unknown children in public spaces in Taipei. In contrast, my data is contextually situated. While still dependent on inference, the longer observation periods make motivations and intentions clearer and provide more information on which to base inferences. The second most dominant function that Custodero et al. (2016) observed was music-making as communication and they related this to cooperative social contexts where the child was interacting with another person. This supports my finding that much of young children's social singing is communicative.

While ostensibly interested in the everyday musical experience of young children, Custodero et al. (2016), like Sole (2017), fall back on a developmental agenda. Discussing an example from a seven-year-old boy, they describe his

move from improvisatory singing to singing a learnt song as "movement from exploratory spontaneity to mastery ...[and]... from the practice of exploring sounds to a musical product" (p. 69). This implicitly places more value on the musical product than the improvisation and implies a progression from one to the other. I would argue that these two distinct types of singing are equally important in a child's musical toolkit. In Sole's study discussed above, she describes a younger child who is motivated to sing complete songs, and an older, presumably more advanced, child who appears to have no interest in doing so, instead using his musical knowledge to manipulate learnt material for his own purpose (Sole, 2017). This is supported by my finding that children usually only sing complete songs when they are performing for others. Custodero et.al. (2016) also claim their analysis demonstrates the development of identity. They suggest that the examples they give, ordered on the basis of age, illustrate the development of identity, expressed through singing as a transitional object. The authors acknowledge that disposition may be a factor in how self is explored and expressed through singing; however, I think presenting the examples as a linear progression over-emphasises the linear nature of identity development.

Custodero et al. (2016) claim that singing is used as a type of security blanket or familiar object that is called on for comfort in transitioning to new situations. I think there are fundamental difficulties with the assumption that young children use singing as a comfort tool, and I will return to this issue in Section 9.5.1.3. Firstly, I wish to summarise and discuss my findings relating to singing to act on the self. As described in Chapter 8, singing to act on the self comprises of three categories: singing to manage experience, singing to manage the self, and singing to explore identity. In this section, I will discuss the first two of these. Exploring identity will be discussed in a separate section along with social singing to express identity.

9.5.1.1 Singing to manage experience

Through analysis of my data, I found that young children use singing to manage their personal experiences. Mundane experiences were transformed through singing, and singing provided motivation to carry out routine activities and chores. Spontaneous singing was also used to intensify engagement with experience, to make sense of experience, and to focus the attention. Essentially, the children used their musical agency to influence their own

experience—that is, to change, manipulate, or enhance it in some way.

In many ways, these findings reflect what has already been explored in the literature. That children use singing to engage with and enhance experience has been suggested by Bjørkvold (1989), Young (2006), and Knudsen (2008). Bjørkvold (1989) describes spontaneous singing as “awareness broadening” (p. 81), taking an experience beyond the mundane. Young (2006) suggests that singing adds an emotional element to experience. Knudsen (2008) describes a young girl singing as she eats her cereal, interpreting her singing as engaging with the experience and maintaining a state of mind. Barrett (2003), Campbell (2010), and Sole (2017) all provide evidence that suggests young children use singing to make sense of the world around them, including their relationships and experiences.

In Chapter 8, I gave examples that suggest the children sang to transform mundane experiences, such as waiting. While transformation of the mundane is not specifically covered in the literature, many researchers refer to young children singing to entertain themselves (Campbell, 2010; Custodero et al., 2006; Young, 2006). Research has shown that parents sing to their infants and toddlers to distract them (Barrett, 2009) and use recorded music to keep them entertained (Young & Gillen, 2010). Several researchers claim that early musical interactions between adults and children form the basis for independent music-making as children grow older and more independent (Barrett, 2011, Barrett & Tafuri, 2012; Stadler Elmer, 2011). Based on the data I collected and the prior literature, it seems that young children may learn how to use singing to entertain themselves from parental example during infant and toddlerhood.

Musical parenting may also influence the way children use singing during everyday routines. Research shows that mothers use singing with toddlers and young children to smooth daily routines, such as dressing and brushing teeth (Barrett, 2009; Custodero, 2006), and this was also reported by the mothers of the children in my study (see Chapter 8.2.1.1). It seems likely that parental singing acts as a model, which the children emulate once they can undertake these routine activities on their own. I would add to this that singing then becomes available to use as a motivational tool to accomplish small chores, such as a child clearing their plate from the table (e.g., Harriett, Example 39, p. 151). We see an equivalent among adults, who often listen to recorded music as a source of mental and emotional stimulation to alleviate the monotony of

routine tasks, such as housework (North et al., 2004). Recorded music is not as accessible for young children as it is for adults, and where children do have access to music-playing devices, the operation of these does not fit easily into the fluid nature of a young child's daily activity. Instead of listening to music, young children seem to sing to entertain themselves during routine tasks and mundane experiences.

As mentioned in Chapter 7, much of the children's self-directed singing was produced when they were playing alone. This singing often lacked meaningful lyrics, being based on syllables and nonsense words, and including humming. The lack of language content, coupled with the absence of visual data, often made this type of singing difficult to interpret. Many researchers describe spontaneous singing as an accompaniment to play (Bjørkvold, 1989; Custodero et al., 2006; Whiteman, 2001). While this seems accurate, it stops short of asking *why* children sing to accompany their play. As already mentioned, Bjørkvold (1989), Young (2006), and Knudsen (2008) all suggest that this singing allows the child to more fully engage with the experience. It could also be, as Young (2006) suggests, a way of creating and maintaining a state of bodily calm that is conducive to quiet play.

An additional suggestion in the literature is that singing is used to create an aural environment that suits the child's state of mind and provides a sonic space in which to play (Knudsen, 2008). This idea seems to be based on research that shows how adults use recorded music to create a private space or an aural environment conducive to concentration (e.g., Bull, 2005; Larson, 1995). Unfortunately, it is difficult to know for sure why young children sing while they play. I suspect it is all these things and more. When looking at how singing is used, it is important not to forget that singing is enjoyable and that this is probably the most important reason the children engage in singing. Singing is aesthetically pleasing, and it enhances the enjoyment of play.

9.5.1.2 Singing to manage the self

My interpretations suggest that the children sing to manage themselves. They sing to coordinate their bodies, to engage with their emotions, to regulate their behaviour, and to protect their self-esteem.

While the data collection method I chose limited the extent to which I could assess movement, I did collect evidence that supports the idea that young children coordinate their singing and gross motor movement (Bjørkvold, 1989;

Young, 2006). Several examples of this were given in Chapter 8.2.2.1. Singing also appeared to motivate movement, as in the example of Alfie scooting on a hot day (Example 55, p. 180). This is in line with DeNora's (2000) theory that music can act as a "prosthetic device" (p. 103), increasing energy and motivation.

As discussed in Chapter 3, it is widely acknowledged that music and emotion are closely linked, even though the exact nature of the relationship remains unclear (Juslin & Sloboda, 2011). The data I collected contained many examples of joyful outbursts of singing, indicating the children used singing to express emotion and as an emotional release. There are also several examples of children singing quietly to themselves as they relax (e.g., Emma, see Chapter 8.2.2.2). My analysis suggests that the children use singing to engage with emotional states and match singing to their mood. There is limited evidence of the children using singing to alter their emotional state. Instead, singing is used to engage with and reflect current emotional states. Sloboda (2010) discusses the everyday nature of emotion in music. Based on his theory, the fleeting, fragmented nature of the children's spontaneous singing and its use as an accompaniment to other activity could indicate that it deals with fleeting, everyday emotions. Engaging with emotions in this way is most likely learnt through musical interactions with adults as an infant. Young and Gillen (2010) identify how parents match their singing to the emotional state of their toddlers; singing, for example, upbeat play songs when they are alert, and gentle songs when they are tired. This matching of mood may teach infants and toddlers to regulate their own moods through singing.

It is difficult to draw conclusions about whether the children use singing to manipulate their moods; however, my analysis suggests that the children understand how singing can be used to affect another's mood. A good example of this is the way Thomas used his singing to try to soothe his baby cousin (Example 98, p. 196). Barrett (2009) also provides an example of a four-year-old girl singing to influence her brother's emotional state. When Alfie played in the pile of sheets (see Chapter 7.5), he pretended to be a baby and used singing to indicate self-soothing. The fact that he did this as part of his pretend play demonstrates his understanding that music can be used to act on the self.

There is one situation in which the children clearly did use their singing to influence their emotional or psychological state. This was to restore their sense

of self or protect their self-esteem when they were faced with parental anger or criticism. In these situations, it was fairly common to hear the children sing quietly to themselves. This strongly suggests that the children were able to use singing as an agentive tool to change an aspect of their experience and restore a sense of self. As far as I am aware, this has not been previously documented.

While the evidence of children using singing to control their emotions is inconclusive, my analysis does suggest that the children use singing as a means of regulating their behaviour. As discussed in Chapter 8, two of the children appear to sing to inhibit their behaviour. Leo sings to stop himself peeking while his mother hides treasure (Example 62, p. 182), and Emma sings to help her wait for the right moment to jump out and surprise her mother (Example 63, p. 183). This appears to support the findings from Winsler et al.'s (2011) laboratory-based psychology study, which showed some children sing as a means of controlling their behaviour. It seems that the children can use singing to both coordinate and inhibit movement. Singing to focus attention on following parental instructions is another example of regulating behaviour through singing. As with emotional regulation, singing to regulate behaviour may be learnt from parents. Parents report using singing to influence toddlers' behaviour and particularly to distract them from unwanted behaviours (Barrett, 2011).

The role of music in the emotional lives of young children is not a well-researched area. Research has tended to focus on whether children can express emotion through song (Adachi & Trehub, 2000) and how parents use singing to help infants and toddlers regulate their emotions (Barrett, 2009; Trehub, Hannon, & Schachner, 2011; Young & Gillen, 2010). Few studies investigate young children's own engagement with music and emotion beyond noting that singing is used to express feelings (Campbell, 2010; Moorhead & Pond, 1978). This is an area that would benefit from further research.

9.5.1.3 Spontaneous singing and solitude at home

As mentioned in the introduction to this section, some of the literature claims that children sing to self-comfort (e.g., Custodero et al., 2016). I would like to question this assumption. It is certainly logical to conclude, as Stadler Elmer (2011) does, that young children learn in infancy to associate singing with positive emotional states that they can then call up again through singing. These emotional states can then be used to self-comfort or to keep the child

company (Barrett, 2016). I do not doubt that this is true to some extent. However, this interpretation relies on a deficit view of children. It assumes that children fear being alone and wish to be in constant social contact with parents or other loved ones. Why is it assumed that children always need comfort and that they always feel insecure? In my data, there is plenty of evidence to suggest that children enjoy being alone. At home, children are very familiar with their environment, and thriving children feel loved, safe, and secure. They know there is always someone to turn to when they are hurt, afraid, or upset. In terms of Bowlby's (1969/2008) theory of attachment, this security gives children the freedom to play alone.

