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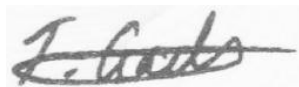
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A handwritten signature in black ink, appearing to read 'T. Gadir', is written over a light gray rectangular background.

Tami Gadir

Musical Meaning and
Social Significance
Techno Triggers for Dancing

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Abstract

Electronically-produced dance music has only recently achieved as much visibility in the global pop music industry as 'live' or instrumental pop. Yet the fascination of cultural scholars and sociologists with dance music predates its rise as a product of mass culture. Much of this interest derives from early associations of dance music with marginalised groups and oppositional ideologies. It therefore follows that many explorations of dance music focus on the ways in which techno, house and practices of 'raving' are expressions of dissent. As a result, the cultural aspects of dance music are necessarily the focus of these studies, with few musicologists addressing musical features and fewer dance scholars considering the specifics of dance movement. What is more, these differing approaches tend to compete rather than collaborate. In my thesis, I seek to address this divergence and to draw attention to the ways that contrasting disciplinary approaches can complement and enrich the study of any music.

I use contemporary techno club nights in Edinburgh as a focal point for addressing musical and social triggers for dancing. I explore subjective experiences of dancing, DJing and producing by interspersing a review of existing literature with my own ethnographic research and musical analysis. Subsequently, I consider how the philosophies of techno are embodied within the movements and postures of the dancing body and social interaction. Participants in techno settings adopt strikingly similar attitudes to the institutionalised classical music world, despite the fundamental differences between the practices of composition, performance and listening. Moreover, these attitudes are repeatedly disseminated by participants, journalists and scholars. My enquiry into social and musical dancing triggers leads me to question the perpetuation of these ideas.

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Lastly, to Jake Poole: you listened, provided me with a critical perspective and were present during the majority of my field work. Thank you for uprooting your previous life and moving sixteen thousand, eight-hundred and sixty-five kilometres across the world with me so that I could do this.

Guide to Reading Thesis with Audio and Video

The audio and video selections are integral to this thesis. I therefore recommend that good quality speakers or headphones be used for listening to audio excerpts if possible. Lower frequencies tend to be lost in smaller speakers such as those of laptops and small earphones.

I offer a number of formats for audio and video files so that they may be accessed as conveniently as possible. In the case of technological failure or breakdown of any of the formats, the files may still be accessed any of the ways listed below. The formats are as follows:

1. Online links in electronic thesis.

This format is designed for reading the electronic (PDF) version of the thesis with an internet connection. Click anywhere on the text that indicates an audio or video file, for example, on 'Audio 1'. The default internet browser should open and stream the relevant file automatically. Some browser settings may prevent streaming playback. In these cases, changing the default browser may help, or the options below may alternatively be used.

2. Website access to audio and video files at:

<http://technotriggers.wordpress.com/>

If reading the printed copy of the thesis, this allows easy online navigation through files in the precise order they feature. The files are divided into four pages (A-D) in order to minimise loading time for slower internet connections.

3. USB memory stick

4. DVD

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Part I: Introduction

Chapter 1 – Defining Dance Music

This thesis explores the musical and social triggers for dancing, focusing on contemporary techno club nights in Edinburgh. Through ethnographic research and musical analysis, I discuss participants' subjective experiences of clubbing, DJing and producing dance music. Part I is divided into two chapters: one that provides an overview of dance music and another that provides a literature overview combined with the outline and rationale of my methodology. Part II describes and analyses the triggers for dancing that have emerged most prominently from my field work, which are either mostly music-focused (for example, melody) or mostly socially-focused (for example, genre). In this part, I aim to highlight the ways that a particular genre-focused clubbing community understands danceability. This material stimulates my exploration of the philosophical underpinnings of dancing triggers in Part III. In this, I consider the ways in which philosophies of techno are reflected during participation, performance and production, through spoken language and bodily movement. I also address the dissemination of these philosophies by participants, journalists and scholars. Part IV lastly rounds off the preceding discussions with a consideration of the politics of techno.

My motivation to unravel the mysterious forces that drive the rhythms of the dancing body stems from my first experiences of electronically-produced dance music. The earliest contemporary popular music to which I was exposed was dominated by synthesisers. The feelings evoked by unfamiliar, distinctly electronic sounds overshadowed my enjoyment of familiar acoustic instruments and voices, and I found myself alone among my peers in my attraction to less vocals-driven dance remixes. Given that none of my friends shared in this fascination, my participation was restricted to sedentary listening through cassette-players and headphones until I was able to go clubbing as an adult. I noted that the act of gathering in a space for the sole purpose of dancing to this music seemed natural and easy. As I observed and compared the ways that people moved on dance floors, I became increasingly curious about individual and collective experiences of music and dancing. After completion of my undergraduate

university studies in piano and composition, I began to explore this question from the new vantage point of the DJ booth.

The allure of the music combined with the elusive nature of our apparently involuntary responses to it eventually led to my exploration of dance music literature. I will provide an overview of these in Chapter 2 and continue to refer to a range of literary works throughout the thesis. The literature that I have reviewed focuses mainly on aspects of dance music history and culture, deals occasionally with music as an object, and seldom addresses the act of dancing. Those who write about dance music tend to also be fans; therefore, upon first reading, I felt connected to them and their compelling accounts. Yet my impressions of these works were clouded by two issues. First, the ways that people experience the act of dancing was not addressed, with the notable exceptions of Ben Malbon (1999) and Joanna Hall (2009). The second issue was an imbalance I perceived between celebratory arguments and critiques of dance music or dance music culture. The former category seemed either to speak exclusively to those who were already fans, or to attempt to convince not-yet fans of the value of the authors' objects of interest. It seemed particularly problematic that only one in-depth critique was undertaken by an ethnographic scholar, Sarah Thornton (1995). My objections to the arguments in literature were not solely ideological but were rather based on my experiences. I therefore determined that ethnographic research was the most appropriate way to address my interest in the social and musical forces behind dancing and engage with the philosophical questions raised by the literature. This method would be driven by my participation as a clubber and DJ, and conversations with participants with whom I had either previously established associations or met during the course of research.

This study is focused on a type of dance music that is electronically-produced and performed by DJs in particular social contexts – namely, licensed night clubs, outdoor music festivals, private parties and abandoned industrial sites. As within many forms of popular music, and as suggested by the terms I use, dancing is the main means of listening to this music. Musical examples that I provide in this thesis range from the

early 1980s to my period of ethnographic research between 2010 and 2012, focusing on the latter period. The producers are mostly European, with a few from North and South America. Their work is performed by DJs at the events in Edinburgh upon which my ethnographic research is based. Although there is a wide range of countries, in particular from Europe, represented by producers whose music I feature, the literature I will examine is written mostly in the 1990s and 2000s, and primarily discusses music, events and people from Britain and the United States.

The phenomena of dancing late into the night and of clubs being the key spaces where dancing occurs considerably pre-date the period from which my musical selections derive (Malnig, 2009). However, there is a consensus among authors of dance music literature on the origins of the musical aesthetics and social practices of a now primarily European dance music scene. Specifically, contemporary clubbing derives from afterhours dance music cultures that developed in New York, Chicago and Detroit in the late 1970s and 1980s (Brewster and Broughton, 1999; Lawrence, 2003; Sicko, 1999). These scenes, which included gay disco clubs in New York, and techno parties run in school halls by black producers and promoters in Detroit, were considered to provide safe spaces for marginalised people whose voices were beginning to emerge from dominant, heterosexual and white society (Brewster and Broughton, 1999, pp. 136-7; Fikentscher, 2000; Lawrence, 2003; Reynolds, 2008, pp. 14-24, 28-32; Sicko, 1999). Clubbing practices provided opportunities to alter the social and temporal rhythms of the day-to-day lives of these participants (Lawrence, 2003, p. 24).

I examine three distinct roles, clubber, DJ and producer, one or more of which may be assumed by any one individual. I refer to people involved in the dance music community who may be in any or all of these categories as 'participants', which alludes to the active participation that dance music usually involves, whether through programming music on analogue instruments or digital software, playing and blending music at a club night, dancing to the music as a listener, or moving between two or three of these roles. The producer of music is the first of three roles that I focus on in these dance music scenes, a position held in high esteem among participants. While the producer spends a great deal of time and effort on production and thus is given the greatest respect of all roles, the DJ performance is the only means through which a

producer can achieve visibility, and spread her name and reputation. The producer who does not perform her music risks remaining in relative obscurity.

The production of electronic dance music developed in the late 1970s and early 1980s; electronic instruments initially designed for the imitation of acoustic instruments were being exploited by the band Kraftwerk in Germany, and by producers such as Derrick May in the United States for the unique sounds that they could produce (Reynolds, 2000, pp. 33-4; Sicko, 1999, pp. 23-6, 79-80). Two such instruments included the Roland TR-808 drum machine (Butler, 2006, p. 64) and the Roland TB-303 Bass line (Butler, 2006, pp. 68-70; Prior, 2010, pp. 4-5). The way in which its unique sound differed so greatly from its intended use helped to establish it as an instrument of cult fascination (Eshun, 2000, pp. 76-7; Prior, 2010, pp. 2, 6; Sicko, 1999, p. 47). In my own field work, the sounds of the TR-808 and the TB-303 are recognised and pointed out by participants as signifiers of a particular determining moment in the sonic history of dance music culture. Contemporary dance music is now primarily produced digitally, using computer software which integrates samples from the aforementioned electronic instruments and many other sounds programmed for production. Some producers prefer to use hardware such as drum machines, analogue synthesisers, sequencers and samplers, either exclusively or in combination with computer software. Samples of audio such as the human voice or the piano are often used in order to simulate, reference or even parody some aspects of the live or instrumental music experience. Similarly, software used by producers is programmed to replicate the sounds of old, well-known instruments such as the TB-303 and TR-808.

While many listeners individually choose to purchase single tracks, albums or compilations for home listening purposes, dance music in the public domain is for the most part performed by a DJ. The DJ is a performer either of amplified pre-produced music or of her originally produced music. More rarely, this role can include the playing of musical instruments combined with the act of DJing. However the latter is an exception to the general conventions of dance music performance examined in this thesis. The DJ's role in this context is to use playback media to play music and blend the end of one track with the beginning of another using a DJ mixer. This involves deciding which part of each track will be played, and how much of the track will overlap with the

next. DJs in a wide range of contemporary dance music genres generally ensure that tempo changes are subtle enough to be effectively imperceptible to those dancing. The media used to play music can either be vinyl turntables, CD players (known as CDJs) or a laptop. Laptops are used either in combination with other digital technologies such as Musical Instrument Digital Interface (MIDI) controllers – which trigger and sequence sounds – and effects units. Laptops can also be connected to CDJs or vinyl turntables. The beat matching technique, involving the merging of the beats of the incoming track with the beats of the concluding track, creates an unbroken flow of music for dancing (also described in Butler, 2006, pp. 53-5, 242). This generally requires an almost uniform tempo to be maintained, and this steady, (audibly) unchanging beat is a key recognisable characteristic of a large proportion of dance music (Fikentscher, 2000, p. 83).¹ Brooklyn-based DJ Terry Noel describes methods that he used in the 1960s in a manner that suggests he was among the first to use beat matching to blend two records (Noel, 1999). However Bill Brewster and Frank Broughton also credit Francis Grasso, a DJ from New York in the 1970s, with the first use of beat matching (Brewster and Broughton, 2010, pp. 57, 61; 1999, pp. 135-6).² Grasso is also argued to have pioneered a DJing style that ‘completely changed the relationship between the DJ and his audience’ (Brewster and Broughton, 1999, p. 139).

A DJ performance can be typically described as a presentation of a DJ’s choice of songs or tracks for people to dance to. In a DJ mix, song or track choices are therefore just as important as mixing and other technical skills. The DJ who commands the dance floor for a whole night with her music choices, for example, is respected similarly to the way in which a jazz musician is credited for a successful improvised solo. Bill Brewster and Frank Broughton (1999, pp. 12-13, 17-20, 83) and Kai Fikentscher (2000, pp. 58-9, 76, 79, 81) emphasise that the relationship between the DJ and the dance floor is powerful and energising. Moreover, as Dave Haslam observes, the potential power of this relationship is proportional to its fragility; it can rapidly take a turn for the worse if

¹ Four-to-the-floor genres such as house and techno are the most consistent, while DJs playing breakbeat genres such as dubstep occasionally use tempo fluctuation. DJs who mix breakbeat with four-to-the-floor genres also necessarily play with tempo (dubstep music and techno music are produced at very different tempos).

² This is one example of how a topic with no official or academic history but with a strong collective mythology results in multiple versions of events being accounted, and multiple parties claiming to have been the first or most significant in some involvement in these histories.

dancers are not responding to music being played (1997, pp. 158-9). Like live popular musicians, DJs can achieve fame and popularity from a series of successful performances, and a local nightclub residency can be a secure form of employment. But globally, DJs are also expected to be producers in order to achieve international acclaim. There is a strong tradition of DJs and producers initiating their own record labels on which to release tracks by themselves and other artists they admire. This was practised by the Detroit techno producers of the 1980s, who took charge of the distribution of much of their music (Sicko, 1999, pp. 69-85). Like instrumental rock and pop groups, commercially successful DJs and producers usually have managers through which all bookings and public enquiries are dealt with.

The third role I wish to highlight is of the listening audience, also known as clubbers, dancers, or ravers. As Nicholas Cook argues, traditional ideas of composer, performer and listener roles suggest that 'listeners are consumers, playing an essentially passive role in the cultural process' (1998, p. 17). Alternatively, as Cook implies, a more open-minded approach to social music-making allows for the possibility that listeners possess some degree of agency. While musical roles in dance music communities are divided on similar levels to those of the classical world, clubbers have significantly more influence on musical output than they are attributed by the three-tier hierarchy referred to by Cook. Their influence occurs not just in whether or not they attend events and purchase music but also through immediate, visceral responses to music, to which DJs, producers and promoters must pay heed. These responses take the form of expressive dancing whose steps are not always pre-meditated. Thus, it can be said to de-emphasise performance and emphasise bodily musical and social expression. However, along with the attention directed toward the 'official' performer – the DJ – dancing is always also a source of attention from other dancers; it is a segment of the whole event, a larger scale performance. This is quite unlike in staged musical or dance performances held in studios or concert halls, where movements of seated audience members are regarded as irrelevant or as distracting from the stage performance. Participation as a seated audience occurs in the form of observation; the body faces one way and is kept as sedentary as possible, to support the attention to the 'action' on the stage, whichever form it may take. By contrast, those who are listening to a performer play in dance music settings are engaged in the performance with their whole bodies, and this is not a

distraction but an expectation; if the participants in a dance music night do not dance, this reflects negatively upon the DJ, who is seen as responsible for the number of people dancing.

The role that I only intermittently refer to throughout this thesis is that of the promoter, whose job it is to organise and manage dance music events in collaboration with venue managers. Some venue managers book DJs themselves, hoping that a particular DJ's music choices will attract a large number of alcohol-consuming clients. By contrast, events that are focused on specialised musical genres are often outsourced to promoters. This is one way that the distinctions between commercial and niche events are understood by participants; a theme that will be discussed throughout this thesis. In the techno scenes discussed here, promoters are usually DJs and sometimes producers who aspire to generate performance opportunities for themselves and their peers. Promoters, unlike venue managers, are able to bring in a core group of people that share their tastes such as their friends and musical peers (Kühn, 2013). As important as this role is in the social fabric of dance music scenes, I do not give special attention to promoters' separate roles beyond this short summary, as they do not directly relate to my inquiry into the nature of physical responses to music.