As mentioned earlier, Custodero et al. (2016) combine the functions *to comfort* and *to entertain* in their analysis. I argue that these functions are very different as they arise from different states of being. My data suggests that children rarely sing when they are unsure or upset. The exception to this is singing to protect the self-esteem when an interaction has injured their sense of self. However, this singing can more accurately be described as self-protection than self-comfort. My analysis of the data I collected suggests that children sing to entertain themselves when they are alone, and this singing arises from a contentment in being alone. This was particularly clear with the children who obviously enjoyed playing alone, such as Alfie and Oliver. These children sang almost constantly as they played. Their singing appears to be an emotional expression of joy in their play, even an expression of the joy of playing alone. Ethnomusicologist Nettle (2005) states that the main function of music in the West is entertainment. This is reflected in the children's solitary singing. These children seem to sing as a soundtrack to their play, in much the same way that an adult might choose to listen to recorded music. They sing because it is fun and it makes them feel good. Singing may also provide a sense of company through an implied connection to others (Barrett, 2016). However, although the data does not provide firm evidence, I suggest the singing itself stems from a sense of contentment rather than loneliness.

Recent literature from outside the field of music education (Colwell et al., 2016; Corson, Colwell, Bell, & Trejos-Castillo, 2014; Lynch, 2017) indicates that preschool-aged children in Scandinavia and the USA actively seek to control the levels of social interaction they experience at preschool through the use of private spaces and that having this control gives children a greater sense of

agency. According to psychologists van Manen and Levering (1996), privacy and secrecy are necessary in the development of an inner self and to develop independence and self autonomy. However, Hancock and Gillen (2007) observed that play is often interrupted and intruded on by adults. Bull (2005), Larson (1995), and DeNora (2013) have all demonstrated how adults make use of music to control sonic space and create a sense of privacy. Considering this literature in conjunction with analysis of my data, it seems likely that solitary singing is used by young children to create a private space through which they can explore inner self and identity and concentrate on their play. Rather like Small's (1998) solitary flautist, when the children sing to themselves, they are defining who they are and relating on multiple levels to the people and culture that surround them. I argue that for some children, spontaneous singing is an important element of the enjoyable experience of being alone.

In the next section, I discuss spontaneous singing as a tool of social agency.

9.5.2 Spontaneous singing and social agency

The findings of this study indicate that young children use singing as a tool to manage social interaction. This is singing that is outwardly directed and interpersonal. It includes singing as a means of communication, singing to manage relationships, and singing to express identity. These areas of social interaction are very closely related. Communication is essential to relationships, and how we communicate and relate to others is influenced by our sense of self. Within relationships, there is a subtext of power and negotiation as we establish our position in relation to others. In this section, I discuss how the children in this study use singing as a tool to influence others and negotiate relationships.

My interpretations suggest that young children use singing extensively as a communicative tool. Sung communication can be explicit, as a way of exchanging information, or implicit, as a means of adding meaning or to communicate thoughts and emotions that go beyond language. Although sung communication can be both communication with others and communication with the self (Welch, 2005), in this section, I discuss outward, interpersonal communication.

Bjørkvold (1989) notes that "Spontaneous singing, just like ordinary

speech, is capable of being adapted to fit a given social situation" (p. 63). The children in my study made use of singing to convey information in a similar way to speech. They often used chant to do this, which agrees with Moorhead and Pond's (1978) and Bjørkvold's (1989) findings. However, communicative passages were also improvised. When the children intended to communicate information, their sung phrases were short, and they used clear, understandable words. This is reflected in Tafuri's (2008) description of what she calls *original phrases*, which are short, communicative, sung passages.

It is well documented that singing goes beyond communicating information and is a means of communicating thoughts and feelings that are difficult to express through language (Barrett, 2005, 2016; Campbell, 2010). The children in my study sang to add emotional content or emotional weight to their communications. They also sang to express emotions, particularly joy and excitement, and to express extra-musical associations in musical ways. They often did not distinguish between speech and singing but treated the two as a continuum of vocal expression. Singing was used as an extension of speech, providing emphasis and emotional content. As musical agents, singing is a tool that the children use to express themselves in their interactions with others.

Music psychologist Cross (2014) considers the communicative strength of music to be its ambiguity or "floating intentionality" (p. 813). He suggests that music may be "an optimal means of managing situations of social uncertainty" (p. 812-3). This idea is extremely relevant to how the young children in this study used singing to manage relationships. One of the most interesting findings of this study was that the children were observed using singing as a means to express disagreement and dissent without putting themselves in a position of direct confrontation. This is discussed more fully in Section 9.5.2.1. Singing also provided a space in which the children could behave outside normal expectations. When the children sought their mothers' attention, some of their demanding behaviour may have been considered unacceptable if they had not been singing. This is explicitly expressed by Alfie's older sister, Sara, when she retorts, "but we're only singing adorably," when their sister complains about Sarah and Alfie teasing her (Example 110, p. 202).

Research has shown that the early communicative exchanges between mothers and infants are inherently musical, and these musical exchanges contribute to the relationships that infants build with those around them (Malloch

& Trevarthen, 2009). It is likely that infants who have been parented in musically responsive ways are able to draw on their musicality to facilitate relationships beyond infancy. My interpretation of the data I collected suggests that the three- and four-year-old children in this study use singing to maintain relationships. The children use singing to connect with others and affirm their relationships. This is closely linked to identity construction, which is discussed in Section 9.5.3. The children often affirmed their connection to others by joining in with their singing, indicating an emotional closeness and sense of belonging. Connecting with others through singing was also demonstrated in the way some of the children sang to younger siblings or pets as a way of caring for them. This empathetic singing shows how young children can use their musical agency for the benefit of others.

The idea of singing to manage relationships has emerged as a strong theme in the study. There are many examples where the children use singing to influence others and their relationship with others. Singing is used to affirm relationships; as a means of cooperation in play situations; to attain and maintain control in social interactions; and to negotiate relationships in non-confrontational ways. The idea of negotiating relationships is explored further in the following section.

9.5.2.1 Singing, power, and agency in everyday social interactions

It is in managing relationships that the children most clearly use singing as a tool of social agency. In these interactions, the children use singing intentionally and skilfully to achieve—or attempt to achieve—a desired social outcome. These interactions often involve the negotiation of power and position. The ambiguity of meaning in singing allows children to challenge parental authority and provides a space for them to exercise their agency. Singing allows the children to assert themselves, express disagreement, attain or maintain control of an interaction, and evade or resist control by others.

My findings lend support to Knudsen's (2008) assertion that issues of power negotiation are observable in young children's spontaneous singing. Knudsen draws on Foucault's idea that power is negotiated through everyday actions to explain how children use singing to empower themselves as agents. Knudsen's work is based on a very small sample of six- and seven-year-old

children (just four short video clips, of which only two relate to power negotiation). However, within the literature that addresses young children's spontaneous singing, only Knudsen discusses the idea of power negotiation in any depth. Although Forrester (2010) mentions that his daughter uses singing in a defiant way and to indicate disagreement. Knudsen illustrates how children sing to communicate power, status, competition, dominance, and a command of space.

The examples given in Chapter 8.3.2.4 provide evidence to support and extend Knudsen's ideas. In Example 105 (p. 200), Alfie's mother is trying to hurry Alfie to get ready to go out and is starting to get cross. Alfie evades her irritation by singing. His singing gently but defiantly indicates that he is resisting her attempts to hurry him. Alfie uses singing in this situation because its ambiguous nature allows him to resist in a way that avoids conflict. Similarly, when Xanthe's mother attempts to lead the singing game in Example 102 (p. 198), Xanthe asserts her right to play on her own terms by intentionally singing in a subversive way to undermine the game. While cooperating to some extent by engaging with the game, she is nonetheless resisting her mother's control through playing by different rules. In Example 103 (p. 198), Caitlin exercises her agency to maintain control of her performing situation. She does this by changing the lyrics of the song she is singing so she can prevent the maid from joining in. In this way, she does not need to confront Uma and tell her that her input is not wanted, and she can continue her performance uninterrupted. Milly also takes control of a situation through singing. When she wants her brother to stop playing dinosaurs and join in a gentler game with her, she simply starts singing "flutter, flutter" in a high-pitched, gentle voice to contrast with her brother's low dinosaur growls. Once she has her brother's attention and he slowly changes his behaviour, Milly stops singing, her objective achieved (Example 101, p. 197).

Adult-child relationships have an inherent imbalance of power. The children in this study act to redress this using singing as a medium. Here, it is helpful to refer back to the way in which children sing to protect their sense of self when faced with parental anger (see Chapter 8.2.2.2.1). In these situations, we can see how the children sing to act on something they can control—their own sense of self—rather than their parent's anger, which is outside their control. Power is closely linked to agency as agency implies the ability—or

power—to act, although it should be remembered that this ability to act is situated and relational (Esser, 2016; Oswell, 2012). Agency occurs within a context and as part of social interaction (Oswell, 2012). In the literature, Markström and Halldén (2009) and Goh and Kuczynski (2009) describe some strategies young children use to realise their agency in preschool in Sweden and at home in China, respectively. In the examples I give, singing is one such strategy. Singing is a vehicle or tool of agency that is situated across the context of the home, the relationships between family members, and the medium of the interaction—the singing. Spontaneous, improvised singing is endlessly pliable and able to be manipulated in ways beneficial to the child. Together with its ambiguity of meaning, this makes singing an important means for young children to negotiate power and exercise agency in their social interactions.

9.5.3 Singing to explore and express identity

Identity exploration and expression is an underlying theme that is evident in many of the ways that the children used spontaneous singing at home. Sommer (2012) claims that children's identities are embedded in everyday interactions and specific cultural contexts, and Hargreaves, MacDonald, and Miell (2017) suggest that musical identities are created on an ongoing basis as part of everyday life. These ideas would suggest that young children's spontaneous singing, embedded as it is within their everyday lives, is a vehicle for identity construction and expression. Analysis of my data suggests the children in this study used singing as a means of exploring their identity, expressing that identity, and presenting themselves to others. Spontaneous singing also connected them to others and allowed them to explore their group identity.

The examples given in Chapter 8 illustrate three ways in which the children explored their identities through self-directed singing. The children improvised narratives about themselves and their lives, made connections with others, and explored their musical identities. Evidence that the children used self-directed singing to explore their personal identities can most clearly be seen through sung narratives where the children sing about themselves and others who are important in their lives. Example 64 (p. 183) describes Leo playing alone and singing about things that he is interested in (Santa Claus,

“good guys” and “bad guys”) and people he cares about. This exploration of identity through musical narrative is also described by Barrett (2009, 2011, 2017), who has written extensively on the subject of young children's identities expressed through spontaneous song.

DeNora (2000) described adults using recorded music to present themselves to others, something that children also seem to do through singing. The children in this study express their self-identity and present themselves to others through the expression of musical preference, using singing to assert their musical identities, and performing. In Example 111 (p. 203), Leo negotiates with his mother to listen to *Gangnam Style* (by Psy), which is his preference, instead of his mother's choice of Christmas music. While listening, Leo dances and sporadically sings along, claiming the song as his own and distinguishing his listening preferences from those of his mother. Having one's preferences acknowledged and accepted is extremely empowering and, in this, Leo's musical agency is facilitated by his mother's actions. The songs that children choose to sing also express their identity, both as individuals and members of the family and wider community. Karl was good at beat-boxing, Maggie sang songs from musicals, Oliver loved Fireman Sam, Alfie sang pop songs, and James sang hymns. In the UAE, Alfie and Emma both sang in an approximation of Arabic. It is compulsory for all children living in the UAE to learn Arabic, and basic Arabic lessons begin at preschool. Outside the home, the children are often in the presence of Arabic speakers and speakers of many other languages. The children may sing in Arabic to “try on” the identity of a speaker of another language (see Barrett, 2016).

The children also sing to present themselves as singers. Alfie appears to explore his identity as a singer when he is alone (Example 66, p. 184) but, more often, this is expressed through interactions with others. Several of the children obviously enjoyed enacting the role of performer, either performing learnt songs or improvising songs especially for the performance (e.g., Emma, Example 9, p. 139; Caitlin, Example 114, p. 205). Several of the children, particularly Alfie, Emma, and James, appear to identify themselves as singers, and they use singing to assert themselves as individuals that need to be heard. Fernyhough and Russell (1997) found that young children use private speech in social contexts as a way of hearing their own voice and distinguishing themselves as individuals. When James is sitting at the table with a large number of people, it

seems that he uses singing in a similar way (Example 112, p. 204).

In the previous section, I discussed children joining in when others were singing. Joining in is usually a social act, but there are several examples where the child is playing alone and quietly takes up a tune they hear another family member sing. The intention in these cases seems to be an affirmation of belonging and emotional proximity. By taking up a song that is being sung by someone else, the child expresses a connection with that person that is both cultural and emotional. This is not communicated but is used as a type of ontological security (Karlsen, 2011).

9.6 Summary

The analysis I present suggests that young children use their musical agency to influence and manage themselves and others. Like much qualitative research, the categories I developed are open to alternative interpretations. For example, singing to entertain the self could be interpreted as a way of regulating the self as it prevents the child from being bored. Alternatively, it could be interpreted, as I have done, as a way of engaging with experience. However, in both interpretations, the children take control of their experience, constructing and manipulating it to meet their own needs.

In an article about informal musicking and care of the self, Batt-Rawden and DeNora (2005) state that "mundane musicking is typically part of the folk-methods of getting by and making do in real time" (p. 292). They claim that much of our musicking (and they refer here to adults listening to music) is "operational" (p. 292)—that is, music is used sub-consciously rather than reflectively. If we surmise that this is the case for young children's spontaneous singing, how can it also be agentic? On the other hand, Wiggins (2015) states that "children's agentic musical actions are intentional and reflective of their musical understanding and knowledge" (p. 115). Based on my experience listening to and analysing the spontaneous singing of the fifteen children in the study, I suggest that spontaneous singing encompasses both these positions. At times, the singing is clearly intentional and reflective of the child's agency and, at other times, it seems to be instinctive and possibly subconscious. Regarding both these positions, it is important to remember that children who have parents who sang to them as infants, using singing in daily routines and to match and regulate their moods, have already had considerable experience of

using music reflectively. These children already have a good understanding of their musical culture and can use singing to influence themselves and others.

Young children's musical agency occurs through the act and practice of singing within a specific context and in relation to others in that context. Young children use singing as an agentive tool to act in and on the world around them. The agency they draw from singing goes beyond purely musical agency. They not only act within music as a cultural tradition, they also use music as a tool of personal and social agency. Therefore, young children's singing does not demonstrate musical agency insomuch as it demonstrates agency realised through music. To be able to use singing as an agentive tool, children must have experience of singing and opportunities to sing. This includes having a repertoire of songs they have learnt, freedom to sing (including time alone), being exposed to positive attitudes about singing, and having role models who sing. In the following chapter, I draw out the main findings of this study and how they make a contribution to knowledge.

10. CONCLUSION

10.1 Restatement of the purpose of the research

The main argument of this thesis is that young children are musical agents who use singing as a means to act in and on the world around them. The aim of this final chapter is to reiterate how this thesis confirms and builds on existing knowledge and offers new and original insights into young children's spontaneous singing at home. This thesis contributes to the academic conversation in two key ways. Firstly, the innovative data collection method enabled greater access to naturally occurring data than has previously been possible. This allowed analysis of all the spontaneous singing a child produced during a continuous recording period rather than being limited to parent or researcher observations. Analysis of the resulting data enriches and develops knowledge of young children's spontaneous singing behaviours and offers unique insights into young children's spontaneous singing at home. The generous sample used in this study allows a move beyond the isolated case studies evident in previous research to provide a much more representative account of young children's spontaneous singing. The sample size allowed examination of both the generalities and individual differences in young children's spontaneous singing, some of which may be applicable outside the immediate context of this study.

Secondly, a contribution is made to understanding how young children act as musical agents and use singing to develop their place in the world, particularly in relation to their solitary play and how they negotiate relationships. Overall, this research expands current knowledge of young children's musical agency and the musical experiences of young children at home, particularly building on the work of Barrett (2009, 2016), Ilari and Young (2016), Karlsen (2011), Knudsen (2008), and Young and Gillen (2010). In addition, it contributes to the wider field of early childhood by providing new insights into what is a significant aspect of young children's lives.

In this chapter, I will briefly summarise the purpose of the research and how I carried it out. I will then synthesise the main findings and demonstrate

how these relate to the existing literature, making explicit the original contributions that have been made to knowledge in the relevant areas. I will also discuss the implications and limitations of the study.

This research began as an exploratory study to examine the ways in which three- and four-year-old children use spontaneous singing in their everyday home lives. Through carrying out the literature review, I identified the need for a clearer overview of how children use spontaneous singing throughout their everyday home lives and, particularly, for a more in-depth understanding of how young children use singing in social and solitary contexts. Following the literature review, the principal aim of the study was reworked to become the main research question, "How do three- and four-year old children use spontaneous singing in their everyday lives at home?" To help answer this question, I posed four sub-questions based on the original five objectives:

- a) What is the nature and extent of spontaneous singing at home?
- b) In what contexts and circumstances does spontaneous singing occur?
- c) What observable factors influence young children's spontaneous singing at home?
- d) How is musical agency demonstrated in spontaneous singing?

These research questions have formed the basis of this thesis. In the following section, I briefly outline the findings relating to each research question and how these findings build on and contribute to current knowledge.

10.2 Relationship with previous research

10.2.1 The nature and extent of spontaneous singing at home.

The first research question looked at the nature and extent of spontaneous singing at home. All the children in this study engaged in spontaneous singing at home, but the amount of singing varied enormously between children. My research shows these young children used their voices musically in many ways, including singing learnt, improvisatory, and adapted songs. This confirms and extends the findings of many of the studies discussed in Chapter 2. Due to the innovative data collection method I used, I was able to assess the nature and extent of spontaneous singing across the whole of each recording period. Studies of young children's music-making at home have

previously involved very small numbers of children or data collected sporadically through parental diaries. Due to the size of the sample and the data collection method used, this study contributes a large amount of data that confirms, extends, and adds breadth to prior research. Most of the spontaneous singing recorded for this study was improvisatory in nature. While this contradicts some previous research that highlights chant as being dominant (Bjørkvold, 1989; Moorhead & Pond, 1978; Sundin, 1960/1998), it confirms the findings of Custodero et al. (2016) and Whiteman (2001).

10.2.2 Contexts for spontaneous singing

The second research question examined the contexts and circumstances in which spontaneous singing occurred. Once again, using the LENA system for data collection enabled a comprehensive view of singing across a wide variety of contexts within the home. I found that the children sang throughout many activities; however, singing was particularly prevalent during solitary play, stationary activities, and when the children were in transition between places or activities. However, I argue that social context has a greater influence on spontaneous singing than active context. The children in this study exhibited different singing styles when they were alone or interacting with others. This finding agrees with Sundin (1960/1998) and, to some extent, Chen-Hafteck (1997). It was clear that the children distinguished between social singing, which was intended to be understood by others, and self-directed singing, which was for themselves alone. I discovered that the young children in this study sang more often when they were alone or playing alone in the presence of others than when they were interacting with others. This new finding suggests that for some children, spontaneous singing is an important part of the experience of playing alone and is used as a tool to act on the self.

10.2.3 Factors influencing young children's spontaneous singing at home

The third research question explored the influence of the home environment on young children's spontaneous singing. I found that the most prolific singers had parents who sang to themselves, had a large repertoire of songs, and had time and space to play on their own. The last of these findings agrees, to some extent, with Moorhead and Pond's (1978) observation that spontaneous singing requires children to have freedom to follow their interests.

The physical and material environment of the home also afforded the children different possibilities for engaging in spontaneous singing. The literature has explored the ways in which parents interact musically with their children, particularly babies and toddlers (Barrett, 2009; Young & Gillen, 2010). However, to my knowledge, the effect of parents singing to themselves—acting as role models—has not been explored. While my research makes a modest contribution to this area, more research is needed into family music environments.