While the subversive nature of dance music scenes in the literature and explored in my field work are not historically unique, they have been attributed a special political status by the media (Alston, 2010; Osborn, 2009; Perkins and Perkins, 2012; *London Evening Standard*, 2006; *The Telegraph*, 2008), and in literature that I will be discussing throughout the thesis. This media and scholarly attention has been critiqued by Sarah Thornton as having contributed to the notion that dance music participants are an unruly and disobedient group, adding to the thrills of the spaces, people and activities of dance music scenes (1995, pp. 132-5). Contempt for the sound of the music was fostered in the late 1980s and early 1990s and infamously etched into legislation (*Criminal Justice and Public Order Act 1994*). However, tabloid media such as *The Sun* have changed their tone for reporting on dance music culture, even endorsing previously shunned dance scenes such as those in Ibiza through advertising (*The Sun*, 2009). This shift can be seen as a symptom of the acceptance of dance music into the commercial music industry.

Participants have various ways of referring to the style of music to which they listen. The term 'dance music' is used in the everyday language of some participants to refer specifically to the popular dance charts. These participants have therefore preferred to identify which genres they listen to, rather than using my chosen label of 'dance music'. An alternative reference often used by participants who wish to clarify the differences between the dance music that they enjoy and popular dance music is 'electronic music', although popular dance music can also be exclusively electronic. Despite this confusion, I have chosen to use 'dance music' rather than 'electronic music' as the latter is often used to mean electronic art music, and there are divisions between electronic music produced solely as art and electronic music produced for popular dancing. This thesis does not, for example, discuss electronic music composed in universities or performed for seated audiences. Those who produce electronic music in the latter context are usually called composers, while those who produce it for dancing, are producers. At the risk of seeming reductionist, this distinction is a reality and the two modes of musical practice do not often overlap. While the contexts in which both art and dance music are performed vary, it would be rare (and likely unacceptable) for an audience to dance during a performance of an electronic piece in a concert hall or lecture room. Conversely, the idea of sitting in rows of chairs facing one direction and listening attentively to a DJ playing seems absurd. Importantly, dance music participants on the whole do not concern themselves with the specific methods of music production. It is common and acceptable for dance music to be produced by a self-taught amateur with no formal education in either music or technology, on a personal computer in a domestic setting. All of these combined attributes would be unusual for a composer of electronic art music. Electronic music pioneer Pierre Henry believes that the production methods of dance music, or perhaps pop more broadly, are not credible, and that its form is dull for the listener:

It's some sort of constantly present tam-tam. I'm not convinced by current music, the way it is done... Its form is similar to the beginning of music in the Middle Ages in France, where it was not only just a form, but it was also very boring. I don't particularly like cave music. (Henry, quoted in Shapiro, 2000, p. 23)

Howard Becker's notion that an auteur who composes unique art occupies a different social plane to the technician producing a reproducible object (1982, p. 272) evidently

still persists. However similar distinctions recur within the electronic dance music cultures themselves, as Simon Frith (1996) notes that they do in all popular music cultures (p. 19).

In this introductory chapter I have established the parameters of the broad style of music and social scene that I will later examine. Clubbers, DJs and producers assume the roles of listeners, performers and composers respectively. These musical roles are the focus of my thesis, although the entrepreneurial role of the promoter as organiser, administrator and marketer of events should not be forgotten. The media have given the music and its social context negative and positive receptions that reflect the prevailing views of the public. Finally, I acknowledge the differences between electronically produced dance music and electronically produced art music, the most relevant of which is the way that dance music is embodied by its listeners on dance floors. Certain meanings are communicated through the dancing body, though not always intentionally. Like many other popular forms of music targeted at dancing, participants listen by moving, experiencing it physically, emotionally and socially rather than mentally, reflexively and analytically (Frith, 1996, pp. 124-6). The role of the clubber is thus socially participatory and performative – we are aware of the possibility that we are being watched.

Chapter 2 – Methodology and Literature Overview

In this chapter, I will provide an overview of the literature used in this thesis, and discuss how it has influenced my research methods, and review some of the language used to describe and analyse dance music within this literature. Finally, I will discuss my own uses of ethnographic research and musical analysis in some detail with reference to some of the aforementioned literature. A significant proportion of the accumulated knowledge on dance music culture is based on histories reported by participants, and thus cannot be said to constitute the history of dance music. These accounts are rich and varied, and given the nature of the field, it would be unreasonable to claim that any chronological account of dance music could be considered purely factual. However, historical and cultural accounts of dance music that will be examined in this literature review generally agree that these musical aesthetics and aesthetic practices, particular to contemporary DJ and club culture, were influenced significantly by the sound systems of Jamaican dancehalls (Shapiro, 2000, pp. 50-1), by disco (Brewster and Broughton, 1999, p. 137, 315; Sicko, 1999, pp. 44-5), funk (Rubin, 2000, p. 116; Sicko, 1999, pp. 53-4) and by European synth pop (Brewster and Broughton, 1999, pp. 342-4; Fikentscher, 2000, pp. 22-3; Shapiro, 2000, pp. 68-9; Sicko, 1999, pp. 48-9) in the 1970s. In the early 1980s, these influences congealed to form new, distinct sounds and cultures, specifically, house in Chicago (Brewster and Broughton, 1999, p. 316; Eshun 2000, pp. 75-6), and techno in Detroit (Brewster and Broughton, 1999, pp. 342-4; Rubin, 2000, p. 114; Sicko, 1999, pp. 48-51). It is also worth noting that I have focused on these accounts that almost exclusively follow the trajectories of the United States and Britain due to their relevance to my site of study. However the development and uptake of related musical cultures in the non-English speaking and non-Western world is an area well worth pursuing in future research.

The literature can be divided into two basic types of document: one that provides a broader theoretical foundation for research, and a second that directly addresses the topic of dance music. The second category constitutes the core literature on dance music and includes ethnography (for example, Fikentscher, 2000; Malbon, 1999), history (Brewster and Broughton, 2010; 1999; Shapiro, 2000; Sicko, 1999) and music-theoretical

analysis of dance music (Butler, 2006; 2001; Clarke, 2005; Garcia, 2005; Hawkins, 2003). I also make reference to more personal accounts of dance music (McCall, 2001; Belle-Fortune, 2004) as they offer perspectives as valuable as those of my interviewees. The works reviewed in this thesis are not exhaustive – dance music seems to be a rapidly growing topic of research in a variety of scholarly disciplines. Moreover, while the literature on dance music that I refer to throughout my thesis has constituted a contextual background, it often addresses issues peripheral to my research question. Works that fit into this category are therefore only mentioned in passing.

With these qualifications in mind, I will now provide an overview of the literature that will be integrated throughout this thesis, starting with the book that initially provoked my interest in researching this topic. Mark Butler (2006) presents important musicological research on dance music that incorporates formal analyses of dance music tracks, and interviews with producers and DJs.³ Butler engages with the concepts of rhythm and meter in techno with a detailed music-theoretical approach without attending to the act of dancing as part of his analysis. His book provides a historical outline of the development of dance music in addition to an informative and accessible outline of how dance music is composed. The photographs of production hardware are particularly helpful for readers with no knowledge of electronic music production, who may otherwise find the descriptions of technologies and their functions difficult to follow. In an earlier article (2001) that is expanded upon in the book (2006), Butler specifically focuses on the way that polyrhythms lend themselves to multiple interpretations and experiences of meter. This article is reviewed and expanded upon by Luis-Manuel Garcia (2005) in an article about repetition. In Chapter 12 of this thesis I will engage with Butler and Garcia's writing in further detail with reference to the combined results of my ethnographic research and musical analyses. In contrast to Butler, I choose not to centre my analysis upon specific musical concepts, but rather attempt to connect the experiential elements of musical and social settings with the act of dancing.

³ While musicology can be understood as a broad field that includes the study of both musical form and musical contexts, in this thesis I use it interchangeably with 'music theory' to denote the analysis of music.

Some contrasting but equally important cultural texts include a chronological history of DJing through an interpretation of conversations with key DJs and promoters by Bill Brewster and Frank Broughton (1999). In a more recent work (2010), the same authors present a compilation of interviews with well-known DJs from the 1940s to the present day. An author who provides a snapshot of a particular scene that derives directly from disco, Kai Fikentscher (2000) uses ethnographic research to explore the social processes of the dance floor in New York City house music clubs. Fikentscher's overarching argument is that this particular scene has empowered ethnically and sexually marginalised groups, particularly gay, African American men. Ben Malbon (1999) similarly uses ethnography to research the practices of clubbers in London, highlighting the ways in which clubbing can contribute to participants' sense of social identity. Simon Reynolds (2008), like Brewster and Broughton, traces a particular historical trajectory of the dance music scene in the United Kingdom, using a journalistic approach. His account, which is primarily cultural, also includes the richest descriptions of dance music that I have encountered in the literature. Lastly, Sarah Thornton (1995) presents an insightful account of a dance music culture whose consciousness is centred on an anti-establishment position and a reliance on the media to reassert this position. Thornton's theoretical work, despite having been written approximately two decades before this thesis, is still applicable to the scenes in my research. It is thus one of my literary focal points in Part III.

Some other works that I have reviewed throughout this thesis that do not deal with dance music contribute to my inquiry in other ways. I explore, for instance, scientific research on musical movement and music perception (Alluri and Toiviainen, 2010; Barreiro, 2010; Godøy, 2011, 2010; Kim, 2010; Phillips-Silver and Trainor, 2005; Schäfer and Sedlmeier, 2011; Trevarthen 1999; Waters 1994), and the drug MDMA or ecstasy (Feduccia and Duvauchelle, 2008), on which there are also helpful studies from sociology (Beck and Rosenbaum, 1994; Becker, 1953; Kelly, 2009; McElrath and McEvoy, 2002; Measham, Aldridge and Parker, 2001; Sanders, 2006) and phenomenology (Fachner, 2011; Leneghan, 2010). Works that explore musical perception and movement both in the mind and through the body (Clarke, 2005; Montague, 2001) has also contributed meaningfully to my considerations of the phenomenology of musical movement. Popular music scholarship (Frith, 1996;

Middleton, 1993; 1990; Tagg, 1981) underpins my methodological and philosophical approach to researching dance music as a popular form. Interdisciplinary studies of youth (Garratt, Roche and Tucker, 1997; Kehily, 2007; Miles, 2003; Roberts, 2003; Weinstein, 1995b), including youth interactions with popular music culture (Bennett, 2006; 2002; 2001; Frith, 2005; 1981; 1978; Grossberg, 1995; Tarrant, North and Hargreaves, 2002; Weinstein, 1995) are also examined. In addition, the seminal sociological literature of Pierre Bourdieu (1984) dismantles the powerful cultural distinctions that have long been etched into mass consciousness in the West, forming the theoretical foundation for the final part of this thesis.

As Ben Malbon notes (1999, p. 77), discussions of dancing are often avoided in academia as the act is elusive in nature, and does not easily lend itself to scientific or quantitative approaches. I have thus attempted also to approach the problem of describing dance movement through dance scholarship such as by Joanna Hall (2009; 2008), who discusses dancing to genres of dance music that I explore in this thesis, and by Julie Malnig (2009) and Lesley Snelson-Figueroa (2004) who explore socio-cultural and phenomenological issues pertaining to dance, respectively. Hall in particular (2009), demonstrates the scope and limitations of close analysis of dance movement, in her detailed analyses of the physical movements of drum 'n' bass clubbers. Lastly, the literature that influences my choices, in the sense that I do *not* incorporate its methods has helped to determine my approach to fieldwork, which I will discuss in some detail in the following section. Fiona Measham, Judith Aldridge and Howard Parker (2001, pp. 70-1), for example, employ assistants to conduct extensive fieldwork for them, including a nurse. Jerome Beck and Marsha Rosenbaum (1994) also employ interviewers for their research (p. 163). The aforementioned methods are survey-based, and their data is numerical, such as percentages of male versus female interviewees (Measham, Aldridge and Parker, 2001, p. 81). Measham *et al.* manage to interview participants effectively despite the loudness of music, by finding quiet areas in large venues (pp. 74-5). Like many other ethnographers in dance music scenes however, Measham *et al.* rapidly learned the importance of establishing trusting relationships with participants (2001, pp. 72-4).

Most of the existing writing on dance music understandably includes terms from the disciplinary backgrounds of its authors, and attempts to integrate scholarly language with language from within the 'scene'. This includes a use of insider language, and occasional translation into a new set of terms for the benefits of outsiders. In other instances, the knowledge of insider language by the reader is assumed by authors. There is arguably a balance to be struck between a coherent translation of dance music phenomena into the vocabularies of specific disciplines, and an understanding of concepts as they are communicated within the community itself. As Richard Middleton notes, the limitations of musicology as a discipline are made plain in a silence on the essential relationship of dancing to music (1993, p. 180). I address this issue by asking how language choices can meaningfully contribute to an understanding of dance music.

To those unfamiliar with electronic music, the terminology of dance music producers and DJs might not always provide many clues to the nature of the sound of dance music. This *quality* of sound is arguably one of the aurally distinct elements of dance music, and has the least-developed descriptive language. Sometimes called 'tone colour' by musicologists, timbre is the character or properties of sound. In purely physical sound terms, timbre is the 'spectral content' of a soundwave (Waters, 1994, p. 133). However, as Simon Waters cautions, it is problematic to describe the physical properties of sound while overlooking the effects that these sounds have on the aural subject, who links sound with experience and meaning (pp. 132-4). Following Waters' lead, any references to sound throughout this thesis are based on the underlying premise that sound is relational, and that its significance is in how, as Steve Goodman argues, its movement 'impresses' upon the body (2009, p. 9). Reynolds (2008) makes a special point of the role of timbre, in highlighting difference between dance music and other musical forms. In other music, timbre is merely the 'medium... through which... the melody... is expressed' (pp. 377-8), whereas in dance music, timbre has primacy over melody.

As Richard Middleton (1990, p. 104) and Stan Hawkins (2001) highlight, musicology was historically formed to fit the study of classical music. The focus of analysis on particular aspects of music due to notation, its undue privileging of particular ways of listening and its established vocabulary make it a problematic form for the analysis of

popular music styles (Middleton, 1990, pp. 104-5). For Mark Butler (2006, pp. 23-4), however, this is the problem of all scholarly disciplines that examine traditionally non-scholarly phenomena. Thus, Butler does not view this argument as a justification for avoiding (classical) musicological analysis in dance music, arguing that ‘the power of a theory of Western classical music to speak for music more generally still holds within the discipline’ and that the process can enrich the scholarly field (p. 24). However, Butler’s work does demonstrate some of the issues confronting musicologists studying dance music – some are acknowledged by Butler while others reveal themselves through language choices and methods. One of the most common practical challenges is illustrated in Butler’s usage of acoustic musical instruments as descriptors of electronic sounds. There is a degree of inconsistency in how the most fundamental electronic sounds are described. This is not a problem unique to this book, nor is it due to any negligence on Butler’s part; he includes an extensive glossary in a helpful attempt to clarify meanings of terms. Many types of production software and hardware use musical instrument names to describe sounds, including Cubase, Reason and Ableton Live. Producers use these terms as a result of how they are presented in the software and hardware. This is logical, given that the sounds of analogue electronic instruments such as drum machines were historically intended to imitate live instruments; their lack of success at this imitation led to unorthodox and more creative uses (Butler, 2006, p. 68; Sicko, 1999, p. 104). It also makes sense in relation to the ways in which electronic sounds are created through the sampling of actual instrumental sounds. It is, nonetheless, an issue unique to the study of electronically produced music that is worthy of exploration.