10.2.4 Spontaneous singing and musical agency

The fourth research question dealt with how young children can be observed exercising musical agency through their spontaneous singing. My interpretation of the data suggests that the children used spontaneous singing to create and exercise agency. Singing is a cultural tool that the children used to act on themselves and influence others as they explored and developed their place in the world. Through analysis of the data, I developed two conceptual themes relating to musical agency: singing to manage social interaction and singing to act on the self. My findings confirm some of the specific ways young children use singing that appear in the literature (see Chapter 2). However, I make some significant additions. Firstly, I found surprising evidence that young children use singing to restore a sense of self when an adult has reprimanded or criticised them. This is a manifestation of musical agency that has not been discussed in the literature to date. Secondly, I found further evidence to support Knudsen's idea that singing is used as a means of negotiating power (Knudsen, 2008). This is an important finding that came across very strongly in the data but has not been explored in depth in the literature. The children used spontaneous singing to create a space in which they could assert themselves, attain or maintain control of an interaction, and evade or resist control.

My definition of musical agency for this research was the ability to act in or through music. The children demonstrated agency *in* music through their ability to create and adapt music for their own needs. However, their spontaneous singing also demonstrated that they could realise their wider personal and social agency *through* music, using singing to influence themselves and others. Overall, this part of my research extends the discussion of musical agency in young children and makes a substantial contribution to

understandings of young children's musical agency and agency through music.

10.3 Review of the research process

10.3.1 Using the LENA system for researching spontaneous singing

I chose to use the LENA system to collect data for this study. At the outset of this study, the LENA system had not been used to study singing. I chose the LENA system because it was important for the aims of the study that the children could be recorded continuously during their normal everyday activities with the least possible disruption to their normal routines. Because the LENA system has not been used to study singing before, it is important to provide a brief assessment of its usefulness for the study of spontaneous singing. I found there were both advantages and disadvantages to using LENA.

10.3.1.1 Advantages of the LENA system

The main advantage of the LENA system was the unparalleled access it provided. The amount and quality of the data I collected would not have been possible using any other data collection method available at the time I began the study. The fact that the recording device (Digital Language Processor) was simple to operate meant the parent could collect the data when it suited them. It also meant that the family's normal daily routine was not disrupted by the presence of an observer. While often interested in the recording device, most of the children appeared to quickly forget about it once it was switched on and tucked away in the pocket of the research vest.

Using the LENA system had another, unexpected advantage. As the virtual observer, the aural perspective I had of each child came from a point on the child's chest, so the whole of the observation period was spent *with* the child rather than observing the child from afar. I was surprised how much this caused me to empathise with the child. Using the LENA system seemed to make it easier to understand the child's perspective. This was, of course, a very personal experience. However, at the International Conference of Music Perception and Cognition in San Francisco in July 2016, I was fortunate to meet another researcher who was using the LENA system. Interestingly, she had had a very similar experience using LENA.

10.3.1.2 Disadvantages of the LENA system

The main disadvantage of using the LENA system was the lack of visual data. This was an issue I was aware of from the outset of the research. However, I found it less of a disadvantage than I originally thought. The recording device ran constantly throughout each recording period, recording everything that happened within a certain distance from the child. To locate episodes of singing within the recording, it was usually necessary to listen to the entire recording. This meant that all episodes of singing were heard in the context of what came before and after. Due to the nature of talk between parents and children and the children's self-talk, there were often many aural clues as to what was taking place. There were also non-verbal aural clues, such as the sound of cutlery at the meal table. Of course, there were occasions when something was not clear, but these were usually minor details. On the whole, I am satisfied that the audio recordings gave sufficient information for this research. Since I started this study in 2012, a host of new technologies have become available that mean if I were to start again, I could also collect visual data. This can be done using tiny cameras that attach to a child's clothes or on a hat. However, I am hesitant to say that I would use this technology if I were starting again. Having completed this study, I think having visual data would potentially add too much complexity. Also, any video recording device attached to the child (as it would have to be to move with the child) could not capture the child's gesture or facial expression. It would give more contextual information but would not add information about the child's intentions or relationships. The audio quality of such a system would also be a consideration.

The LENA system comes with specialist software that is designed to automatically analyse language data. However, as discussed in Chapter 5, the automatic coding feature did not prove useful for the qualitative study of spontaneous singing. Initially, I made use of the automatic coding as a guide, but once I became practised at working with wave forms, and could recognise basic patterns, such as speech and TV noise, this did not prove to be an advantage. Because the automatic coding could not detect singing as distinct from speech, the recordings had to be listened to almost in their entirety, although long periods of silence could be seen on the wave form and safely fast-forwarded. With over 183 hours of recording collected, this was slow work. However, listening to the complete recordings allowed me to get to know the

child and the family and understand the context of the singing.

10.3.2 Limitations

Like any research, this study has several limitations. Perhaps the main limitation was the lack of visual data due to the data collection method I chose. The limitations and advantages of using the LENA system have been discussed in the previous section. A further limitation of the study was the limited demographic of the sample. Due to practicalities discussed in Chapter 5, the children in this study were white, middle-class minority-world children. In addition, they could all be described as thriving children. In these general terms, my sample reflects the samples of other studies of young children's singing at home, which perhaps makes connections with the literature more obvious. However, throughout the study, I did wonder how the data would have been different if these children had been experiencing hardship or growing up under stressful circumstances. Could they still find agency in singing? Would singing have been more or less important to them? These are perhaps areas for further research.

One approach I could have taken in this study was to return to the parents with the data and ask for their interpretation. When Sole (2017) did this, the exercise proved valuable, particularly for the parents. I considered this at the time of data collection; however, at that time, I was unsure what I wanted to gain from the exercise. Because this was an exploratory study, I was not entirely sure what I was looking for until after I had analysed the data from the first six children. Unfortunately, due to the time it took to work through the large amount of audio data, by the time I had analysed the data, I felt that too much time had elapsed to return to the parents. Leaving the UAE in the middle of the data collection period also made returning to the parents difficult. I acknowledge that input from the parents may have provided further insights into the data.

Although I aimed for data that was as naturalistic as possible, there was always a risk that the recording could influence the behaviour of the child or other members of the family. While I asked the parents to tell the children they were being recorded, I expected the children to quickly forget and go about their normal routines. This was true for most of the children, particularly the younger ones. However, several of the children seemed to sing for the recording at one point or another. Two of the younger children, Jacob and Rachel, sang when

the vest was first put on and their parents told them they were being recorded. However, they then appeared to forget the recorder. The older children were more often aware of the recording. Among the older children, Emma, Esther, James, and Milly all appeared to have moments when either they remembered they were being recorded or family members reminded them, resulting in a bout of singing aimed at the recording. This singing was often marked by comments about being recorded or needing to sing. One child addressed me directly. Most interactions between the children and their parents seemed natural. In their study of the naturalistic behaviour of young children, Tudge and Hogan (2005) note that they would expect the behaviour of the children to indicate if parents were acting abnormally. Based on my experience researching my own child, I suspect this would be the case. Occasionally, adults asked the child if they had been singing and encouraged them to sing. However, these occasions were rare, and the resulting data were coded to reflect awareness of the recording. I am confident that most of the singing was naturally occurring, and these episodes did not have an adverse effect on the overall study.

The main problem I experienced during the research was to do with consent. Even though I was careful to explain consent, both during the parent interview and in writing, misunderstanding of consent meant I had to discard one full recording and part of another one. This was discussed fully in Chapter 5.

10.4 Implications

My findings contribute to a conversation about the role and importance of singing in the lives of young children. In a wider sense, the findings make an original contribution to knowledge about how young children use singing as they function as agents acting in and on the world around them.

This study adds substantially to a body of research that has shown singing to be an important part of the everyday lives of young children. It also reinforces prior research that demonstrates that young children use singing skilfully in their own ways and for their own purposes. Although this body of work has been accumulating for some years, young children's musicality continues to be misunderstood by both practitioners and the wider academic community.

Spontaneous singing was present in varying degrees in the daily lives of each of the fifteen children in the study. The children drew on many different

influences for their spontaneous singing, and the children who made the most use of singing experienced musical home lives. This suggests that providing musical experiences for young children may empower children to use singing as a tool of agency. Musical repertoire and experiences can act as a toolkit or resource that children can draw on for a range of purposes.

Agentive spontaneous singing in this study was largely improvisatory. This has several important implications for educational practice. Firstly, improvisation should be seen as a fundamental part of young children's musical activity and included as a key element in the musical activities that are offered by educators. Secondly, it is important that children have the opportunity to develop a wide repertoire of songs that they can draw on in their improvisations. In addition, this suggests that early childhood educators can encourage the development of young children's musicality by creating an environment in which improvisational and playful singing can take place. Integrating opportunities for playful singing into general early childhood practice supports the ways young children make music themselves and can reduce the need to rely on specialist music skills.

The predominance of spontaneous singing among the children whose parents used self-directed singing suggests that self-directed singing may be a learnt skill. It is likely that this skill is nurtured from infancy through musical parenting. Batt-Rawden and DeNora (2005) describe how important it was for the adult participants in their study to become consciously aware of how they use music for personal well-being. While it is not clear whether young children are consciously aware of how they use singing, they do seem to possess some skills in using singing to act on the self. It may be that music education can help children to nurture these skills, particularly as they move away from using their own voices and come to rely more on recorded and transmitted music. Bandura's (2006) theory of self-efficacy places importance on the belief that we can use our agency to produce a desired effect. So, in order for children to use their musical agency or to use music in agentive ways, they need to believe in their ability to produce a desired effect. This is an important job for music education as children enter primary school. The three- and four-year-olds in this study appear to be confident in their ability to use singing as an agentive tool. The challenge for educators is to help children retain this belief.

10.5 Unanswered questions - Implications for future research

Over the course of this research, three interesting issues have arisen that could not be covered in this thesis. Firstly, it is clear that more work could be done on home musical environments, including musical parenting and the influence of family members as role models for singing. It would also be interesting to explore further the differences in musical outputs between siblings.

Secondly, an area that needs more work is the link between singing and the emotional lives of young children. There is very little research investigating how young children use singing as a tool to express or regulate their own emotions.

Thirdly, the demographic of the children used in this study means that like many similar studies, it is firmly situated in the middle classes of the minority world. More research is needed into the musical experiences of young children across different cultures but, perhaps more pressingly, also amongst different socio-economic and cultural groups within minority world countries and with children who are growing up in challenging circumstances.

10.6 Final comment

In answer to my overall research question, I found that young children use spontaneous singing skilfully in ways that are meaningful and useful to them. Children use singing as an agentive tool to explore and make sense of the world and to act on and influence it.

My work makes a significant contribution to a small body of literature exploring the musical lives of young children. This literature is situated across a number of fields, particularly childhood studies, music education, and ethnomusicology. My research adds to a cross-disciplinary conversation about the importance of music in the everyday lives of young children. In particular, the innovative data collection method I used allowed unprecedented access to the spontaneous singing of young children at home. This study confirms findings from prior research and contributes original findings about how young children use singing when they are alone and how they act as musical agents to influence others.

In my observations, I had the privilege of listening in to the everyday lives of fifteen thriving children in two countries. The overall impression I got of these children was that they were strong, happy people, forging a place for themselves in relation to their families and their world. These children were active musical agents using singing to meet their needs and as a tool for acting in their world.

Appendix A: Summary of Karlsen (2011)

A summary of the characteristics of Karlsen's (2011) categories of musical agency.

Categories of musical agency	Characteristics
The individual dimension	
Self-regulation	Music is used to regulate, adjust, enhance and integrate aspects of the physical and psychological self. Includes using music for emotional or mood work, memory work and to regulate bodily comporment.
Shaping self-identity	Music is used to affirm and explore identity and present identity to self and others.
Self-protection	Music is used to block out other sounds and aid concentration
Thinking	Music is used to think about music specifically and about extra-musical meaning.
'Matters of being'	Music is used to facilitate engagement with 'the more existential dimensions of life', including to enhance imagination, fulfil spiritual needs, and to increase sensibility.
Developing music related skills	Individuals engage with music to improve their musical skills.
The collective dimension	
Regulating and structuring social encounters	Music is used to structure social events and to negotiate power.
Coordinating bodily action	Music is used to allow people to co-ordinate their actions, such as marching together.
Affirming and exploring collective identity	Music is used to articulate the values of a particular social group
'Knowing the world'	Joint music-making is a way of exploring human relationships and what it means to interact socially
Establishing a basis for collaborative musical action	People who engage in group music-making need to have a collective understanding of musical goals.

Appendix B: Codes, categories and themes

1. Descriptive codes

Coding area	Code group	Descriptive code	Explanation	
Singing Behaviour	Chants		Singing is very rhythmic, with melody limited to one or two notes. Includes rhythmic speech.	
		Humming	Hums (improvised)	Hums an improvised, or unrecognisable tune.
			Hums a learnt song	Hums a tune that is recognisable as a learnt song.
	Improvisatory singing		Improvises using nonsense words/syllables	Singing on syllables or nonsense words.
			Singing outburst on syllables	A short, usually loud, sung outburst
			Sings spontaneously with words (improvised)	A short, sung outburst using understandable words
			Sings improvised song with words	Improvises using understandable words.
		Learnt songs		Sings a learnt song
			Sings a learnt tune with nonsense words/syllables	Replaces the lyrics of a learnt song with nonsense words or syllables.
			Sings a variation of a learnt song	Learnt repertoire is changed in some way. This can include changing the words, or altering part of the melody.
		Sings and plays an instrument		Sings while playing an instrument.
		Vocal play		Use of pitched voice, but outside normal singing. Includes vocal swoops and experimenting with voice.
Context	Play	Play – imaginative/pretend	The child is engaged in imaginative play	
		Playing outside	The child plays outside	
		Playing with other	The child plays with a friend or sibling	
		Solitary play	The child plays alone	
		Music play	The focus of the child's play is music. This includes playing instruments and playing games about music (e.g. being a music teacher, performer etc.)	

	Stationary activities	Eating/Mealtime	The singing takes place during a mealtime or while the child is eating.
		Playing board game/card game	
		In bath	
		In bed	
		Looking at a book /reading	
		Object manipulation	Manipulating small objects using fine motor skills.
		Painting/drawing/writing	The child is painting, drawing, or writing.
		Puzzle	The child is engaged in doing a jig-saw puzzle
		Cooking	The child is helping in the kitchen.
		Gross motor movement	Sings while jumping, running, dancing etc.
		Listening to music	The child is listening to live or recorded music, or to an audio book.
		Looking for something	Searching for a toy or other object
		Conversation	The singing takes place during a conversation with another person.
		Routines and chores	Engaged in routine activities such as washing hands, getting dressed, putting on shoes. Includes simple chores such as taking items to the bin, tidying toys, fetching and carrying.
		Shopping	Examples that take place in shop within home compound.
		Transition	Times when the child is physically transitioning (from room to room, inside-outside) or between activities, while the child decides what to do next (e.g. finished eating and going to play).
		Waiting	The child is waiting for something (e.g. food, mother's attention etc.)
		Walking	Walking outside home to shop or playground.
		Watching TV/iPad	Watching TV, DVD, playing on iPad or computer.
		Unclear	Context is unclear from the audio recording
Social context	Alone		The child is physically alone in the room, or the garden.
	In the presence of others		The child is in the presence of other family members, but is not interacting.
	Interacting with others	Interacting with others	The child is interacting with others

		Sings with others	The child is singing with others
		Sings with adult	The child sings with an adult
		Sings with another child	The child sings with another child (sibling or friend)
Communicative intent	Singing for imagined other	Sings to imaginary friends	The child sings to an imaginary friend, toy or pet
		Sings with media	The child sings along to music on TV, DVD, iPad etc.
		Sings for recording	The child sings for the recording device.
	Self-directed		Singing is inwardly-focussed
	Social		Singing is directed at someone else
	Unclear		The communicative intent of the singing is unclear
Function (initial codes)		Accompany thought or action	Includes singing to aid concentration. Not accompanying play.
		Accompany movement	Singing while engaged in gross motor movement
		Communicating	Includes seeking social connections and strengthening social bonds. Implicit as well as explicit communication.
		Concentrating	Child sings quietly while concentrating on activity.
		Enhancing experience	Child sings to intensify engagement
		Entertaining self/Aesthetic enjoyment	Child sings because it is pleasurable. Often difficult to distinguish between this and to accompany activity.
		Expressing emotion/emotional release	The child sings to engage with an emotional state, or to express emotion.
		Performing	Child sings for other people. Usually identifies him/herself as a performer through demanding audience attention.
		Power negotiation	The child uses singing to assert him/herself.
		Seeking attention	Child sings to gain attention.
		Self-soothing	Child hums while sucking thumb/fingers, quiet, sounds relaxed.
		Singing as part of, or to accompany play	Child sings whilst playing
		Singing to ignore or defy adult	Child sings when adult is attempting to direct child's behaviour
		Thinking	Singing appears aid thought process
		Unclear	Function is unclear

2. Development of conceptual categories and themes from initial function codes

Conceptual Themes	Function codes	How did I place singing in this category?
Singing to act on the self		
Singing to manage experience	Singing to enhance/transform experience <ul style="list-style-type: none"> - Entertaining self 	The context is routine, the singing is self-directed, child not actively engaged in another activity (although singing in bed and in the bath can become extended periods of solitary play). Singing seems to be because activity not that interesting.
	Singing to engage with experience <ul style="list-style-type: none"> - Accompany thought and action - Concentrating - Singing to accompany play - Thinking 	Child seems fully engaged in an activity (other than singing), singing is an accompaniment, way of thinking about the activity, or a means through which to 'wallow' in an activity.
Singing to manage the self	Bodily co-ordination <ul style="list-style-type: none"> - Accompany movement 	The child is engaged in a gross motor activity (jumping, dancing etc.) which is co-ordinated to the child's singing.
	Regulate emotion <ul style="list-style-type: none"> - Expressing emotion/emotional release - Self-soothing 	Usually an outburst of joy or excitement, but also managing uncertainty and emotional release. Includes self-soothing.
	Protect self-esteem	Child has been criticised or scolded and sings to restore his/her sense of self
	Regulate behaviour	The child seems to sing to control an impulse or to follow instructions.
Singing to explore self-identity		The child sings narrative about themselves and their family. Child seems to explore abilities and interests as a singer.
Singing to manage social interaction		
Relationships	Affirming <ul style="list-style-type: none"> - Communication (implicit) 	Child joins in singing with others, or draws others in to sing with her. Child sings about someone in their presence.
	Entertain/comfort others	Child's sings when younger child is upset, or sings to a pet. This is different to performing, as the child doesn't demand attention, but rather gives attention to someone else.
	Joint play	Singing is used co-operatively as part of joint play.

	Power negotiation - Singing to ignore or defy adult	Child uses singing to assert him/herself, particularly when he/she disagrees with adult, or when an adult is attempting to direct child's behaviour
Communication	Direct message	Child sings to convey information
	Enhancing message	Child sings to add emphasis to spoken communication
	Seeking attention	Child sings to gain attention
	Communicating thought	Child sings to indirectly share their thoughts.
	Communicating emotion	Child sings in a social context to express an emotion.
	Musical preference	Child expresses or demonstrates musical preference.
Identity	Asserting own voice	Child uses singing to make their presence felt, or to make themselves heard (not directly demanding attention).
	Performing	Child sings for other people. Usually identifies him/herself as a performer through demanding audience attention.

Appendix C: Recruitment materials

1. Sample recruitment letter



A hidden world of song: a PhD research project examining the singing of young children at home

Dear Parent/caregiver,

I am looking for volunteers to take part in a research project which will examine the singing of young children at home. The project is for my PhD in Education at Exeter University, UK. I would like to recruit 3-5 year-olds from predominantly English-speaking homes. It doesn't matter if your child sings a lot or not.

What does it involve?

Your child will wear a cotton research vest that holds a small recording device. This device will record all your child's vocalisations (speech and singing) for 4-6 hours. I would like to collect recordings on four separate days from each child who participates. I will also ask that you take part in an informal interview. This will be with me at a time and place convenient for you. The purpose of the interview will be to help me understand your child's musical environment and experiences.

Why only English speakers?

In my analysis it will help if I understand the context of any singing that takes place.

What is the benefit to your child?

There is no tangible benefit to your child as an individual. The study is designed to improve understanding of young children's singing and the home music environments of young children. This may have an impact on the future musical education of young children.

When will it take place?

The recordings can be carried out on days that suit you and your child.

Will the recording infringe on family privacy?

The recording device will record everything your child says and the speech of others within approximately six feet (1.8 metres) of the child. In reality this is usually only speech directed at the child.

If you and your child would like to take part in this research project, or would like to know more, please contact me on 055 3045368 or email bronya.dean@gmail.com. I will be very grateful to hear from you.

With kind regards,

A handwritten signature in black ink, appearing to read 'Bronya Dean'.