I will focus on the word ‘bass drum’ as a typical example of an instrument name used to denote the sounds that dominate and propel dance tracks; other descriptors such as ‘kick drum’ (as in a rock drum kit) are acknowledged by Butler as well (2006, p. 259). The kick drum might be a more logical label as arguably this sound in dance music was designed to mimic familiar drum kit sounds rather than the sounds of classical instruments. There is significant scope for confusion with terms such as ‘bass drum’. It seems not to be referred to as the ‘bass drum’ by dance music reviewers, who use the broader terms ‘beats’, ‘kick’ or ‘drums’ (Boomkat, 2002-2011; DJ Mag, 2010; Wowk, 2013). Eshun (in Shapiro, 2000, p. 78) uses the term ‘kick drums’, Sharp (in Shapiro,

2000, p. 140) uses ‘beats’, while production software like Ableton Live uses both ‘bass drum’ and ‘kick’ (Ableton, 1999-2010; Spike, 2010). The bass drum, an acoustic instrument originating in military bands, is used in the modern orchestra (Adler, 2002, pp. 431-2). Although acoustic samples of drums and percussion instruments are often the original sound sources, the editing of these samples by producers means that the end result – the sound of a mastered track heard on the dance floor – does not often resemble the acoustic instrument. While Butler helpfully states that the sounds referred to in his book are electronic and therefore distinct from acoustic instruments (2006, p. 260), his focus on rhythm and meter precludes any expansion of this into how these distinctions occur. I see some benefit to using terms such as these, familiar to outsiders, if the differences between the two sounds of the same name are made clear. For example, the so-called ‘snare drum’ in dance music can be an electronically manipulated sample that sounds little like an acoustic snare. In this thesis, I therefore use musical examples along with descriptions to express these differences.

Butler (2006) uses classical notation and extensive, self-devised graphic representations. Both are accompanied by written descriptions including sound labels which are chosen, according to Butler, on the basis of common usage, producers’ language, and importantly, for the purposes of differentiation on a score. The notation in the descriptive scores is used to demonstrate concepts such as metric displacement and ‘turning the beat around’ in dance music (2006, pp. 139-155). Notated music is helpful to musicologists inasmuch as it is a tangible visual reference for the conceptualisation of particular musical elements. The elements not practically represented in Butler’s thorough scores are effectively represented in other ways, such as graphical representations of whole dance tracks, and tables that list all the sounds in each (pp. 283-323). However, one problem specific to notated transcriptions is their lack of accessibility; notated scores, particularly those of the complexity of Butler’s, are lost on anyone other than the most adept score-readers (see also Hawkins 2001). Transcription is as subjective as any other form of analysis, as highlighted by Hawkins (2001). This subjectivity is not a problem in itself; the danger is only that it might be perceived as a more precise or accurate form than the written word and other representational forms. This idea may derive from its relatively systematic use across time and (mainly Western) space, and its basis on a fixed set of conventions for the representation of particular

musical elements. More importantly to this research however, the overemphasis of melodic and harmonic elements and under-emphasis of other elements are not conducive to the study of a form such as dance music.

Eric Clarke (2005) also presents a musicological study of dance music, although his focus is the way that motion is perceived in music by listeners. Clarke compares selected classical pieces with Fatboy Slim's 'Build It Up, Tear It Down'. I provide a one minute excerpt of this track, below to contextualise this discussion for the reader:

Audio 1. Fatboy Slim - 'Build It Up, Tear It Down'⁴

According to Clarke, the motion that listeners might hear in this music relates to an instinctive understanding of how sound is affected by the movement of real-life objects (2005, pp. 80-2). The other two musical examples used in the article are strikingly different: Berg's 'Wozzeck' (Clarke, 2005, pp. 77-80), a Serialist opera from the early twentieth-century, and a Mozart String Quintet (pp. 82-7). Clarke's analysis of 'Build It Up, Tear It Down' presents a unique choice of language for describing dance music. Despite the brevity of his analysis, it is an effective demonstration of some of the sonic features that are common to many dance tracks, such as 'filtering' (pp. 80-1), a term also used by DJs and producers. Clarke uses a mix of musical instrument terms such as 'drum kit' and 'male voice' or 'vocals' (pp. 80-1), also using timbral metaphors such as 'brightness' and 'clear' (*ibid.*), Western pitch names 'B and E' and terms such as 'texture' and 'timbre'. In addition to this, a term which DJs and producers use – 'bass heavy' (*ibid.*), is used to describe an emphasis on low frequencies. The latter is used in quotation marks, perhaps indicating that the term is not one that Clarke would commonly use.

This combined use of language from different disciplines in addition to insider terms are useful for highlighting points that Clarke wishes to make on different aspects of dance music. For example, the language of musicology might be better at describing specifics of pitch patterns, while the language of producers would be more appropriate to

⁴ Fatboy Slim (1998) 'Build It Up, Tear It Down'. 03.00 – 04.00

describe electronic effects. However, it is important to be clear on exactly how terms are used by whom, and to be equally clear about how they will be used in this specific piece of writing. For example, Clarke does not mention that the drum kit in the above track is electronic, nor that the vocals are digital samples. This could mislead a reader who has not heard the track, and does not know that this genre of dance music rarely uses acoustic instruments. Most importantly, there is a conspicuous lack of any mention of bodily movement despite the acknowledgement that it is a ‘dance track’ (p. 80). This seems an unusual absence given that the topic being addressed is motion, and dancing is a literal manifestation of motion in music for listeners. Like most dance music, ‘Build It Up, Tear It Down’ is produced specifically for dancing. As Simon Frith emphasises, popular music demands fundamentally a different kind of listening to the kind that is expected for classical music (1996, pp. 39, 41, 124-6), such as Mozart’s chamber music or Alban Berg’s ‘Wozzeck’. Therefore, it could one hand be considered an unusual choice to analyse them concurrently in a discussion on motion perception. On the other hand, as Middleton suggests, all musical sounds are in some sense ‘analogous to physical gestures’ (Middleton, 1993, p. 177), noting that ‘[e]ven with pieces not intended for dancing, listeners usually find themselves *moving*, really or in the imagination’ (p. 178, italics in original). The most obvious manifestations of this are the inherent musical qualities of the human body such as the rhythm of the heart, and vibration of the vocal chords (p. 179). In addition, it is suggested that listeners are provoked to dance or move by physical reflex, such as when sound is extremely high in volume, to the point that it is felt by the body rather than heard by the ears alone (p. 179). This phenomenon is an accurate description of the workings of dancing *triggers* – the responses that seem outside of our control. Musical analysis encompassing physical movement could provide an alternative to Clarke’s (2005) theory of cerebral motion and Butler’s (2006) investigation into rhythm and meter.

Like Clarke, Stan Hawkins (2003) focuses on a single dance music track – in this case, ‘French Kiss’, by Lil’ Louis. However, unlike Clarke’s comparative study of movement perception, ‘French Kiss’ is the sole object of an imaginative musicological discussion of the relationship between music, dancing, and culture. Hawkins undertakes a detailed musical analysis to explore the relationship between musical form and associated technological, production, performance and listening/dancing practices (pp. 81-2).

Specifically, the textural and rhythmic features of the quintessential house track, 'French Kiss', form a set of interactions and tensions between opposing rhythmic planes: the dominance of rhythmic constancy on one hand, and the sense of flux on the other. These tensions characterise house as a genre, and are in essence, the key to setting the body in motion (pp. 92-3, 95), in addition to 'the felt qualities of volume, mix, timbre, sound-system and groove' (p. 101). In other words, the persistent four-to-the-floor kick drum and other sounds that contribute to the sense of meter (such as the hi-hat and 'handclap/snare') comprise one motional force. This is interjected by more temporary sounds that carry the dual role of delineating the track's three-phase form (pp. 88-91) and adding rhythmic variety, such as vocalisations and syncopated melodic riffs (pp. 95-7). Hawkins alludes to the parallel between the constituent individual gestures that create variety in the collective dance floor that is 'controlled' by the repetitive beat (p. 100) and by the vertical musical structure described above. Moreover, the potential for playful dancing interpretations within an overarching repetitive form can be read as politically significant in relation to the African-American, gay scene within which this musical style developed (pp. 82-3, 98, 100).⁵

Hawkins uses traditional formal musicological techniques such as transcription into a notated score, and like Butler (2006), a tailor-made graphical representation that illustrate elements excluded from the classical score. Time-coding, for instance, is included to show the introduction of a new 'cellular groove pattern' at one minute and thirty-one seconds into the track (Hawkins, 2003, p. 91). The 'cellular groove pattern', abbreviated to 'CGP', is defined as a unit of looped material marked by their uses of musical elements as textural or alterations in sound effects (p. 90). Hawkins' graphical descriptive 'score' also allows for analysis of the macro-form of the track, such as when Phases A, B and C occur, in addition to identifying sounds by their names, such as 'brass stabs, (panned and filtered)' (p. 91). The transcribed classical-style score and the unique graphical representation is complemented by a sonogram (p. 93), that uses frequency, time and amplitude as parameters that indicate 'energy' levels at various points in the track (*ibid.*). Tamas Ungvary and Simon Waters (1992) propose a detailed rationale for using sonograms as an alternative type of musical representation. The flexibility afforded by representing only three parameters of sound leads to a shift of

⁵ I will shortly pick up on the issue of dancing style in relation to analysis of dance in Hall (2009).

emphasis from musical elements privileged by the traditional score (pitch and rhythm) to texture and timbre; these elements ‘apparently [relate] closely to the experience of many listeners’ (Ungvary and Waters, 1992, par. 6.4).

The four visual representations that Hawkins uses – the notated score, the unique graphical score, the sonogram, and a table that summarises key information in the track, are combined also with the culturally- and socially-conscious ideas of popular musicology. This is exemplified through the historical and cultural context of the music that is later formally analysed (Hawkins, 2003, pp. 82-4). In addition, here, dance music terms are, as in Butler (2006), systematised, and integrated into an overarching musicological paradigm. The use of the notion of a ‘cellular groove pattern’ as a unit of dance music material is not merely influenced by the concept of the groove in funk and dance genres, but also an object that is systematically applied to musicological observations and consequent evaluations. Other dance music terms are used with direct reference to insider language, such as ‘track’ (p. 81), used by DJs to denote a piece of dance music, and the informed use of a wide variety of genres, sounds and hardware that are part of the technical and fan knowledge of dance music scenes. One discrepancy is exposed by the all-encompassing use of the term ‘DJ’ to mean DJ and producer (pp. 86, 97-8), which can be justified by the fact that Lil’ Louis, the artist of the only track analysed here, occupies both roles. However, to use the term DJ to mean either DJ or producer (or both) can still be problematic when an apparent lack of distinction between them can confuse or discredit the author’s core point. In particular:

Musically, the skills (on the part of the DJ) invested in controlling the beat and the crowd are what frames the aesthetic of house. Indeed, the grooves provide the prime stimulus for the DJ realizing music in ‘real time’, as if insisting that clubbers should party to the point of complete immersion in the beat (see Rietveld 1998: 148). Importantly, it is the unfolding of all the musical events – drum loops, beats, vamps, sound textures, special effects, bass lines, melodies – that thrills, excites and drugs the dancer. (Hawkins, 2003, pp. 98-9)

I would agree that the DJ has ‘real-time’ control over the crowd inasmuch as her social, in-the-flesh presence combined with her musical choices impact clubbers on an immediate and visceral level. However, the beat – including its pitch, timbre, dynamics and length – is pre-programmed by a producer who may be but is not necessarily also the performing DJ. If this statement is intended to mean that the DJ (as performer as

opposed to producer) controls the tempo of the playback and thus impacts upon clubbers' dancing, then this is accurate, but I would question what is meant by the term 'beat' (if not tempo) and whether beat is controlled by the DJ. I would also contend that producers as the initial programmers of sounds and dancers who enact a bodily interpretation of these sounds are as much if not more responsible for the 'aesthetic of house' as the DJ. Yet it is not clear whether Hawkins is using the DJ here as a producer, or performing DJ, or both or whether the aesthetic being referred to is musical, social or a combination. If, as is claimed, 'it is the unfolding of musical events... that thrills, excites and drugs the dancer' (*ibid.*) then it is surely the producer who establishes the musical aesthetic. The DJ makes it personal and social through her presence and her delivery of other producers' carefully-constructed tracks to a dance floor. Overall however, the language used in this chapter provides rigorous links between musical form, the dancing provoked by it and cultural meaning.

Simon Reynolds provides a contrasting and more culturally-focused treatment of dance music (2008). His journalistic style and methods are unabashedly personal, and his methods of representing music are primarily metaphorical. The metaphorical style of Reynolds' writing is reminiscent of Roger Scruton's theory of musical aesthetics, in which listeners make mental links between sound and spatial worlds, allowing them to make sense of what they hear and to convert abstract combinations of sound into tangible things through their imaginations (1997, pp. 85-96). Reynolds uses metaphor as a way to relate his object of study to readers' culturally common experiences. For example, in a description of one genre of dance music, Reynolds refers to a '...play of 'light' as it creases and folds, crumples and kinks' (Reynolds, 2008, p. 378), and asserts that '...techno is an immediacy machine, stretching time into a continuous present' (*ibid.*). Occasionally Reynolds uses terminology partly drawn from musicology to contrast with the mostly metaphorical descriptions, but these are usually not explained. For example it is doubtful that readers without a classical music education would know what the terms 'ultra-melismatic vocals' (p. 126) or 'hyper-melismatic vocals' (p. 18) mean.⁶ Musical terms assist arguments that Reynolds

⁶ Melisma can be either a compositional or improvisational technique, in which a single syllable of a word is sung over two or more notes. Melisma is incorporated extensively into choral music, opera,

makes such as that in ‘Some Justice’ by Urban Shakedown, ‘[f]using the staccato aggression of the mentasm stab and the tremulous euphoria of the octave-skipping piano-vamp, the oscillator-riff literally electrifies the listener’ (Reynolds, 2008, p. 123).

For a formally musically-educated reader, ‘staccato aggression’ is helpful for imagining particular aspects of sound, as is the ‘mentasm stab’, for readers who know the track by Joey Beltram, *Mentasm*, to which it refers. It is not clear to me what is meant by an ‘octave skipping piano vamp’. Octave skipping on a piano can be imagined if the sound of octaves on a piano is familiar, although it is not obvious which registers are being used, and what is meant by ‘skipping’. It could mean jumping from one octave to the next, skipping over an octave and using contrasting registers. Alternately, it could relate to rhythm rather than with pitch. We do not know what else is happening in the track, as Reynolds has chosen these elements to describe his subjective experience of the sound. Only with technical knowledge of production hardware and software, is there a chance of understanding what an ‘oscillator-riff’ sounds like, even though the word *oscillation* in its literal meaning – vibration – might be evocative in the context of this sentence, in which it is said to ‘electrif[y]’ the listener (*ibid.*). What is more, electrification implies a jolt or a shock, a concept that would be understood by a reader as shocking in relation to what he has been exposed to in the past.⁷ Reynolds draws attention both to his own and others’ experiences of dance music. Rather than formal considerations, priority is given to subjective receipt of the music by the listener. Despite his own extensive use of metaphor, Reynolds argues that dance music is ‘non-referential’ (2008, p. 375) and that ‘[e]ntirely an appeal to the body and the senses, it offers no food for thought’ (p. 376). This contrasts Roger Scruton’s notion that metaphor is a necessary aspect of musical listening (1997, p. 92).

gospel music, and a large range of contemporary popular music. It is a common method through which a solo singer can display virtuosity.

⁷ I would suggest that if this track were to be played in a club today – its reputation as a classic drum ‘n’ bass track notwithstanding – it might not have the same ‘electrifying’ effect on clubbers as it would have when it was first released. This is because expectations are different with regard to the extent of physical and dynamic impact of a drum ‘n’ bass track. This form of description is inevitably not only culturally specific (*not* universal) but also somewhat dated.

Reynolds' analysis of music, while evocative, does not address questions such as why certain sounds have specific effects on listeners (Butler, 2006, pp. 9-11). Additionally, although his musical terms turn the elusiveness of music into something that can be visualised or imagined, the reliance on metaphor to portray music is somewhat limiting. Metaphorical descriptions provide outsiders an insight into how sounds might make a listener feel, what they evoke and how senses are affected without helping us to understand what they actually sound like. Certainly, a benefit of notation and theories of Western melody or harmony as the basis for analysis is that this method can provide an overall technical understanding of formal elements. However if used alone, it is comparable to conducting ethnographic research by standing at the back of a club and taking notes without participating, or without acknowledging one's inevitably subjective musical experiences. Reynolds' method thus demonstrates both the strengths and limits of descriptive language alone, while also resonating with the experience of clubbers. By contrast, formal analysis may be of more interest to a producer or DJ.⁸ Similarly, metaphors in written language can more closely reflect the dance floor experience, while the distance of formal analysis can provide a helpful, complementary method.

Kai Fikentscher (2000) conducts ethnographic research on the dance floor in New York City, focusing on its interactive and social elements. This is another valuable work that addresses the music in relation to dance, and treats the two as equally significant elements of clubbing. Musical elements are only raised if there is something to be said about how they affect the dancer –the 'dancing body' is referred to as a 'musical instrument' (2000, p. 59). There is a strong emphasis on the perspectives and experiences of the subjects of his study, including DJs and clubbers. For example, insider colloquialisms such as 'the vibe' (pp. 81-2) are introduced, explained and then consistently used throughout the book. For Fikentscher, the vibe denotes a kind of collective energy which begins at the DJ booth, progresses to individual dancers and spreads across the whole dance floor before coming back to the DJ (p. 81). Fikentscher does not focus as much upon research or analysis on the music as on its context, however the small amount of description used is effective, and chosen with respect for and sensitivity to participants. A basic level of musical analysis is undertaken, such as the

⁸ Not all DJs and producers are formally musically educated, and thus these kinds of musicological descriptions could be equally lost on them.

interpretation of dance music meter as 4/4, and the mention of balanced four-phrase forms (2000, p. 81). For the most part however, Fikentscher adopts the terms of clubbers and DJs. These terms – ‘the bass’ and ‘the beat’ (Fikentscher, 2000, p. 86), are used with reference to how they impact the dancer, for example, in the claim that the beat is the basis of dance movement (p. 83).

Ben Malbon (1999) highlights the lack of discussion of music in dance music literature (pp. 76-7), a significant problem given that music is the element which most attracts people to clubbing (pp. 79-81). However, rather than conducting any musical analysis, Malbon analyses what clubbers say about their musical experiences (1999, pp. 80-1, 83, 85, 88-90). This is achieved partly through direct quotations from his interviewees, who highlight both the personal significance of music and its connections to dance (p. 85). His musical language is primarily derived from sociological work on music, such as Frith (in Malbon, 1999, pp. 76-8, 81, 83-5, 87-8, 90, 102-3, 117, 182) and the work of ethnomusicologists such as John Blacking (in Malbon, 1999, pp. 80; 82; 87; 102; 117), along with those of his interviewees. For example, Malbon suggests that the sort of listening which occurs in the nightclub is ‘simultaneously *motional* and *emotional*’, (p. 84, italics in original) relating to both sound and the place of the listening subject within the context of other clubbers. Furthermore, his discussion of music and temporality in the nightclub (pp. 102-4) opens up important questions on the phenomenology of musical movement in this context. Overall, through his participation in multiple clubbing nights, Malbon observes the social processes of a dance music scene. Like Fikentscher, he discusses dancing in terms of its capacity for communication, and its reflection of general social behaviour (Malbon, 1999, p. 27). While Fikentscher’s study looks at the way that a particular dance scene reflects marginalised groups within society, Malbon explores existing and past theories of subcultural consumption (1999, pp. 23-4) through which he aims to present an accurate account of clubbers’ perspectives and practices (p. 25). For Malbon, theories of political resistance are misleadingly imposed on clubbing cultures (pp. 18-19), a point that I will expand upon later. According to Malbon, the attraction to clubbing comes from personal relationships with music, dancing and ‘crowds’ rather than overtly political goals (pp. 20-6, 81-7). While Malbon makes a worthy point of framing individual clubbers in a wider social realm emphasises music’s importance, no discussion of musical content is undertaken in his book.

Dance scholar Joanna Hall is critical of the lack of analyses of the actual movements of dancing in literature that addresses dance music (2009, p. 50). Her descriptions of dance movements are designed to illustrate broader social issues, such as that notions of masculinity and aggression are pervasive in the drum 'n' bass scene (pp. 203-5, 213-17). These descriptions are thorough, including almost all moving body parts. For a musician studying dance music, they help to demonstrate how complex these improvised yet highly stylised movements are. They are also illustrative of some of the difficulties of analysing dance for those outside of dance scholarship. More importantly, they highlight aspects of drum 'n' bass dancing which relate to particular musical stylistic characteristics of the genre, such as the way that one side of the body tends to sway forward on the 'off-beat' of the music (Hall, 2009, p. 203), punctuating the rhythmic syncopation. For Hall, sudden, extreme movements such as those of clubbers she observed are symbolic of and contribute to the normalisation of male aggression within these drum 'n' bass settings (pp. 203-5).

Hall's descriptions of drum 'n' bass dancing provide insights into specific bodily movements and lead me to conclude that words alone would not serve my research as a form of representing dance movement. The descriptions that Hall provides are long; once the end of a description is reached there is a risk that its connection to the rest of the passage has been lost. It can also be difficult to 'convert' or 'translate' long micro-descriptions into mental images of dance movements which occur much more rapidly than their written representations. However the main rationale for not using this method extensively in my thesis is that it is difficult to imagine the movements in conjunction with the sounds to which they are responses. The below excerpt from Hall's analysis is illustrative of the challenge of comprehending this complex relationship:

The feet move from one to the other in a stepping pattern in place, either by transferring the weight slightly from one to another (with bent knees) with full steps and a low bent supporting leg whilst the other is lifted upwards (often to the slower bass line rhythm I -step +-lift, 2-step, +-lift), or by tapping the lifted foot on the ground in front of the dancer before stepping onto it (I -step, tap-2,3-step, tap-4). This variation can also become a skipping movement as the energy becomes lifted and the dancer hops and the tap becomes a loose and low kick. The torso moves with the legs so that the shoulders and body twist forward and back in opposition to the feet (the extent of this movement varies between dancers, and

their own absorption in the music and dance at different points of the evening).
(Hall, 2009, p. 205)

If a reader attempts to imagine every moment described above, the agile movements of many body parts in succession may be conjured up, rather than any simultaneous movements. Another issue that descriptions at this level of technical detail contend with is their inability to incorporate the unquantifiable, intangible, yet central element of dance in this setting – that of style. The sequence, as it is described, could be mistaken as occurring somewhat mechanically. It is challenging to provide a sense of the non-technical stylistic qualities of drum ‘n’ bass dancing that make a dancer look ‘cool’ or that attribute the dancing with the ‘feel’ of the music. Hall later resolves this by providing an accurate and helpful breakdown of some components of coolness within a drum ‘n’ bass club setting, linking displays of attitude with previous and subsequent explanations of movement of individual body parts. This passage is also very valuable in that it provides a vivid impression of the postures and posturing of this particular style of night club dancing:

A sense of cool bravado and arrogance, juxtaposed with an intense excitement or energy, can be seen in the dancers’ body postures when moving, as well as standing around the space and walking through the club. On the dance floor the two main torso positions display an intense build up and release of energy, as well as a languid, relaxed and arrogant confidence. (Hall, 2009, p. 216)

Malbon (1999, pp. 98-102) also takes up the issue of style and ‘coolness’ in the nightclub environment. Like Malbon, I argue that people who are admired for their dancing skills appear to be tapping into an intuitive sense of the music with their bodies. This style may seem unattainable to those who cannot understand the interpretation expected from them as a response to ‘feeling’ the music. This ‘feel’ is literally impossible to learn other than through direct observation, repeated imitation, and importantly, an immersion in the culture of the scene. I argue that the drum ‘n’ bass moves described by Hall (2009) lose their significance if a depiction of this genre-specific ‘feel’ or style of movement, is not achieved. While words can be informative or even evocative, a more effective method for describing dance is to show it – by means of a video viewing if not in the flesh. In my thesis, a small number of video excerpts from field work are the primary means through which the reader can witness the types of dancing to which I refer. While Hall acknowledges that video recordings of dancing could be useful for

depicting what she is verbally describing, and that she filmed a number of events, she states that the quality of her recordings were not high enough to include in the thesis (pp. 173-4). I experienced similar technical issues with video as described by Hall (2009) in the above literature discussion but have chosen to include some illustrative video excerpts nonetheless. The above descriptions by Hall might benefit from this form of representation, to show how class, racial and gender issues are expressed through certain stylistic choices of movement to music.

I have so far attempted to highlight some issues brought about by contrasting academic discussions of dance music. Numerous theories of sound and timbre demonstrate the ways in which the study of electronic music (including art music) could benefit from a specialised descriptive vocabulary. Currently, there are as many ways of discussing dance music as there are written academic works on the topic, and the benefit of this range is their contribution to a multifaceted exploration. I intend to bring together the vocabularies and techniques of sociology and musicology to gain a better understanding of both dance music and its context. If the combined study of dance and music in this context becomes a more established scholarly field, a flexible but common set of terms might be developed through which this understanding can be expressed.

I have thus far devoted this chapter to a review of literature and the language employed within these works. However, my thesis is based on a method of research that can best be described as ethnographic, a unique form of investigation based on entering a specific setting, and observing and interpreting events through active participation (LeCompte and Schensul, 1999, pp. 1-2, 10). Therefore, I will now proceed toward a discussion of this ethnographic research by means of a summary and introduction to the ways in which my participants have used musical terms. Most participants listen to dance music by dancing, though some also sit to listen. DJs and producers in particular relate their dancing and listening to the ways that they interact with dance music professionally. It can be posited that there are three distinct ways in which insiders talk about dance music, defined by the three roles or relationships to the music described in the previous chapter: producing, DJing and dancing. These three terminologies overlap

but each has a different way to describe music.⁹ For example, the primary sounds in the lower frequency range, agreed by many DJs, producers and dancers to be important elements of dance music (Fikentscher, 2000, pp. 83, 86-7), are made up of at least two separate sounds. One is unpitched and has a beat-keeping function, and the other contains definite pitches. These two are somewhat analogous to the kick drum and bass guitar in traditional rock band set-ups. As alluded to above, producers almost always refer to these sounds as the kick (drum) and the bass (line). Producers who make music collaboratively (usually in pairs) say that having a common set of terms is necessary for achieving their production goals. Moreover, although sound names might be common among most producers due to the names used in production technology, other elements such as mood are described differently between collaborative groups. For instance, one of my Edinburgh-based interviewees, Phil, complains that it frustrates him when DJs who have no production experience cannot articulate their musical intentions coherently to him as a producer. Some clubbers, on the other hand, refer to both kick drum and bass line collectively as ‘the beat’ or ‘the bass’. As Frith notes, clubbers have no particular need to communicate the difference between the two sounds to each other because dancing, rather than talking, is their main means of expression (2010). Of course, as I will demonstrate throughout my thesis, some clubbers are just as aware of these differentiations as DJs and producers.

In the context of this thesis, I assume multiple roles simultaneously – that of researcher, clubber and DJ with a small amount of experience co-promoting events. As Middleton (1993, p. 180) notes, a ‘scholar-fan’ has the benefit of carrying out a dual path of inquiry into types of popular music phenomena that are unavoidably subjective. James Clifford (2004) highlights this point within his challenge to past practices of anthropology, in which the colonial researcher once claimed to represent, but instead *spoke over* the indigenous voice (p. 386). For Clifford, an ‘indigenous ethnographer’ can offer valuable insights to his own culture, with a different set of methodological problems to the outsider (*ibid.*). I have been listening to dance music for eighteen years, clubbing for ten years, DJing for four years, and involved with organising events for three years. I therefore firstly bring to this research an understanding of the technical aspects of

⁹ These vocabularies are likely to be somewhat localised, such as in the differences between the language of United States-based writers Butler (2006) and Fikentscher (2000), and United Kingdom-based writers Reynolds (2008) and Malbon (1999).

DJing, and having learned the processes involved in the organisation of events, I have insight into commercial aspects of the industry. My classical music background has led me to be particularly fascinated by the aspects of dance music not easily explained through an art music lexicon. At the outset of my research I had a moderate familiarity with the settings I was to research. Since then, my involvement in non-research roles – as a DJ primarily – has increased significantly. This degree of immersion, as Andy Bennett highlights, can be advantageous in its consequence of near unlimited access to information, events and people (2002, p. 463). Yet it can also be problematic, in that my position has evolved from primarily doctoral research ‘dabbling’ in other roles, into being primarily part of this group and secondarily a PhD student. This does not invalidate my research, as my relationship with the ‘scene’ only developed to this point after the completion of my field work. However my depth of immersion is a continuous concern; I have had to try hard to attend to elements of dance music events that would otherwise escape my attention due to my absorption in the act of experiencing music (Abbate, 2004, p. 511; Gadir, 2013). These usually unnoticed aspects of the dance music event supplement the key insights gained through participation and, as Bennett notes, highlight the vital act of reflecting upon this participation (2002, pp. 461-2). Some of the aspects I observe include uses of space, behaviour of clubbers and visible reactions to music.

My research method is influenced by the ethnographic methods of other dance music, such as by Malbon (1999). I am also guided by peripheral but related sociological research, such as a study of ecstasy use by Jerome Beck and Marsha Rosenbaum (1994), who emphasise their avoidance of imposing their personal preconceptions upon participants (pp. 160-1). Like Butler (2006), Garcia (2012), Fikentscher (2000) and Malbon (1999), Beck and Rosenbaum use observation and interviewing as core ethnographic methods (1994, pp. 162-3) but their study differs in that they do not participate in the activities they are studying. Sean Leneghan (2010), unlike Beck and Rosenbaum, uses participant observation in his phenomenology of ecstasy experience, using the drug thirty-five times over the course of his PhD research (Leneghan, 2010, p. 33) providing a further breadth and depth of insight than works that examine the drug use from the outside. Song and Parker (cited in Measham and Moore, 2006, p. 16) assert that researchers can never be only insiders or only outsiders, but occupy a state that is

somewhere in between. My own role shifts between researcher, promoter, DJ and clubber, and occasionally all of the above at one event, an insider-outsider position that Measham and Moore refer to as 'double immersion' (2006, p. 21). The consequence of this is that I have had to come to terms with what it means to research while DJing or dancing. As LeCompte and Schensul note, one of the most important considerations of ethnographic research is to avoid interrupting and thus altering the activities taking place in the studied setting (1999, p. 10). Thus, as Luis Manuel-Garcia emphasises, among the implications of being simultaneously a researcher and a participant is the need to be discreet and respectful of participants' leisure time (2013, pp. 5-7). Measham and Moore also argue that this particular research setting is by its nature personal and that 'objectivity and neutrality in clubland is illusory' (2006, p. 19). Participants have become my friends during the course of research, and I therefore do not view them solely as research subjects (p. 20). An element of management is therefore required in the balance of 'professional identity' and recreational participation (p. 22).