Bronya Dean

2. Recruitment poster

The poster is enclosed in a decorative border of small stars. The text is centered and uses a mix of bold and regular fonts for emphasis.

WANTED!

**Research
participants**

**I am looking for 3-5 year-olds to participate
in my PhD research on how young children
use singing in their everyday lives at home.
The children will need to wear a small
recording device and record during their
normal home routine on at least two occasions
for 4-6 hours.**

**Please contact Bronya on
027 9651222 or 571 5409 if you are
interested.**

Thank You!

Appendix D: Activity log

Project: A hidden world of song

Contact: Bronya Dean, tel. 027 9651222, email: bkd203@exeter.ac.uk

Activity Log

Child's name: _____

Date: _____

Please fill out this chart during your recording day, noting activities your child engaged in, such as:

Meal/snack times

Playing alone

Playing with siblings/friends

TV/DVD time

Naps

Book reading

Friends visiting

Thank you for your efforts. Your notes will help me interpret the recording.

Time	Activity	Main Caregiver	Other people present	Additional notes
Start time:				

Appendix E: Interview topics

Areas to cover in parent interview

Explain study and recording procedure/requirements

Ethical considerations / safety etc.

Agree to participate? Consent form.

1. Participant information form

Child details - name, date of birth (use of pseudonym in publications etc.)

Parent details - name, contact number, email (to be used to arrange recording sessions and provide feedback)

Languages spoken at home

Cultural background (i.e. cultural/ethnic background of family, home country etc.)

2. Child's daily routine (incl. best times to record)

3. Musical background of parents:

- Do you play an instrument? Sing?
- Have you ever learnt an instrument?
- Other musical activities

4. Musical environment of home:

- Do you sing to yourself/ to your child?
- Do you play instruments at home?
- Are older siblings learning instruments?
- Do you have musical toys? Toy instruments?
- Do you listen to music – for yourself/ for your child?
- What other musical experiences does your child have at home?

5. Child's other musical experiences:

- Do you and your child attend a music group?
- Is there music/singing at nursery?
- Does your child have any other significant musical experiences outside the home?

6. Singing at home:

- When do you sing to your child? What do you sing? Why?
- Does your child sing at home? – When? What?
- Why do you think he/she sings?
- Do your other children sing as much/more?
- What do you think of your child's singing?

7. Is music an important part of your life? Why? Do you want music to be part of your child's life?

Set dates for recording (aim for 4 days – 2 days a week for 2 weeks – try for one weekday and one weekend)

Explain how equipment works, what's expected, safety etc.

Explain informed consent

Agree on acceptable feedback

Appendix F: Summary of interview data

Child	Age	Household	Cultural background	Language	Care	Mother's musical background	Father's musical background	Music at home	Instruments at home	Music outside home	Parent comment
Alfie	4	2 older sisters	British	English	Home	Informal - singing, piano	Informal - basic guitar	Mother sings to self and children, plays piano. Sister learns piano. Radio on (pop music).	Electric piano, acoustic and electric guitars. Toy instruments	Toddler music class	Alfie sings a lot, songs he knows and songs from radio. Makes up words to fit tunes he knows.
Emma	4	Older sister, baby brother, maid (Ethiopian)	British	English	Full time school	Formal lessons (clarinet grade 5)	Informal - basic guitar	Mother chooses recorded music for children. Radio often on. Disney movies. Listen to iPod in car. Mother initiates singing together.	Various real and toy incl. karaoke machine	Music classes at school	Emma loves to perform. Puts on concerts, uses karaoke microphone.
Karl	4	Only child, nanny (Filipina)	USA/ Australia	English	Nursery 4 d/w, nanny	Formal lessons (flute), school band, musicals	Large music collection.	Parents sing a lot. Father listens to music. Nanny used to sing to Karl.	None, but Karl has own iPod. Toys that make music	Possibly some singing at nursery	Loves songs from movie credits. Sings songs from radio - changes lyrics. Likes to sing and dance.
Leo	3	Older brother, baby brother, maid (Filipina)	USA/ Germany	English/ German	Nursery 4 d/w, home	Minimal formal lessons. Sunday school choir.	Formal lessons (organ), choir	Mother sings to children. Uses songs in routines. Encourages boys to sing to baby. Listen to music in car and sometimes at home. Children ask for music.	Some basic handheld percussion instruments	Some singing at nursery	Leo loves dancing to music - favourite Gangnam Style.

Xanthe	3	Older sister	Australian	English	Home	Formal piano and singing lessons	Formal clarinet lessons	Sister has own iPod. Mother listens to CDs in kitchen -variety. Watch musical DVDs (e.g. Annie, Mary Poppins)	Bag of instruments, used often.	Toddler music class - stopped now	Both children make up songs and dances
Harriet	3	Baby sister, nanny (Filipina)	British	English /French	Nursery 3 d/w, nanny	Formal lessons - recorder, clarinet, piano	None - mother discouraged music	Parents sing as part of bath/bed routine. Listen to children's CDs (Disney). Listen to children's music in car and kitchen.	Some toy instruments. Elmo.	Nursery, toddler music group	Harriett sings when she plays alone, but this is not often.
Rachel	3	Older brother	British	English	Home, babysitter	Formal lessons - cornet, singer	Formal lessons - trombone	Music from TV and iPad. Brother sings at Sunday School	Small percussion, toy piano	Sing at playgroup, just started music class, church	Rachel enjoyed telling me about her maracas. Sang and played on toy piano.
Maggie	4	Younger sister	British (Scottish)	English	Full time school	Formal lessons (music degree)	"Not at all musical"	Mother sings with children. Radio usually on.	Toy keyboard	Music classes at school. Attends rehearsals with mother.	Makes up songs and puts on shows. Possessive about 'her' songs.
Caitlin	3	Two older sisters, maid (Ethiopian)	British (Scottish)	English	Nursery 3 mornings	Formal lessons (saxophone), singing	Formal lessons (Oboe)	Listen to music in the car - used to be children's music, but mostly mother's choice now. Girls listen to music at dance at home.	Some toy instruments - not used much	Nursery, toddler music group, playgroup	Caitlin mostly sings in the car - sometimes for an hour non-stop. Doesn't sing much at home
Milly	4	Younger brother	NZ	English	Kindergarten, 3 days	Formal lessons (piano)	Singing	Father listens to music. Disney DVDs		Music at Kindergarten	Loves Disney movies.
Esther	4	Older brother	NZ	English	Day care 4 days, mother, grandmother	Formal lessons (recorder, flute). Sang in school choir	Formal lessons (guitar)	Mother sings with children. Disney movies etc.			Tends to sing when she's on her own.

Oliver	3	Only child	Dutch/ English Zimbabwean	English / Dutch	Day care 3 days, home	Currently taking piano lessons	Enjoys singing	Mother sings a lot with Oliver	Piano	Baby gym, day care	Sings to himself a lot, mostly songs he knows but also made up songs
Jacob	3	Older sister and brother	NZ	English	Kindergarten, 2 days	None (1 year piano lessons)	None	Mother sang with children as babies, not now. Listen to radio in car. Sometimes listen to music at home.	Piano. Drum, recorders, ukulele	Kindy	Doesn't seem to sing much. Brother sings and plays piano most often
Thomas	3	Baby sister	NZ	English	Kindergarten, 2 days	Informal - singing	Informal - basic guitar	M listens to music in car, D listens at home. M sings to children to soothe in car and for routines. D sings to children with guitar. Music on TV. T chooses and operates CD player. Song books.	Keyboard, range of toy instruments	Mainly music, Gymagility	Operates CD player
James	3	Baby brother, grandparents	NZ	English	Day care 3 days, home	Formal - violin, piano	Formal - clarinet, saxophone	Lots of singing, grown- ups sing with children. Sing grace. Sometimes play recorded children's music.	Small violin, electronic toys	Music class, church, day care	

Appendix G: Matrix for development of thematic analysis

	Social Context	Function	Context	Communicative Intent	Behaviour
Social Context					
Function	How does function relate to social context? (What function does spontaneous singing have in different social contexts?)				
Context	How does context relate to social context? (not so relevant)	How does Context relate to Function? (What function does spontaneous singing have in different contexts?)			
Communicative Intent	How does Communicative Intent relate to Social Context? (Is the communicative intent of spontaneous singing different in different social contexts?)	How does Communicative Intent relate to Function? (These are very closely linked)	How does context relate to Communicative intent? (not so relevant)		
Behaviour	How does Behaviour relate to Social Context? (Are certain spontaneous singing behaviours more prevalent in certain social contexts?)	How does Function relate to singing Behaviour? (Are certain singing behaviours used for certain purposes?)	How does behaviour relate to context? (Are certain behaviours displayed in certain contexts?)	How does behaviour relate to communicative intent? (What types of singing behaviour are used for different types of communicative intent?)	

Appendix H: Ethics certificates

1. Ethics certificate from Birmingham City University

Ms Bronya Dean
c/o Oliver Broad
BP Abu Dhabi
Chertsey Road
Middlesex
TW16 7LN



2nd May 2013

Dear Bronya

Ethical Approval

Further to the above, thank you for the revised documentation and additional information regarding your application.

I can confirm that your category B Ethics Application has now been approved.

Yours sincerely,

Professor John Clibbens
Chair of the Faculty Research Ethics Committee

Faculty of Education, Law and Social Sciences
Birmingham City University
School of Social Sciences

Professor John Clibbens PhD, CPsychol, CSci, AFBPS
Head of School

City North Campus Perry Barr Birmingham B42 2SU
T: 0121 331 5671 F: 0121 331 6622 E: john.clibbens@bcu.ac.uk
www.bcu.ac.uk

2. Ethics certificate from the University of Exeter

MSc, PhD, EdD & DEdPsych theses.



Graduate School of Education

Certificate of ethical research approval

MSc, PhD, EdD & DEdPsych theses

To activate this certificate you need to first sign it yourself, and then have it signed by your supervisor and finally by the Chair of the School's Ethics Committee.

For further information on ethical educational research access the guidelines on the BERA web site: <http://www.bera.ac.uk/publications> and view the School's Policy online.