I have participated, observed, analysed, and through this attempted to reach an understanding of the social and musical context within which people dance to, DJ, or produce dance music. Westbrook aptly uses the metaphor of a 'journey' undertaken by the ethnographer, or 'navigator' (2008, p. 104). To adopt Westbrook's term, my journey has involved attendance and participation in club nights, the majority in Edinburgh, along with a small number in Glasgow, London, Berlin, Tel Aviv, Zurich and Sydney. When attending events, I participate either as a clubber, a DJ or a promoter, and attend both to my own experiences and to the behaviour of others sharing the space with me. I draw upon notes taken on a mobile phone when appropriate, but full participation requires free hands, particularly if it involves dancing. On the occasions that these notes are the foreground of my focus, and where my immersion in the intended object of my focus – the event – ceases, I stop note-taking and recommence full participation. Overall, the balance between participation and observation is delicate, exemplified by the challenges of consciously observing others while dancing myself. Thus, I tend to alternate between the two levels of consciousness, observing more 'visually' while having breaks from dancing, and observing my own reactions to music while dancing (Gadir, 2013). My process includes the transcription of ethnographic notes into word documents. Many events involve no note-taking, to promote uninterrupted

participation. On these occasions the writing of my initial notes occurs after events. In some instances, reflections follow the events by days or weeks, particularly in the case of research conducted outside my main site of study. I take inspiration from the approach of Hall (2009), in taking some detailed notes on dance movement to allow me to reflect upon responses to music, in conjunction with two videos taken during field work. In the first of the two videos I attend as a clubber and researcher and in the second, as a DJ and researcher. Participation also includes the attendance of some afterparties. These illuminate the sense of social connectedness and group identification, that is, as I will argue, one of the most significant triggers for dancing.

My role as a DJ also constitutes a significant portion of my ethnographic research. DJ and audience behaviours are central to the question of musical and social triggers for dancing, and I have the advantage of observing both my own process and other DJs'. My own DJing includes purchase of music, practise-mixing at home and subsequently performing at events. In Edinburgh, being a DJ also often entails the role of co-promoting events, an obligation that is assumed across many dance music scenes. One activity that this involves is 'exit flyering' – handing out promotional flyers for future events to clubbers as they exit a club at closing time. Another form of flyering occurs during the day, for example, during the Edinburgh Fringe Festival. I have, for example, dressed in costume and accompanied two participants and interviewees, Zoe and Kane, to hand out flyers in public areas such as footpaths and parks. Distributing flyers can occur in the company of others or individually. Promotion also involves putting up posters in as many legitimate spaces as possible. One of the most common forms of promotion occurs on the social networking site Facebook, of which I had to become a member in order to stay abreast of events and actively promote them to the widest possible audience. The bulk of my involvement with Facebook relates to my joint formation and administration of the Edinburgh University Dance Music Society with another clubber and student.¹⁰ In addition, part of my ethnographic work has included

¹⁰ The Dance Music Society organises events for students to take part in DJing, promoting and attending. The society co-promotes existing club nights in Edinburgh in return for discounts for society members, and provides a forum through which students who enjoy dance music can meet and share experiences. An equipment loaning system for aspiring DJs has more recently been set up, along with promotion of local producers. The society has provided a growing network of clubbers, DJs, producers, event promoters, and club managers with whom I have developed working relationships, and many of whom I have interviewed.

the observation of a small number of production sessions (or parts of production sessions). While I have aimed to be thorough in only a small number of sessions, I also recognise the need to respect the working time and space of others. Thus, I have taken the approach of being a ‘fly on the wall’ – mainly observing and note-taking, and only rarely asking questions. My presence can be said to already constitute a degree of interruption or at least change of their usual working environment. Thus, the producers have tended to explain their actions or converse with me, unprompted. The observation of this process – of producing music for dance floors – has led me to a clearer understanding of how producers conceive of their roles in making people dance.

In addition to participant observation, I explore how participants construct and articulate their experiences of dance events, through thirty-seven interviews conducted between 2010 and 2012 with clubbers, DJs and producers. My interviews focus wholly on the subjective experiences of participants. As I alluded to earlier, some participants fit into more than one of the above categories, as it is very common for DJs to also be experimenting with production, or for producers to have begun their careers as DJs. Additionally, it is unusual for DJs not to have ever been clubbers. Thus, evidently the division of the three categories for the ethnography is not clear cut; DJs who are also producers will inevitably bring observations, judgements and experiences which are based on their unique experiences in both roles. In the case of any participants who feel that they fit into more than one role, interviews have been conducted in the context of the role to which they feel most connected. In these cases, I also note how the second (and in some cases, third) roles influence their responses – the overlaps are almost always brought up by participants themselves. While the aforementioned overlaps are largely unavoidable and all three groups have perspectives in common, I argue that valuable distinctions can be made between the way that these three groups think and talk about dance music, necessitated by their contrasting roles. By highlighting perspectives unique to each role, I hope to contribute to a better understanding of the ways in which musical participation occurs in the dance music setting. I encourage participants to discuss their experiences in an open and unrestricted form, as the ‘danceability’ factors and individual tastes and experiences being examined in this study are less suited to quantitative or statistical forms of analysis.

Given the topic of this research, I draw attention not just to the content of interviewees' responses, but also to my interjections and responses, shown in parentheses and italics. My inclusion of both sides of dialogues with participants exposes the moments when the expected professional nature of my role as researcher is surpassed by my sense of membership of a welcoming and tight-knit community. Thus, in line with Goffman's notion of maintaining 'face' – a good social impression – for both the self and for those with whom we interact (1972, pp. 10-11), the importance I attribute to my newly acquired position within this community is embodied within my unconscious, confirmatory language. All participants and club nights are assigned pseudonyms unless I have received a personal request to the contrary, and I also do not name venues to which I refer. The interviews, importantly, demonstrate the ways in which clubbers, DJs and producers would like to be viewed by others. Their awareness of my academic approach undoubtedly also influences their responses.

In referring to Measham, Aldridge and Parker's study (2001) on page 18, I noted that interviews can be conducted in the setting itself. The spontaneous responses attained from interviewing participants at dance music events might offer rather different insights to responses procured in separate interviews. However in Edinburgh, venues of the scale of those in Measham *et al.* are rare to come by. Additionally, participants are often too intoxicated to reflect upon their experiences in seated conversation and DJs and promoters are often too busy working. I would again return to the points made by LeCompte and Schensul (1999, p. 10) and Garcia (2013, pp. 5-7), that an ethnographer should always be respectful and aware of the impact of her behaviour upon the social setting being observed. Therefore, I have determined that interviewing people in clubs is not practical, an issue that has also been identified in Measham *et al.* (2001, pp. 75-7). All interviews in my study took place either in the home of the interviewees, at my home, in cafes, or in pubs – never in the dance music setting itself. Therefore, responses rely both on the memories or impressions of interviewees of their experiences, and on their ability to recount these memories or impressions verbally. All interviewees have been volunteers, and therefore my success in encouraging their participation has relied first and foremost on my ability to establish a rapport in advance of asking for interviews, and secondly, on the strength of my interview invitations.

In my ethnographic research, I attempt to achieve a balance between distance from and closeness to the research object. This leads me to attend to an inevitable question also addressed by Bennett (2002): in what ways have my subjective experiences impacted on both the fieldwork phase of the ethnography and my interpretations of the data collected? I take certain phenomena for granted due to my comfort and familiarity with the settings and associated practices (Frith, 2010; Gadir, 2013). The features with which I am already familiar include the setup of physical spaces for dance music events, and some aspects of clubbers' behaviour. To these things I tend not to pay any attention unless something stands out to me as unusual or incongruous. For instance, I am used to the lighting style of many nightclubs, and therefore do not generally observe the effects of lights on clubbers and on music perception. However, this does vary and Edinburgh nightclub lighting is brighter than in the clubs I have attended in Glasgow, Berlin, London, Tel Aviv and Zurich. Conversely, there are several features that I am in the habit of noticing when clubbing because of biases that relate to my classical music education. For instance, I always note how accurately DJs are beat matching, attributes of sound, tonality, melodic features and loudness. I also tend to make judgements on track choices, usually based on whether they make me feel like dancing. Furthermore, it has been necessary to alter some of my clubbing routines for the purposes of research. For example, I almost always wear ear plugs, frequently try to stand further from speakers or behind them and I often dance near walls or physical objects in order to avoid the full impact of sound in the centre of the dance floor.¹¹ I am often one of the first people to dance, and I often stop to watch others dancing, although the latter habit developed after research commenced. Other elements of the club night that I routinely note are the numbers of people in the room and how these numbers affect the atmosphere. Since commencing this research, and through my attempts to attend club nights spanning as many dance music genres as possible, the difference in styles of dancing, and consequently the atmosphere between four to the floor dance music (such as house and techno) and breakbeat (such as dubstep and drum 'n' bass) are striking. This reflects the ways in which specific musical features can provoke bodily expression through dance, and on how the social imposition of genre can impact on this expression.

¹¹ I take these precautions due to tinnitus brought on by over-exposure to loud music.

In a thesis that asks what can trigger dance, it is important to acknowledge that my research approach involved occasional use of the drug MDMA. This kind of first-hand experience contributes to knowledge on an inherently subjective topic. It is for this reason that despite the problems of researcher involvement in illegal practices, my chapter on drug use refers to these experiences when they shed light on the questions that I address. The choice involves a rejection of so-called detachment that music-focused analyses can lead to, taking cues from Measham and Moore, who aim for integrity through analytical reflexivity (2006, pp. 18-21). Given that the after-effects of MDMA or ecstasy are more enduring than that of an alcohol-induced hangover, and that balancing a 'night' life with a studying and working life is challenging (Garcia, 2013, p. 8), I have been sparing in my use. Thus, my understanding of the experiences of frequent and heavy users is, in a sense, limited to others' accounts. As Measham and Moore note (2006, pp. 16-17), the effects of being an insider on the researcher, including physical, should always be balanced with choices informed by a desire for academic rigour.

Many researchers clearly feel the need to deemphasise their roles as participants in clubbing generally and more specifically drug use (Measham and Moore, 2006, p. 22) because of the stigma still associated with illegal practices in clubbing. It is also suggested that female researchers feel more cautious about this than male researchers because of 'enduring moral discourses surrounding women's pursuit of pleasure' (Etorre and Pini, cited in Measham and Moore, 2006, p. 22). Andy Bennett (2002) argues that Thornton's work (1995) is an example of this type of avoidance. Thornton does not, according to Bennett, explore the role of ecstasy use in the process of researching, and does not reveal what she learned from the experience (Bennett 2002, p. 458; Measham and Moore, 2006, p. 18). At most, it provides a 'way in' to a crowd that she is not 'native' to (Thornton, 1995, pp. 2-3, 89). Yet, there are also male scholars of dance music who choose not to address how drug use might influence or alter the phenomena they discuss, such as Butler (2006). This is in part because the focus of these authors' research topics is elsewhere. However, its under-emphasis unwittingly also implies that these experiences are not commonplace or critical to the framing of particular issues. Nonetheless, it is surely the case that authors' sense of professional ethics colours their choices on the way in which drug use is considered, if at all.

I have attended closely to interactions between people and music in order to gain an insight into a range of possible triggers for dancing, and analyse the importance of philosophies of the dance floor, rather than using my ethnographic data to approach discussions of dance music through a pre-decided theoretical framework. Through this, I aim to draw attention to some hitherto unexplored angles which prioritise an understanding of dancing triggers. Ethnographic research has allowed room for me to illuminate aspects of dance music settings through my own voice, in addition to my presentation and inevitable mediation of others' voices. The depth and breadth of issues that are revealed by ethnographic methods are made possible by the flexibility of the approach, and by the necessity of accepting the specificity of the research. The likelihood that definitive conclusions can be drawn from such a flexible methodology is low, and the consequently unpredictable and slightly anarchic direction that research has taken appropriately reflects the unruliness of the research setting.

As Tara Brabazon (2000-2012) argues, a PhD research project, like any other, is inevitably a process of selection and rejection. I will therefore now provide the rationale for and discussion of my choices of research setting and consequent musical style. Edinburgh is the city in which my university is situated. I have close physical access to all clubs are permitted to in the city centre, and judging by the literature I have read on other parts of the UK (see, for example Bennett, 2000; Brewster and Broughton, 1999; Malbon, 1999; Push and Silcott, 2000; Reynolds, 2008; Thornton, 1995), Edinburgh as a clubbing city shares a number of attributes with its larger counterparts. There are, however, certain features that set it apart from the others. For example, the Old Town, the area in which all of my Edinburgh club research was based, is filled with heritage-listed architecture, with spaces which have been occupied, abandoned, and reoccupied repeatedly for centuries. Edinburgh, like some other UK cities, has strict council rules governing its nightlife, including a 1:00 a.m. curfew for licensed venues classified as pubs and 3:00 a.m. for those licensed as clubs. However during Hogmanay, the Scottish New Year's Eve celebrations, and the Edinburgh Fringe Festival in August, the population of the city temporarily and suddenly increases, and clubs remain open for an extra two hours.

The City of Edinburgh Council is also considered by participants of dance music scenes to be overly restrictive and conservative. According to the Antisocial Behaviour etc. (Scotland) Act 2004, Council reserves the right to seize sound equipment in the presence of police if music is not turned down within ten minutes of notification of a single noise complaint (Kerr, 2012). Alternately, Council staff can send police to seize the equipment during hours that council staff are unavailable (*ibid.*). On one occasion, I was DJing at a private house party hosted by two of my participants, Victor and Gabi, when police and council staff arrived, instructing us to stop the music immediately and go home, or else the hosts would receive a 100 pound fine. This situation was confronting enough to agitate participants, and frighten Victor and Gabi into not holding parties at their home for approximately three and a half months after the incident. Edinburgh's niche dance music scenes, unlike some in my home city of Sydney, do not tend to appropriate unoccupied spaces to hold events. This can be partly attributed to the relative ease and affordability for use of a small range of legitimate venues for events, and the desire to avoid inevitable confrontation with Council. Importantly, there is little incentive to go genuinely underground when the legitimate venues that host performances of niche music genres (both bands and DJs) have relatively relaxed door policies. This is very unusual in almost all other cities in which I have been clubbing, where people who do not fit in (in any number of ways, including race, sexuality, fashion, general appearance) are often rejected by nightclub security on arrival.