READ THIS FORM CAREFULLY AND THEN COMPLETE IT ON YOUR COMPUTER (the form will expand to contain the text you enter). **DO NOT COMPLETE BY HAND**

Your name: Bronya Kerrin Dean

Your student no: 630058067

Return address for this certificate: c/o Oliver Broad, BP Abu Dhabi, Chertsey Road, Sunbury, Middlesex TW16 7LN

Degree/Programme of Study: MPhil / PhD in Education

Project Supervisor(s): Dr Susan Young

Your email address: bkd203@exeter.ac.uk

Tel: 00971 55 3045368 (United Arab Emirates)

I hereby certify that I will abide by the details given overleaf and that I undertake in my thesis to respect the dignity and privacy of those participating in this research.

I confirm that if my research should change radically, I will complete a further form.

A handwritten signature in black ink, appearing to be 'Bronya Kerrin Dean'.

Signed:.....date:....11/09/2013.....

Chair of the School's Ethics Committee
updated: March 2013

Certificate of ethical research approval

TITLE OF YOUR PROJECT: A hidden world of song: The singing of young children at home

1. Brief description of your research project:

Aim: To examine the ways in which young children sing spontaneously at home.

Objectives:

- To identify child-initiated singing behaviours at home, the extent to which they occur, and the circumstances in which they occur.
- To explore the idea that young children engage in distinct social and self-directed singing behaviours at home.
- To consider the influence of the home music environment in relation to child-initiated singing behaviours.
- To assess the usefulness of the LENA (Language Environment Analysis) technology for the study of young children's singing.

This is a multiple case study using non-participant observation through audio recording as the principal method of data collection. The data will be collected using a small recording device that the child wears during the course of their normal daily routine (see further details below).

2. Give details of the participants in this research (giving ages of any children and/or young people involved):

I aim to collect audio data from 10-15 children aged 3-5 years. I will also carry out an informal interview with a parent or guardian of each child. I intend to recruit children from English-speaking families, volunteered by their parents.

I have already collected data from two children with ethical approval from Birmingham City University.

Give details (with special reference to any children or those with special needs) regarding the ethical issues of:

3. Informed consent: Where children in schools are involved this includes both headteachers and parents). Copy(ies) of your consent form(s) you will be using must accompany this document. a blank consent form can be downloaded from the GSE student access on-line documents: Each consent form **MUST** be personalised with your contact details.

Informed consent will be sought from a parent or guardian of each participating child. The parent will be asked to sign a consent form before the data collection begins and to seek consent from his/her child prior to each recording session. Guidelines will be provided for this (see attached 'informed consent guidelines for parents'). I will make it clear to the parent that consent from the child must be voluntary. Due to their age, the children are unlikely to fully understand the project, however in order to participate in the research they will have to assent to wearing the research vest. Even the youngest children will be able to indicate their wish not to participate by refusing to wear the vest. Parents will be asked to abide by the child's wishes in this regard and not try to coerce the child. If a child refuses to wear the vest the parent will be asked to try again on a different day. A child's continued refusal to wear the vest will be interpreted as dissent. I will also make it clear to the parent that the child can chose to stop recording (i.e. have the vest removed) at any time during the session.

Chair of the School's Ethics Committee
updated: March 2013

The recording device being used can pick up voices within approximately 1.8 metres of the child. Therefore, I will also provide a consent form for other members of the family and visitors who may be present during the recording. I will ask the key parent to have this available on recording days, along with the 'Informed consent information sheet'. If others are present during the recording the parent should ask them read and sign the consent form. I will leave my contact details in the form of a business card, to be given to visitors in case they have questions, concerns, or decide they do not wish to be included. Apart from names, personal details will not be collected from anyone other than the target children and their parents.

4. anonymity and confidentiality

To ensure anonymity all participants will be referred to by a pseudonym. The children in this study will be wearing a recording device which collects audio data within a range of approximately 1.8 metres. The device will record the speech of both the target child and others within this range. This will be made clear to the parent and is reflected on the Informed Consent Information Sheet. Every reasonable effort will be made to ensure that no output will provide information which might allow any participant or institution to be identified from names, data, contextual information or a combination of these.

5. Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress:

The principal method of data collection will be non-participant observation through audio recordings. This will be supplemented by data collected through parental interview.

I will collect audio data through the use of the LENA (Language Environment Analysis) research system. This system was developed by the LENA Foundation in Colorado (www.lenafoundation.org) specifically for use with young children and babies. It features a small recording device (a digital language processor) fitted into a vest that the child wears, supported by software that distinguishes the child's speech from other speakers and environmental sound. The vest is light-weight cotton fastened with poppers at the back. It can be worn on its own or over top of the child's own clothes. There is a credit-card sized pocket at the front which holds the recording device. The device itself is a sealed plastic unit approximately 5.5 cm x 8.5 cm x 1.2 cm in size and weighing approximately 60 grams. The system is designed to gather naturalistic data in the home environment.

Data collection will be limited to the times the child is at home and the recording will be spread over a number of days. Data collection will be arranged to fit into the family's normal weekly routine. Recording times will be agreed during an initial interview with the parent and will ideally be spread over a range of times and include both week days and weekends. At the end of each recording session caregivers will be asked to fill in a brief activity log indicating the main events that took place during the recording. I aim to record over several hours on at least four separate days. However, this will be flexible according to what is appropriate for each child and family.

I intend to carry out an informal interview with one of each child's parents to collect information relating to the child's daily routines, the musical background of the family, musical practices in the home, parental attitudes to music and parental perception of the child's singing at home. The interview will also be an opportunity to schedule recording times that are convenient for the family and to ensure parents understand the importance of gaining informed consent from the child. I may find I need to return to the parents after the data collection with specific questions about the data. This could also be an opportunity to provide feedback to the parents.

The research will take place in the child's home environment within the familiar routine of at-home care, and is unlikely to cause any distress. The only imposition on the child will be the need to wear a research vest fitted with a small recording device. The recording device will be switched on by the parent or caregiver prior to dressing the child in the vest. The researcher will not be present.

6. Give details of any other ethical issues which may arise from this project - e.g. secure storage of videos/recorded interviews/photos/completed questionnaires, or
Audio data will be downloaded from the recording device at the earliest possible opportunity. On downloading, the data is automatically deleted from the device. Any hard-copy data, e.g. signed consent forms, will be kept in a locked drawer for which only I have a key. Participant's personal data will be stored in password-protected files on my password-protected home computer, with back-up stored in my password-protected account on the University U-drive. As the large audio files will exceed my storage limit on the University U-drive, these files will be labelled to ensure anonymity and backed-up to Dropbox, using the additional two-step verification security. Apart from occasional use of first names, the audio files do not contain personal information.

I have completed the ELE Information Security Awareness course and as a result have improved my use of passwords and general digital security.

In the very unlikely event that the recorded data reveals a child to be in a situation at home that will cause real harm (physical, emotional or sexual abuse), I will inform the child protection officer at the child's school or nursery and hand the relevant data to them. This follows the advice of the Head of the infant school at a leading British school in Abu Dhabi.

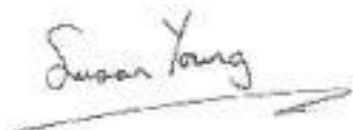
7. Special arrangements made for participants with special needs etc.
It is not anticipated that there will be any participants with special needs. However, if there are, I will seek guidance from the parents as to any special arrangements required.

8. Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):
No exceptional factors are anticipated.

This form should now be printed out, signed by you on the first page and sent to your supervisor to sign. Your supervisor will forward this document to the School's Research Support Office for the Chair of the School's Ethics Committee to countersign. A unique approval reference will be added and this certificate will be returned to you to be included at the back of your dissertation/thesis.

N.B. You should not start the fieldwork part of the project until you have the signature of your supervisor

This project has been approved for the period: September 1st 2013 **until:**



By (above mentioned supervisor's signature):**date:**..... 16th Sept 2013....

N.B. To Supervisor: Please ensure that ethical issues are addressed annually in your report and if any changes in the research occur a further form is completed.

Chair of the School's Ethics Committee
updated: March 2013

GSE unique approval reference:.....D/13/14/1.....

Signed:.....*ABrown*.....date: 8/10/13.....
Chair of the School's Ethics Committee

Chair of the School's Ethics Committee
updated: March 2013

Appendix I: Parent information pack

1. Consent Information sheet

Information sheet for informed consent

Project title: A hidden world of song: The singing of young children at home
Researcher: Bronya Dean
Email: bkd203@exeter.ac.uk
Phone: 027 9651222

The aim of this research study is to examine the ways young children sing at home. My research involves using a product called LENA™, a digital language processor that children wear. LENA records child vocalisations for an entire day, or part of a day. Participation is entirely voluntary. Please read this document carefully and decide whether or not you would like your child to participate.

Procedures

If you decide to participate in this study, you will be asked to do the following:

1. Take part in an informal interview about music in your home.

This will provide me with background information about your child and family and how you use music in your home. The interview will take place at a time and place convenient for you.

2. Complete at least two recording sessions and the associated paperwork.

During the interview we will decide on the best recording times for your child. However, as a guide we will aim to complete two or three recording sessions of 4-6 hours duration over a period of two weeks.

During the recording session your child will wear a special vest (provided by the researcher) that contains a recording device (LENA Digital Language Processor). You simply 1) turn on the LENA DLP at the beginning of the session; 2) fasten the DLP into the research vest; 3) put the vest on your child; and 4) turn the DLP off at the end of the session. I will arrange to collect the recording device and return it for the next agreed session.

The purpose of each recording session is to collect samples of your child's self-initiated singing (i.e. when they start singing of their own accord). I would like to observe your child's **normal behaviour**, so it is important to act as naturally as possible during recording sessions.

During or after each recording session I will ask that you complete a simple activity log providing information about the recording period.

Family privacy

The LENA recording device will pick up all your child's vocalisations and any other speech or sound within approximately 1.8 metres (6 feet) of the device. **This includes the speech of other adults and children in the home.** In reality this tends to be speech directed at the child, rather than adult conversation. Only singing and dialogue related to singing will be used in this project, other dialogue will be disregarded.

Confidentiality and use of the data

- Any personal information (such as names and contact details) obtained in connection with this project will be kept confidentially on a password-protected computer, or in a secure location.
- The results of this project will be published in my thesis and may also be presented at academic conferences and published in articles both in print and online. Neither your real name nor your child's real name will be used in these publications and presentations.
- Short audio clips of your child's singing (alone or with others) may be used during conference presentations, attached to online publications and filed at the university with the final thesis. Neither your real name nor your child's real name will be used in these publications and presentations.
- Personal information will be kept by the researcher in a secure format for up to 5 years after the completion of the study, after which time it will be destroyed.