Edinburgh has an abundance of pubs, bars and clubs. There is a strong culture of drinking, with a small amount of venues featuring live instrumental music, and it is difficult to ascertain whether visitors or locals are the main attendees, and to whom the pub targets these gigs – many of them are marketed as traditionally Scottish. An example of one of the tours officially promoted by both the Edinburgh tourist industry and the University of Edinburgh's student union and halls of residence, is the 'Literary Pub Tour' (see The Edinburgh Literary Pub Tour 2012). This takes tourists on a pub crawl to establishments that are linked historically and mythically to the literary history of Edinburgh. By contrast, clubbing appears to feature in two contrasting cultural domains: first, a commercial circuit of clubs often owned by franchises whose reach includes other UK cities, and often markets itself on the basis of drinks prices. This

scene is based primarily in the New Town, an area that is central for shopping, restaurants, and hotels, but also extends to particular streets in the Old Town that are almost always busy both during and after club opening hours. The second, substantially smaller club scene – based, for the most part, in the Old Town – has similarities to Bennett’s description of Newcastle’s niche club scene (Bennett, 2000, pp. 73-102), in that its participants perceive it as existing in a state of struggle. This club scene operates legitimately, yet sees itself as marginal partly because the music performed is not necessarily broadcast on commercial radio or MTV, and the scene is music-centred rather than alcohol-centred, even though alcohol is a common, major means through which both types of venues financially survive. Thus, some of the followers of this circuit of clubs see themselves as ‘battlers’, to borrow an Australian colloquialism, against a tide of clubs that are focused on profit in contrast to their concern for catering to musical tastes outside of the commercial, popular music world. A sense of community exists that is based in part on musical taste, and in part on this oppositional sentiment. Bennett (2000) emphasises this quasi-activist stance in Newcastle, while in Edinburgh this varies between musical scenes and between participants. For instance, while most participants in both techno and drum ‘n’ bass events in Edinburgh are aware that their musical interests are not shared by a majority of clubbers in Edinburgh, they are not all expressive of concerns for the well-being of the scene, nor of the idea that commercial music events are a threat. Many clubbers enjoy the music and the company of others who share their tastes, and do not see what they are involved with as a cultural battle against oppressive societal conditions. This is most demonstrated by clubbers who are relatively indiscriminate about which clubs or events they are willing to attend. Many of the participants in club nights in the Old Town are equally likely to go to the New Town, as long as their friends are with them. Typically in techno circles, those who are most concerned about the longevity of the scene are the promoters, DJs and core groups of loyal attendees who attend their nights and support them consistently – their friends.

As my main site of study, Edinburgh has proven to be a fascinating and dynamic geographical base for this research. This is in part due to the luck of my research timing – certain types of club closures, takeovers and moves that have occurred during the course of my research have re-ignited sentiments that were dormant among techno

participants until these events began to occur and the issues relating to musical scenes in Edinburgh gathered a greater public profile. In addition, and importantly, Edinburgh is considered by many participants to be the meeker dance music sibling to its western counterpart Glasgow, only one hour away but starkly different. Glasgow is known as a base for internationally acclaimed record labels, DJs and producers, and its techno clubbing scene is perceived by many Edinburgh participants as superior. The sense of being culturally overshadowed by another city has undoubtedly impacted upon the structure and movement of the Edinburgh techno scene in various ways. For instance, Edinburgh techno participants are often hyper-critical of their own practices, and consequently convey humbleness and self-deprecation. Yet simultaneously, they express an awareness of the scene's worth and can speak of it fondly and defensively.

The final issue I will address in relation to ethnographic research is my choice of techno as a focus. Discussions of genre necessarily imply selection and exclusion of certain characteristics of one or more genres according to a hierarchy of 'rules' (Fabbri, 1981, p. 55). I explore techno in various ways throughout this thesis, and compare and contrast it to other genres to highlight the embodiment of genre differences as exemplified by participants. I also emphasise that definitions of dance music genre vary not just over time, but across the world, and thus, that techno is only a term that should be understood as pertaining to the specific scenes that I have researched. There are various reasons why the techno scenes in particular have become the core of my research. Firstly, it is obviously impossible to explore all genre scenes in any helpful depth in one thesis. Secondly and more importantly, Edinburgh's dance music scenes are governed by genre divisions to the point that events are rarely promoted without central references to genre.¹² More importantly, the issues that the techno scene brings to light complicate my notions of danceability and have consequently changed the course of my research from focusing primarily on formal musical features that trigger dance, to balancing this with a closer investigation of social phenomena.

While not immediately obvious in the process of obtaining the data, techno philosophies have gradually revealed themselves to be the underlying motivations for

¹² I have learned this through my experiences of co-promotion of events, and note that most events I attend clearly denote the genre or genres that will be played on any given night on their flyers and posters.

dancing within the context I have researched. This theoretical shift is reflected in my thesis structure, which begins with closer technical analyses of musical concepts and progresses, to discussions on broader social issues, occasionally returning to technical detail for illustration, as discussed above. While my study provides a narrow, geographically- and temporally-specific view of dance music settings, I contextualise it through comparable scenes in other cities and countries. These philosophies feature in scenes across Western Europe, the United States and in countries that culturally identify with Europe and the United States, such as Australia and Israel. In a geographically fragmented scene such as techno, these ideas are transferred from location to location, assume relevant forms in their local contexts and are adopted as part of local language.

One alternative means to exploring the central object of this research – dance music – is to use musical analysis. I conduct analysis particularly of the musical features brought up by participants. This analysis, informed in part by the literature described above (Butler, 2006; Clarke, 2005; Hawkins, 2003) takes place primarily with the assistance of audio examples. As Carolyn Abbate notes, the meaning of music can be lost through purely written and graphical representations:

While musicology's business involves reflecting upon musical works, describing their configurations either in technical terms or as signs, this is, I decided, almost impossible and generally uninteresting as long as real music is present—while one is caught up in its temporal wake and its physical demands or effects. (Abbate, 2004, p. 511)

Dance can be understood as sound interpreted by the body. The progress and composition of musical sound and the movement of the body are both dominated by a sense of the temporal. While it is almost impossible to determine which if any triggers for dancing are innate, it is not unreasonable to suggest that overall, the phenomenon of dancing is a natural human response to music. To transcribe music into a fixed score is to express particular musical attributes and not others, such as the turbulence and propulsion of sound, and the effects of these physical phenomena on the body. A requirement for making musicological observations while performing music is keeping a 'metaphysical distance' from the experience itself (Abbate, 2004, pp. 510-11). This suggests that musicologists' reliance on this kind of analysis to determine the meaning or value of music is problematic (*ibid.*). The moving body itself is a written score come

to life; yet unlike ink on a page, it is fleeting – not precisely repeatable. The dancing body is also the least interrupted form of musical transcription that is possible, from sound to human, with no pen and paper to mediate the process. The living experience of music is a ‘material, present event’ and thus its examination requires ‘going back for a moment to a certain fork in the road and seeing what was abandoned there’ (Abbate, 2004, p. 506). Yet, there can be sound reasons for our desire to capture these moments and imprint them, including the opportunity for reflection that surpasses the temporal limits of the event. On one hand, dance music is a form generally treated as entertainment rather than as art (Cook, cited in Brewster and Broughton, 1999). Thus, as Christopher Hogwood (2010) suggests, the undertaking of musical analysis could seem an exercise irrelevant to participants and lofty in its aims:

...reductive forms of musical analysis... [are] of no help at all to performers or listeners. It is like presenting you with a printout of a friend’s DNA sequence, from which you don’t recognize him at all, whereas the expression of that sequence as dark hair, brown eyes and a crooked nose produces instant recognition. You need only to resort to DNA analysis when you don’t have the whole person. (Hogwood, 2010, p. 173)

On the other hand, I also propose a rationale for pursuing a small amount of written musical analysis. There is currently no analytical vocabulary for dance music other than the combined techniques for analysis of classical and popular music. Its relative absence in the literature can be partly attributed to the philosophical and technical challenges associated with the process. One of these challenges is the tension inherent in developing analytical terms for a genre of music which generally (though not always) fits into an anti-intellectual culture, and was largely developed by ‘non-musicians’, in the sense of having no formal traditional musical training. However, numerous critical analyses of social, cultural and musical phenomena have been undertaken regardless of their separation from the intellectual world, including other genres of popular music, so I do not see these as reasons not to engage in an analytical process with dance music. Moreover, as also argued by Butler, undertaking analysis of music that does not neatly fit the current parameters of musicology can lead to an expansion of musicological language, boundaries, and ideas on what constitutes music that is worthy of analysis (2006, pp. 24-5). Dance music’s sole function is for dance, and unlike other music, it is designed specifically for social settings such as the nightclub, the festival, or similar dance gatherings, and music is the reason why most people go clubbing (Malbon, 1999,

pp. 9; 81, 103). Therefore, there are many aspects of dance music that are unique when assessed within the framework of Western musicology. This fact, as the process of research and analysis in this thesis has shown, necessitates broader approaches to musical analysis that are not governed solely by disciplinary habits.

Dance scholarship, such as that of Joanna Hall (2009), discussed above, can provoke a reconsideration of the methodologies of musicology, and the accessibility (or not) of musicological language to non-musicologists. Attendance of some dance studies conferences during the course of my thesis has led me to consider more carefully the value of the prescriptive score and its analysis. It can be said that these tools do things that words alone cannot, and thus that music, unlike dance, has an international, 'official' and thoroughly learned vocabulary at its disposal for composition, performance *and* analysis. While Labanotation and other relatively new forms of dance notation exist, they are highly specialised forms of notation for 'experts' which few choreographers understand, and which are rarely, if ever, used by dancers (Lammin, 2011). Even as recorded music is now an accepted accompaniment to music scholarship, musicology literature still primarily comprises the written word and excerpts or whole musical scores as accompaniments. However increasingly, CDs are provided as an appendix (for example, Butler, 2006), or, links to mp3 files are provided within a digital body of written text. Music journals available online such as *Music Theory Online* make use of this format (for example, Butler, 2001; Garcia, 2005), a variation of which I have adopted for my thesis.

Many of the tools and techniques used in Western art musicology are largely inapplicable to my inquiry. I argue that melody has a significantly reduced role in dance music (and particularly in techno, the genre of my focus), compared with its central position in other popular music and classical music. For some dance music, melody is still a relatively important feature. However, if we take melody to be 'a succession of notes, varying in pitch, which have an organized and recognizable shape' (Kennedy, 2004, p. 469), then most dance music can be characterised by a lack of melody. Tonality is virtually non-existent in the consciousness of the clubbers interviewed in this study, although some producers do consider it to be an important musical feature in their work. As an extension of this point, harmony more generally is present in some dance

music, but is not the highest priority of producers, and is rarely mentioned by interviewees in this study.¹³ By contrast, melody and harmony are often the departure points for classical musicological discussions, and thus many of the methods used to analyse music focus on these elements. In production, instrumentation is limited to electronic instruments such as analogue synthesisers, and in performance, to playback media such as record players, CDs or laptops playing through a speaker system. Thus, the ways of understanding acoustics, timbre, texture and instrumentation are fundamentally different to classical musicology, in which instrumentation is a relatively fixed and unambiguous set of information. The final point about the difficulty of marrying traditional musicological analysis to dance music is equally the case for other genres of popular music, not only dance music. Dance music is not notated, and as a consequence, the sound of the music is the only meaningful form in which the final product can exist. Unlike a visual artwork, score, or piece of literature, dance music has no representative spatial form, but exists entirely for the listener, as a temporal, experiential form.¹⁴

As demonstrated in the above reviews of Hall's written work on dancing (2009) and Reynolds' musical descriptions (2008), the written word alone does not provide a reader with enough information to evoke complete impressions of sound or movement. Therefore, in order to help grasp musical concepts as they are discussed by my participants, as mentioned above, I provide audio excerpts for listening and comparison. In discussing musical genres, these excerpts provide opportunities for the reader to hear precisely what I am describing, rather than only theorising about genre. As Hogwood argues, 'theoretical cooking is as unthinkable as theoretical football or motor racing – the performance is what decides it' (2010, p. 167). All musical analysis in this thesis has been undertaken through close, repeated listenings to tracks. Only one transcribed score is used for illustration of musical elements such as melody, register and some aspects of rhythm. This score is not, however, helpful for attempting to reach an understanding of

¹³ In interviews, a few producers mention their use of chords in dance music production, but neither clubbers nor DJs bring up harmony or tonality.

¹⁴ Production software, online dance music retailers and music-sharing spaces such as Beatport and Soundcloud use visual representations of their own, commonly in the form of the sound wave, which shows time on an *x* axis and amplitude on a *y* axis. However these visual representations only tell the viewer limited information about the sound of a track. It is not clear to the lay viewer whether this information conveys how loud a section of a track is relative to another section, how long it is, where the breakdowns may be demonstrated by a sudden drop in amplitude, or a combination of these parameters.

the whole sound (aesthetic), individual and groups of sounds (timbres). Thus, the audio excerpts are relied upon more heavily throughout discussions of other musical features.

The works of Butler, Clarke and Hawkins, discussed above, have all included either well-known tracks, tracks by well-known producers, or well-known tracks by well-known producers. Garcia (2005), reviewed later, is the only author to analyse music that is particular to a smaller scene and is genre-specific. The bulk of musical examples that I analyse and discuss also fits into this category. However I also include select musical references from the 1980s, 1990s and early 2000s. My aim in including this extended range of repertoire is to provide an aural, historical contextualisation of the development of dance music as a combined musical style and an associated set of practices in the United States and Britain, although as mentioned in Chapter 1, a significant proportion of the contemporary music I discuss is produced outside these countries, or by producers who are from neither of these countries. Very rarely, I refer to concepts such as tonality or modality (major, minor or modes) to help to portray the mood of a track, and this is of course only helpful to those for whom the terms major, minor, phrygian, etcetera, contribute to a possible interpretation of mood.

Although I have not undertaken extensive, detailed musicological analysis such as that of Butler (2006), utilising some elements of the pre-existing, highly-developed analytical lexicon of musicology can complement other methods of analysis and exploration, if only for its ability to succinctly present a great deal of complex information about a piece of music. Familiar representations such as melodic transcription, labels of a particular tonality or modality, or a time signature can be a helpful starting point for depiction of dance music to scholars of classical music. Hall's (2009) meticulous descriptions of dance movement have also highlighted both the benefits and limitations of this depth of analysis for a form that is not produced within the parameters that music theory is accustomed to addressing. I wish to highlight the importance of being sparing and selective in use of this type of representation and analysis, as it will inevitably exclude readers who do not possess this background. Audio examples act as the most direct means to analysing the musical object. Naturally, the listening experience is coloured by visceral and immediate reactions that are influenced by taste, but at the very least sound can be accessed and interpreted by everyone who has their hearing,

regardless of their musical education. As Frith argues, some musicological analyses focus on aspects of the music that listeners are not aware of (1996, p. 26). Also following this notion that musicology can be alien to actual musical experience, Middleton (1993, p. 81), stresses that ‘the analysis of music only becomes meaningful when positioned in relation to the social space it is received in’ (see also Frith, 1996, p. 39; Tagg, 1982, p. 40). I would extend this to a holistic notion of musical analysis that incorporates the movement of both sounds and the human body. Thus, in this study, the musical elements that I observe or that are perceived by participants to impact dancing are the specific focus of analysis.

This chapter has offered an outline and rationale for the methods of my exploration of dancing triggers. It began with an overview of literature that features throughout my thesis, followed by an enquiry into the vocabulary of dance music in this literature. I continued the theme of terminology with my examination of dance music participants’ use of language. This discussion led to a full account of my ethnographic approach, in which I outlined some problems and issues of ethnography, provided details of my participant observation and interviews and rationalised the parameters of the ethnographic research. Finally, I considered the merits and disadvantages of different forms of musical analysis with reference to musicology literature, and explained my goals for its use in my thesis.

Part II: Dancing Triggers

I will now draw upon the results of my ethnographic research to introduce the primary elements that are fundamental for triggering dance, focusing on reactive, bodily responses to music.¹⁵ I use the term ‘trigger’ to evoke the sense of being compelled to dance by an inexplicable force.¹⁶ However, as Tia DeNora argues, this notion of a ‘force’ is somewhat illusory if understood in isolation from the bodies that receive and interpret it:

Music... is not a ‘force’ like gravity or wave power. It is rather a potential ‘source’ of bodily powers, a resource for the generation of bodily agency. Music is, or rather can serve as, a constitutive property of bodily being. (DeNora, 2000, p.99)

Thus, I do not frame the triggers discussed in Part II as causes, but rather as elements that might contribute to the urge to move. The triggers that I address can generally be divided into two categories, musical and social, although some fit into both. Rather than an overarching statement about what makes people dance in every genre, culture, place and time, my study is case specific – referring to contemporary dance music scenes that are primarily in Edinburgh. Chapter 3 incorporates three different but related musical elements: low frequencies, repetition and contrast. In Chapter 4, I deal with the experience of sound on the club dance floor. This chapter incorporates research from fields such as electroacoustic composition and musicology to address the phenomenology of electronic sound. Chapter 5 discusses two triggers – the evocative nature of melody and the humanising nature of vocal lines.

In Chapter 6, I address the social element of genre, in addition to familiarity and nostalgia. In the seventh and final chapter of Part II, I explore the ways that MDMA or ecstasy as the main drug of choice in dance music and clubbing scenes can trigger dancing. I use my observations and the narratives of participants to guide the discussion throughout Part II. In addition, I provide audio excerpts to provide the most direct experience of the sounds to which I refer. In this thesis, the trigger is not merely

¹⁵ Coincidentally, in the field of sound physics, the term ‘fundamental’ refers to the lowest frequency of a sound wave produced by physical vibrations (Sethares, 2005, pp. 17, 19).

¹⁶ See also Malbon, 1999, p. 91 for a similar description by an interviewee.

restricted to the moment just before dancing begins. It encompasses the before, during and after of dancing – the elements that make people start to dance, make continued dancing more pleasurable and continue their impact after dancing ceases.

Chapter 3 – Low Frequencies, Repetition and Contrast

Emphatic, punctuated low frequency percussive sounds and bass lines are particularly audible in relation to other musical attributes in dance music. Bass lines are not merely supportive parts or part of the ‘rhythm’ section, they are central to the listening and dancing experience. For a significant portion of each track, the bass line is often the only part consisting of definite pitches. In this sense, it stands out from the other parts as a focal point. A significant number of clubbers interviewed mentioned that the quality of bass lines impacted on whether they would dance or enjoy the music. Similarly, DJs and producers expressed the importance of the bass lines in determining the success of a track. One clubber, Fleur, said, ‘the louder it gets, the harder the bass, the more you jump.’ One DJ, Cam, stated that clubbers seek the ‘growl’ of a bass line. Below are the responses of a DJ and a producer, Mick and Sam respectively, to the question of what they believe makes people dance:

Mick: Well, what makes *me* dance is, like, in a club if it’s got really good sub-bass, or just that driving bass that really pumps.

Sam: ... a very heavy bass line, something chunky.

Dance music is generally played at extremely high volumes at dance music events. DJs can sometimes be observed increasing the volume on their mixers as their sets progress, and sound engineers can contribute to increasing the volume of the music over the course of an event. The extremities of volume and register allow low frequencies to dominate the auditory and sensory experience of dance music through their immediate, physically felt nature. These low frequencies in the form of kick drums and bass lines do not always command the conscious attention of clubbers, but are nonetheless the basic elements that make this form of music danceable. The low frequencies as heard through professional speakers at these volumes vibrate the surfaces of listeners’ skin and their environment, and can be set at very low levels. This occurs in the genres of drum ‘n’ bass and dubstep, in which ‘sub-bass’ is a prominent feature. A short drum ‘n’ bass excerpt has been used to illustrate this, below. Listen particularly for the lowest pitched sound that is audible after the vocal introduction and the single ‘snare’ upbeat:

Audio 2. DJ Fresh - 'Babylon Rising'¹⁷

Sounds are only meaningful with reference to their position in the whole mix among other sounds. Berlin-based, Australian producer Rick Bull, known by his stage name Deepchild, discusses this relationship between the constituent danceable parts, highlighting the importance of the low frequency parts:

Rick: [...] a regular kick drum and a bass line... sort of anchor your knees and your gut, a snare... sort of hits you in the chest and kind of off-sets, er... the kick drum. And then a lot of stuff up the top, you know, hats to create a sense of movement, which come at a sort of head level [...] it's all about the bass line, the kick and the snare.

Another producer, Warren, similarly discusses the relationship of different parts of the texture to different parts of the body. Low frequency parts, including the bass, correspond with the lower parts of the body and the 'centre of gravity', while higher frequency parts such as hi-hats lead to 'finer movements' including movements of the arms and other parts of the body.

In a range of popular music genres, bass guitar parts are important both harmonically and rhythmically. In dance music, the role of the bass line is similarly rhythmic, but the extent to which it plays a harmonic role varies. In some dance music, particularly in techno, which is based on percussive sounds and few sounds with definite pitches, there is often little or no harmonic progression (chord changes) in the bass. However, tracks with central melodic parts such as those belonging to house or trance genres provide the most exceptions to this. 'Alone With You' by Deadmau5 (2008) is an example from the progressive house genre, that has more pitch material than tracks classed as techno, and a bass line that underlines a rich vertical texture of pitches. This track, which contains no voice, begins in a manner typical to a dance track, with a heavy kick drum and snare, alternated with a shortened, manipulated percussion sound, following a kick drum semiquaver with a dotted quaver. This establishes a clear sense of meter and tempo:

¹⁷ DJ Fresh (2006) 'Babylon Rising'. 01.10 – 01.40

Audio 3. Deadmau5 - 'Alone With You'¹⁸

Beginning in the most bare-boned way, this introduction functions as a metric anchor for DJs who wish to match the beats to the last section of another track, so that one can be blended into the other. However, in a manner that does not match most dance music that I analyse, the melodic section is introduced very suddenly – only after 16 bars of kick drum and snare. The final two beats of this pattern are accompanied by the sound of chimes which indicate a formal equivalent of a ‘cadence’ point that prepares the listener for musical change. These formal signifiers are a standard technique, as Butler (2006) and Hawkins (2003) have both demonstrated in their respective analyses. However instead of introducing one or two percussive parts or the bass line on its own, a set of arpeggiated pitches are introduced at once. The mid-register tenor pitches add to the initially gentle bass line, and together with a percussive sound on the weak beats of the bar (acting as the snare), create a change in texture and colour:

Audio 4. Deadmau5 - 'Alone With You'¹⁹

The bass line returns in full force after the first breakdown. The chimes are once again used to build-up to this significant point of change in the track:

Audio 5. Deadmau5 - 'Alone With You'²⁰

There is a marked change in mood at this bass line re-entry, as in many dance tracks. This is the point at which a DJ could mix out of a prior track and allow this one to be played in its entirety. The bass line gives the track a textural richness and further grounds the rhythm of the kick drum. Leaving out the bass line until this stage allows for a definitive understanding of when the track should be clearly heard on the dance floor. This can be described, then, as a functional dance floor track – custom made to be mixed with other tracks by a DJ. The bass sound allows the music to be physically

¹⁸ Deadmau5 (2008) ‘Alone With You’. 0.01 – 0.11

¹⁹ Deadmau5 (2008) ‘Alone With You’. 00.22 – 00.52

²⁰ Deadmau5 (2008) ‘Alone With You’. 01.25 – 01.45

felt by the clubber. While the arpeggiated pitches in the higher register provide interest and atmosphere through their varying timbres and dynamics created by effects such as filtering and varied levels of reverberation, it is the bass line here that provides impetus. A bass line remains present in the breakdown in Audio 6. This is a very *legato* (smooth) breakdown that does not inspire jerky dancing but the kind of flowing movement expected of a breakdown. This bass line becomes detached once more when the kick drum returns at approximately 16 seconds into the track:

Audio 6. Deadmau5 - 'Alone With You'²¹

Typically for dance music, the role of the bass is not to create interest through harmonic progression, but rather to create a rhythmic, melodic and timbral foundation for movement in this track. The bass line implies chords and a tonal hierarchy of sorts, yet a sense of harmonic stasis is created in the act of looping of the pitch patterns. I hear the track as floating around the key of E flat natural minor. This may be heard by the reader when comparing the short excerpt of Audio 7 with the E flat minor chord and natural minor scale in Audio 8:

Audio 7. Deadmau5 - 'Alone With You'²²

Audio 8. E Flat Minor Chord and Natural Minor Scale²³

Additionally, the high register prominent melodic part can be described as a pentatonic riff based around D flat, E flat, G flat, A flat and B flat (or the enharmonic version, if preferred). Thus, although an E flat minor chord can be made to aurally 'fit' this track, it might be more helpful to conceive of it as a bass line that contains a pattern of repeated pitches in a pentatonic mode (though it is worth noting that at the start of Audio 5 a clear B natural sounds at the end of a riff in the tenor-range). The bass line can be heard slightly differently according to which sounds are the focus in the lower register. For instance, in Audio 4, this is most audible as E flat, G flat, A flat and E flat. In Audio 6,

²¹ Deadmau5 (2008) 'Alone With You'. 03.45 – 04.15

²² Deadmau5 (2008) 'Alone With You'. 02.00 – 02.10

²³ E Flat Minor Chord and Natural Minor Scale (2012) (performed by author).

however (the big breakdown), the pattern can be heard as possibly finishing on a D flat. It is difficult to tell which pitches belong to which sounds, and whether other sounds are providing distractions from the particular sound a listener is trying to follow. Nonetheless, various short melodic riffs are based around the bass line, and the missing notes of the scale add harmonic ambiguity, leading to a modal interpretation that is mainly based on the ‘black key’ pentatonic scale:

Audio 9. Deadmau5 - 'Alone With You'²⁴

In contrast to this, bass lines in dance music can also play a role that is similar to that of bass lines in rock and pop songs. These exceptions are worth examining as they tend, understandably, to be among the most popular tracks.²⁵ In ATB’s ‘Hold You’ (2001), for example, the bass and vocal lines enter before any kick drum or percussive parts. This is not unlike the structure of most pop music, in that harmonic and melodic structures are often outlined from the outset. Its introduction is also very different to music that is specifically for the dance floor rather than the radio. Like Deadmau5’s ‘Alone With You’, tracks made for the dance floor are more likely to start with beat-keeping percussive parts in order to orient the DJ to the appropriate meter. These parts are often comprised of kick drums, snares and hi-hats. In this example, however, snares and hi-hats are introduced after the vocal melody and bass line, with the kick drum entering last:

Audio 10. ATB - 'Hold You (Airplay Mix)'²⁶

There is a four note bass riff in the above excerpt – F, G, A, E – which repeats for the duration of the track. This, together with the vocal line, a chord progression, a verse-chorus structure in the vocal melodic part, and a song length of approximately three and a half minutes, constitutes the pop music element in this dance track. Deadmau5’s ‘Alone With You’ would not achieve this status due to its endlessly repeating riffs, its

²⁴ Deadmau5 (2008) ‘Alone With You’. 02.45 – 03.15

²⁵ Brewster and Broughton (1999, p. 370) state that trance has become the most popular dance music genre in the world. I would suggest that this relates in part to the following of recognisable, traditional melodic and harmonic structures in many tracks.

²⁶ ATB (2001) ‘Hold You (Airplay Mix)’. 00.00 – 00.45

lack of vocals, its form (main-breakdown rather than verse-chorus), and its noticeable textures and timbres rather than on harmonic development. The bass line of 'Hold You' outlines its harmonic structure (F, G, Am, Em) and underscores its melodic parts:

Audio 11. ATB - 'Hold You (Airplay Mix)'²⁷

The vocal line uses primarily step-wise movement in the verse, remaining within the range from A3 to E4 (the first five notes of the A minor scale):

Audio 12. ATB - 'Hold You (Airplay Mix)'²⁸

In the chorus, the vocal line starts by leaping a fourth from E4 to A4 (an octave higher than the first A), reaching C5 at its peak with melisma over the word 'hold':

Audio 13. ATB - 'Hold You (Airplay Mix)'²⁹

Although as I have argued, some of the musical features described above can be interpreted as formal, harmonic melodic and textural elements of a pop song, this track can be classed as dance music because it features a dominant bass line and metronomic kick drum, its tempo is what I would consider to be fast (134 beats per minute), its low frequencies are removed and reintroduced to create what are known as breakdowns and bass drops, it makes use of filtering techniques and the voice is the only non-electronic sound source. What is more, as in standard dance music practice, the named author of the track is ATB, the male producer, rather than the female vocalist, whose name only features in fine print on the back of CD release as one of the last 'credits', before the photo and cover credits. In other genres of vocal popular music these roles are often swapped, with the singer's name headlining the song title, and the songwriter in the periphery.

²⁷ ATB (2001) 'Hold You (Airplay Mix)'. 01.26 – 01.56

²⁸ ATB (2001) 'Hold You (Airplay Mix)'. 00.30 – 00.45

²⁹ ATB (2001) 'Hold You (Airplay Mix)'. 02.23 – 02.53

There is a logic as to why the intuitive phrase ‘feel the beat’ contains the word ‘feel’ rather than ‘hear’ (Phillips-Silver and Trainor, 2005). The word ‘feel’ holds within it the idea of activating the sense of touch through movement of the body. Simultaneously, it also contains the idea of feeling as an emotion. This is not merely a linguistic coincidence; the cognitive processes which control movement directly affect emotions (Trevarthen, 1999, p. 6; Snelson-Figueroa, 2004, pp. 16-17). Colwyn Trevarthen refers to musicality as ‘impulses felt in the body’ (1999, p. 3), wherein musicality is equated with an intuitive understanding of rhythm. What is more, the whole body feels the impact of the lowest frequency sounds most directly, and this is familiar knowledge for clubbers who can feel bass lines vibrating their bodies (Gilbert and Pearson, 1999, pp. 44, 46). As Reynolds (2008) puts it, ‘[w]hat drove the Ecstasy-sensitized crowds wild, though, was the bowel-tremor undertow of low-end frequencies, impacting you like an iceberg (90 per cent of the devastation takes place below the threshold of perception)’ (Reynolds, 2008, p. 100).³⁰ In my ethnographic work, I have often seen clubbers standing near speakers to heighten this effect.

The repetitive beat in dance music is metronomic beyond human capability. Live drummers and bassists would have difficulty playing precisely the same rhythm for the length of a DJ set without a break, although live techno bands do exist. Even the most talented performers who have the endurance for this task would not be able to play with the tempo, pitch, rhythmic and dynamic precision of machines.³¹ The aesthetic of dance music is defined in this sense by the non-human capabilities of technology. Repetition, not only of the low frequency kick drums and bass lines described above, but also of the whole mix, is a core component of the dance music aesthetic. Moreover, when added to factors such as percussiveness, loudness and tempo, repetition is a primary trigger for the urge to move (Fikentscher, 2000, pp. 85-6; Radocy and Boyle, 2003, p. 42). In the

³⁰ While Reynolds has not told us how low the ‘sub-bass’ notes are, the term suggests that they are lower than the lowest notes of acoustic instruments such as piano, double bass and tuba. Some sub-bass may be too physically low to be perceptible as pitches to most human ears and are felt as vibrations rather than heard.