Potential risks and discomforts

I have not identified any potential risks related to this research. The recording device is a non-transmitting digital language recorder that is small and lightweight. It is specially designed for use with babies and young children at home. The unit fits snugly into the research vest in a pocket fastened with poppers. The unit has no detachable parts and conforms to international safety standards UL STD 60065 (Audio, Video and Similar Electronic Apparatus) and UL STD 696 (electric toys).

Potential benefits

There are no immediate benefits to you or your child for participating in this study. It is possible that the data collected in this study will help us learn more about young children's singing and the home music environments of young children. This may have an impact on the future musical education of young children.

Participation and withdrawal

- You can choose whether or not you and your child will participate in this project.
- If you volunteer yourself and your child to be in this project, **you may withdraw at any time without consequences of any kind.**
- You may also refuse to answer any questions you don't want to answer and still remain in the project.

Contact details

If you have any questions or concerns about the project or your participation in it, please contact me on 027 9651222 or by email at bkd203@exeter.ac.uk

2. Guidance on gaining consent

Gaining your child's informed consent

Gaining informed consent from research subjects is an important part of ethical research. *Informed consent* means that the research participant understands and willingly agrees to their part in the research. As a parent, you have the authority to consent on behalf of your child. However, it is important that your child is also given the choice to participate or not. This is good research practice and can be done in an age-appropriate way.

When you dress your child in the research vest (**with the DLP already switched on**) please seek their consent by saying something like this (in your own words):

“Today you are going to wear this special vest so we can record your singing. Is that okay?”

Feel free to go into more detail if your child is interested, but please make it clear that it is not okay to remove the recording unit from the vest (hopefully they won't even realise it can come out).

Of course, at this age they are unlikely to understand the research, but at least they are being given a choice whether to wear the vest or not.

If they do not want to wear the vest, *do* try one or more of the following:

- ask again nicely
- explain that it would be a really special and helpful thing to do (or explain something more about the research, if appropriate)
- offer them another colour (if it fits)

However, **please do not try to coerce or force them**. It is important that they are allowed to decide for themselves.

If they still refuse please try again on a different day. Please let me know if this is the case so I can rearrange the recording schedule.

If they refuse again, don't worry. We can try again in a few weeks or months.

With young children consent is an on-going process, which means that if your child wants to remove the vest part-way through the session, they must be allowed to. However, first try to find out why they want to remove the vest and find a solution. For example, if they are hot, try removing another item of clothing. It's okay to put dress-up clothes over top of the research vest.

3. LENA quick reference guide + FAQs

The LENA™ Digital Language Processor (DLP) Quick Reference Guide

- **The enclosed LENA DLP does NOT need to be charged.**
- To turn on the LENA DLP, press the TOP BUTTON for 4 seconds. The screen will show the version number and will then say “Sleeping.”
 - ★ After 15 minutes “Sleeping,” the DLP will shut off.
 - ★ If the DLP shuts off, press the TOP BUTTON until screen says “Sleeping.”
- To begin recording, press and hold the REC button until the screen says “Recording” (about 4 seconds).
Let go of button IMMEDIATELY when screen says “Recording.”
 - ★ Do NOT press the REC button again after the recording has started.
- Screen **MUST** say “Recording” before you put the LENA DLP in the LENA Clothing.
 - ★ Screen must NEVER say “Paused.”
 - ★ If screen says “Paused,” press REC button for 3-4 seconds, until screen says “Recording.”
- To turn the DLP off, press the top (power) button.

Please turn over for Frequently Asked Questions →

The LENA Digital Language Processor (DLP) Frequently Asked Questions

What you need to know about the LENA DLP

Q: I pressed the top button on the LENA DLP and now it says "Sleeping." Is this okay?

A: Yes, this is fine! To begin recording, press and hold the REC button until the screen says "Recording" (about 4 seconds).
Let go of button IMMEDIATELY when screen says "Recording."

★★★★★

Q: I turned on my LENA DLP and forgot to start the recording right away. The LENA DLP has shut off. How do I turn it back on?

A: 1) Press the TOP BUTTON for 4 seconds, until screen says "Sleeping."
2) Press and hold the REC button until the screen says "Recording" (about 4 seconds). Let go of button IMMEDIATELY when screen says "Recording."

★★★★★

Q: I'm ready to put the LENA DLP in the LENA Clothing, but it says "Paused" instead of "Recording." What should I do?

A: Good question! It is VERY IMPORTANT that the screen say "Recording" before you put it in the LENA Clothing. If it says "Paused," press the REC button until the screen says "Recording" (about 3-4 seconds).

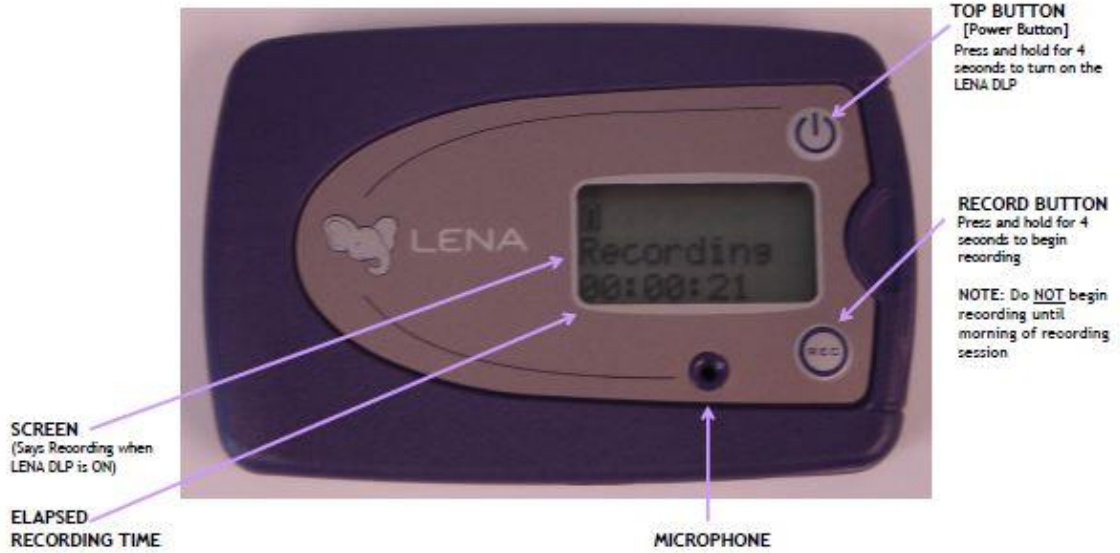
★★★★★

Q: When the LENA DLP turned off after 16 hours, the screen said "Memory Full," but now the screen is blank. Is this okay?

A: Yes! The screen automatically goes blank 15 minutes after the recording is complete.

4. DLP information sheet

THE LENA™ DIGITAL LANGUAGE PROCESSOR (DLP)



5. Recording dos and don'ts

Recording DOs and DON'Ts

DO:

- ☆ DO read instructions
- ☆ DO record for 4-6 hours
- ☆ DO keep a normal daily routine
- ☆ DO record at home and playing outside
- ☆ DO record if you go on a quick errand outside the home, but please make a note of this in the activity log
- ☆ DO remove the LENA DLP from your child's LENA Clothing while in a car seat or any other safety harness. Keep the LENA DLP close by to continue recording. Put the LENA DLP back in the LENA Clothing once child is out of car.
- ☆ DO remove the LENA Clothing during naps, sleep periods, and baths, as you would any other clothing not intended for sleepwear or swimwear. Leave the LENA DLP in "Recording" mode inside the pocket of the LENA Clothing and keep the Clothing nearby to continue recording.

DON'T:

- × DON'T record during long trips outside the home
- × DON'T allow your child to wear the LENA DLP when in a car seat or any other safety harness
- × DON'T submerge the LENA DLP in water (bath, pool, washing machine, sink, etc.)

Appendix J: Consent forms

1. Child consent form (Exeter/UAE version)



GRADUATE SCHOOL OF EDUCATION

Title of Research Project: A hidden world of song: The singing of young children at home
Researcher: Bronya Dean

CONSENT FORM: participants' parents / guardians

I have been fully informed about the aims and purposes of the project and have been given the opportunity to ask questions. I agree, on behalf of myself and my child, to take part in the project. Taking part in the project will include being interviewed and recorded.

I understand that:

there is no compulsion for myself or my child to participate in this research project and we may withdraw our participation at any stage

I have the right to refuse permission for the publication of any information about myself or my child

audio recordings and information collected will be used solely for the purposes of this research project, which may include publications or academic conferences or seminar presentations

if applicable, the audio recordings and any information which we give may be shared between any of the other researcher(s) participating in this project in an anonymised form

all audio recordings and information about myself and my child will be treated as confidential

the researcher will make every effort to preserve my, and my child's anonymity

.....
(Signature of parent / guardian)

.....
(Date)

.....
(Printed name of parent / guardian)

.....
(Printed name of child)

One copy of this form will be kept by the participants' parent or guardian; a second copy will be kept by the researcher(s)

If you have any concerns about the project that you would like to discuss, please contact Bronya Dean on 055 3045368 or email bkd203@exeter.ac.uk.

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

2. Visitor consent form (Exeter/UAE version)



GRADUATE SCHOOL OF EDUCATION

Title of Research Project: A hidden world of song: The singing of young children at home
Researcher: Bronya Dean

CONSENT FORM: additional family members and visitors

_____ *[Name of child participating]* is taking part in a project that involves his/her voice being recorded using a device that will record any sound and speech within approximately 1.8 metres. As a result it is possible that your voice and/or your child's/children's voice(s) may also be recorded. The project is an investigation into young children's singing at home. Please sign this form if you give your consent to being included in the project if your voice or the voice(s) of your child(ren) are picked up on the recording.

If you wish to discuss the project, have any questions or change your mind, please contact me. Contact details are given below.

I understand that:

there is no compulsion for myself or my child(ren) to participate in this research project and we may withdraw our participation at any stage

I have the right to refuse permission for the publication of any information about myself or my child(ren)

recordings of myself or my child(ren) collected for the purposes of this research project may be used in publications, academic conferences, seminar presentations and other research outputs

if applicable, the recordings may be shared with other genuine researcher(s) in an anonymised form

all personal details about myself or my child(ren) will be treated as confidential

the researcher will make every effort to preserve my own and my child's / children's anonymity

.....
Printed name(s)

.....
Relationship to participant

.....
Signature

.....
Date

If you have any concerns about the project that you would like to discuss, please contact Bronya Dean on 055 3045368

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

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