³¹ As an instrumental performer, I used to consider this to be an argument in favour of live instrumental music, and against machine-produced music – the human versus the inhuman. This argument is also probably familiar to anyone who has engaged in conversations (or arguments) that involve both dance music and rock music fans.

Criminal Justice and Public Order Act 1994, responsible for the criminalisation of raves in England, the target music is defined as ‘include[ing] sounds wholly or predominantly characterised by the emission of a succession of repetitive beats’ (*Criminal Justice and Public Order Act 1994*, p. 1). This policy is perceptive in that it recognises the importance of repetition as an identifying feature of almost all of the music being played at the targeted events. It also implies that one of the most danceable elements of dance music is in itself objectionable.³²

Repetition in general is not unique to dance music. It is also a significant and widely appealing feature of most Western music – not least from the Classical era. Its typical uses involve, for instance, the statement of a theme, a precise repetition and a slight alteration. This treatment allows the listener to recall the theme well enough to anticipate its return, or alternatively, to anticipate a change. At this point it could be helpful to briefly turn to the most well-known opening themes in the classical repertoire for illustration:

Audio 14. Beethoven - 'Allegro con brio'³³

In the below excerpt of Beethoven’s Symphony No. 5, the theme is first stated:

Audio 15. Beethoven - 'Allegro con brio'³⁴

This theme is then varied with melodic variation based on a sequence, while the rhythm remains the same:

Audio 16. Beethoven - 'Allegro con brio'³⁵

³²See Garcia (2005) for a useful exploration of the ways in which repetition has historically been interpreted as negative, and indicative of deficiency across disciplines (par. 2.1-2.21).

³³ Beethoven, L. V. (1984) ‘Allegro con brio, Symphonie No. 5 op. 67’. 00.00 – 00.24

³⁴ Beethoven, L. V. (1984) ‘Allegro con brio, Symphonie No. 5 op. 67’. 00.02 – 00.04

³⁵ Beethoven, L. V. (1984) ‘Allegro con brio, Symphonie No. 5 op. 67’. 00.04 – 00.07

At this point, there is a precise melodic and rhythmic reinstatement of the first four notes, followed by an extension into a longer passage with rhythmic repetition and melodic variation:

Audio 17. Beethoven - 'Allegro con brio'³⁶

There is then rhythmic repetition with the original theme reinstated in the subdominant position:

Audio 18. Beethoven - 'Allegro con brio'³⁷

The various forms of repetition of the first theme throughout the course of the movement can be said to contribute to memorability or 'catchiness'. This theme can be compared with the 'hook' in dance music, in a jazz piece, or in a rock song. I would suggest that an important difference between the latter musical forms and most classical pieces is that it is more commonplace to feature exact repetition with little or no variation in popular music. In classical music, development of melodic themes is more prevalent than precise repetition.

Dance music uses repetition in one sense as a tension-building tool.³⁸ Through observations of dance music settings, it can be said that this tension is often experienced in the form of the periodic removal of the beat, known as the breakdown, creating a demand for its return. This tension is often resolved or alleviated with the return of the beat – I address this in the final section of this chapter. According to Trevarthen, human musicality manifests in its most basic sense through our everyday movements, in the form of a 'dynamic, repetitive impulse' (1999, p. 4). Eugene Montague formulates the same idea from another direction – dancing is fundamentally based on movement to repetition in music (2001, pp. 88-9). If this is the case, then dance music is a tailor-made musical form for provoking movement to music. There is a crucial element of anticipation and preparation involved in the act of moving to music (Montague, 2001, p.

³⁶ Beethoven, L. V. (1984) 'Allegro con brio, Symphonie No. 5 op. 67'. 00.08 – 00.20

³⁷ Beethoven, L. V. (1984) 'Allegro con brio, Symphonie No. 5 op. 67'. 00.20 – 00.24

³⁸ Fikentscher (2000) argues that this pertains not only to the physiological effects of the music, but also to the social interactions between clubbers and the DJ (p. 64).

40). The dancer hears not only a series of sounds but also the potential for movement in these sounds (p. 54), and the sooner the pattern is discernible, the sooner the movement can establish itself clearly in relation to the music (p. 35). It is this same repeatability, defining musical coherence as opposed to random sound, which provides this potential for movement.³⁹ As Montague argues, repetition converts what could have otherwise been incoherent sequences of pitches into audible structure, translating to expectancy that lends itself to regular movement (2001, p. 40). In the early twentieth century, Arnold Schoenberg attempted to eradicate the vocabulary of familiar patterns and repetition from art music (Morgan, 1991, p. 65). It can be said that this goal could only ever be successful for purely ‘thinking’ music, as there was little offered for bodily movements to ‘hook’ onto. The promotion of an elimination of pitch organisation hierarchies (such as tonal scales) and of other musical elements suggests that dancing was the last thing on the minds of Serialist composers – it is almost impossible to effectively anticipate musical events in these pieces for the purposes of moving to them.

By contrast, repetition is used ‘unapologetically’ in dance music, as Garcia highlights (2005, par. 3.1). Rather than being a tool through which to reach an object of fulfilment, repetition results in pleasure through the experience of musical and temporal process as an end in itself (par. 6.1). Yet Garcia further argues that the source of this pleasure in repetition comes from the way in which listeners can ‘plot pathways’ (2005, par. 5.2). Despite Garcia’s earlier stated goal of showing how the process of repetition can lead to feelings of pleasure (par. 3.4), this notion seems to suggest that repetition leads to pleasure through difference. Garcia alludes to this notion himself in the phrase ‘the seemingly paradoxical effect of an ever-changing same’ (par. 3.9) in the idea that music changes gradually over time as looping layers are added throughout a track. This argument does not promote the idea that pleasure can be gained from repetition itself but instead from the subtle changes that repetition can draw our attention to as listeners. Instead, I would argue that it is the *sameness* we experience within repetitive forms which is the cause of movement-triggering pleasure and sometimes even trance-

³⁹ In the 1956 film *Funny Face* (2001), Audrey Hepburn’s character dances to ultra-modernist music (before it becomes more traditionally ‘jazz’ in its style and harmony). This music could be considered extremely difficult to coordinate movements with, as it is rhythmically very erratic, and the instrumentation is highly varied. However, outside the fictional world of the film, this is a choreographed and rehearsed dance to this specific piece of music. It is unlikely that anyone would find this easy to dance to on a first hearing.

like states. The pleasure from the embodiment of repetitive elements is further heightened when shared with others on a dance floor.

In my above discussion of low frequencies and repetition, I have referred a number of times to the part of the track known as the breakdown. A breakdown occurs when one or more elements of the mix are eliminated to reduce the texture and provide a break from the otherwise relentless musical elements. For some participants this also translates to a break in dancing. The breakdown leads to an anticipation of the return of the kick drum and the bass line, and some clubbers even continue dancing to these absent elements during breakdowns, as they anticipate their return. The breakdown involves the removal of the bass line or kick drum and its return is known as the 'bass drop' or simply the 'drop'. The ways in which respondents frequently refer to bass lines in terms of their removal or return suggests that it is the element of contrast that creates impact as much as the bass line itself. Numerous adjectives are used by participants to describe the timbre or effect of this particular sound at this particular moment, such as one clubber, Rob, who described it as a 'crunchy' bass drop. One DJ, Dom, described the effect of the moment before the bass drops:

Dom: Dance music's tailored to sort of... like you know, when you hit a big reverb, you build up and people are almost squirming it's like that sort of, like, that tension that sort of builds in the room and then it's the release of tension again when you know it kicks back into your bass line...

Another DJ, Cam, discusses the techniques of a performance by international DJ Richie Hawtin as deliberately building up tension.⁴⁰ This technique, he argues, is achieved through multiple, successive bass drops, each of which is louder than the last:

Cam: You think, you think he's dropped [the bass]. Everyone thinks he's dropped. You start going... and then 30 second later he drops and you're like 'holy shit' that... (laughs) you know, the place goes fucking bananas, you know, t-shirts start

⁴⁰ This sentiment was echoed by DJs and clubbers at an afterparty of a Richie Hawtin gig held at a private home.

flying about, sweat everywhere, and everyone's like, you know, it becomes like, it becomes, em... you know, almost like, back to that kind of tribal feel, that you know people just lose control. And that to me is what it's all about.

Various types of breakdowns are used in a number of dance music genres, from gradual breakdowns, to the brief removal of elements before their reintroduction, to 3 minute breakdowns and sudden bass drops. An extreme example worth noting is Tommy Four Seven's 'Surma' (Speedy J Dub Tool) which has no breakdown at all. This is relatively rare, but can occur in the genre of minimal techno which is characterised by an unrelenting kick drum. There are other structural signposts to create musical interest and provide contrast: filtering (for example, at 3 to 7 seconds into this excerpt), reverberation throughout the track, sweep sounds (known as sweeps) that crescendo dramatically and then drop away (such as at 0.30 to 0.44) and sound effects that interrupt the metrical regularity of the track (audible for instance from 1.15 - 1.30):

Audio 19. Tommy Four Seven - 'Surma (Speedy J Dub Tool)'⁴¹

To date, I have not encountered a dance event in which an entire DJ set has no breakdowns, although one event observed in Glasgow's Sub Club came close, with only a small number of brief breakdowns. In Ben Klock's 'Subzero' (Function-Regis aka Sandwell District Remix), a gentler movement between breakdown and bass drop occurs with the removal of the syncopated hi-hat at 6 seconds into the below excerpt, followed by the removal of the bass line and kick drum at approximately 20 seconds. The meter is still clearly denoted through other percussive and melodic parts during this breakdown. At 36 seconds, the breakdown is interrupted by a softly brushing percussive sound on the downbeats and the main hi-hat is reintroduced at 43 seconds before the bass line and kick drum return at 58 seconds. The technique of gently reintroducing - sounds prepares the clubber for the return of the bass and kick in a non-dramatic fashion, while simultaneously bringing back the lightness created by the hi-hat syncopations. Also note the sweep that begins the first time at 13 seconds and the second time at 45 seconds, used as a signal for imminent changes:

⁴¹ Tommy Four Seven (2009) 'Surma (Speedy J Dub Tool)'. 05.20 – 07.00

Audio 20. Ben Klock - 'Subzero (Function Regis aka Sandwell District Remix)'⁴²

In stark contrast to this, Extrawelt's 'Trummerfeld' (Oliver Huntemann Remix) contains a dramatic bass drop with two distinct stages. The track contains a heavily articulated bass line and kick drum, and sharp, syncopated percussive sounds. The breakdown, which begins at 17 seconds into the excerpt below, at first continues a subtle sense of meter through some faint rhythmic percussive sounds. At the same time, the ambient pitched sounds are a standout feature. The percussion in this half of the breakdown is faded out by 36 seconds, leaving only a cloud of pitched sound. The bass and kick drum return in a penultimate drop at 46 seconds, with new melodic material giving a false sense of resolution. At this stage, the texture remains relatively sparse, comprising only a small number of percussion parts, a short mid-high register riff and a prominent bass pattern that stands out against the kick drum through some syncopation. This section is the first of a two-stage exit from the breakdown. The final drop occurs at 1 minute and 46 seconds into the excerpt, when the material used before the first breakdown recurs:

Audio 21. Extrawelt - 'Trummerfeld (Oliver Huntemann Remix)'⁴³

Like 'Trummerfeld', Pig & Dan's 'Terminate' (excerpted below) has a breakdown that is extremely long, but unlike the above track, the breakdown beginning at 13 seconds in the excerpt below loses all sense of the meter originally denoted by the kick drum and bass line. The reverberant pitches stray from the original meter with almost a sense of swinging style, akin to an improvisatory solo in a jazz piece or a cadenza in a classical concerto. The tempo of these pitches has no audible relationship to the tempo of the main section, and there are also no obvious clues like the sweeps in 'Subzero' (Audio 20). Some of the crescendos in this section might trick a listener into anticipating a bass drop. The breakdown ends virtually without warning at 1 minute and 36 seconds. This creates a sense of stasis and unpredictability that differs from the types of breakdowns that maintain a clear sense of meter:

⁴² Ben Klock (2009) 'Subzero (Function-Regis aka Sandwell District Remix)'. 03.30 – 04.45

⁴³ Extrawelt (2009) 'Trummerfeld (Oliver Huntemann Remix)'. 03.20 – 05.20

Audio 22. Pig&Dan - 'Terminate'⁴⁴

The conventions of various genres treat breakdowns differently. Dubstep tracks are often less than half of the length of techno tracks, their breakdowns tend to be standardised and there are shorter intervals between breakdowns. The dynamic and timbral contrasts between breakdowns and bass drops are often more pronounced in this genre. It is quite common to contrast a soft, sparse, melodic and sometimes non-metric breakdown with loud, thickly textured bass drops. This kind of contrast is provided in the track 'Ultraviolet' by 501 (Audio 23). In this example the meter is maintained vaguely from the start of the breakdown at 3 seconds, and more clearly at the 30 second point:

Audio 23. 501 - 'Ultraviolet'⁴⁵

A similar phenomenon can be found in 'Down' by DZ, in which the sense of meter is altered during the breakdown, from 5 seconds into the below excerpt:

Audio 24. DZ - 'Down'⁴⁶

The extremely low frequency sub-bass mentioned earlier contribute to the more pronounced dubstep drops. The contrast of the absence and presence of sub-bass, along with the abrasive timbres of bass lines and mid-register sounds create a sense of aural shock. These timbres more closely resemble the scratchy distortion of electric bass guitars than the mellower tones of techno and house bass lines in my sites of study.

The neurosciences also present interesting research on the effects of musical contrast. Valorie Salimpoor, Mitchel Benovoy, Kevin Larcher, Alain Dagher and Robert Zatorre (2011) use the physiological symptoms understood to be linked with dopamine release to assess whether pleasure derived from music occurs during the 'reward' (the part of the music that the listener 'likes'), or whether it occurs in anticipation of the 'reward' (p. 1). These physiological symptoms include 'chills' (arousal of the autonomic nervous

⁴⁴ Pig&Dan (2009) 'Terminate'. 02.45 – 04.30

⁴⁵ 501 (2010) 'Ultraviolet'. 02.00 – 03.10

⁴⁶ DZ (2010) 'Down'. 02.40 – 03.20

system), increasing heart and breathing rates and a range of others (p. 1). The authors conclude that the anticipation leads to dopamine release to a greater extent than the pleasurable experience of music itself (p. 4). Consequently, as the researchers suggest, the idea of pleasure is more powerful than responses to actual pleasure (pp. 4-5). This partly explains why tension created by breakdowns or long periods of repetition followed by sudden contrasts create intense bodily sensations for clubbers, and why clubbers, such as Dom and Cam (above) remember these particular moments so vividly. Salimpoor *et al.* speculate that the anticipation experienced ‘may arise through one’s familiarity with the rules that underlie musical structure’ (2011, p. 6). I would agree with this point; it is precisely because clubbers expect that they will enjoy the sound of the bass drop after a long breakdown that its anticipation is itself a significant factor in the overwhelming feelings of euphoria they experience. DJs and producers, like classical musicians, ‘frequently take advantage of such phenomena, and manipulate emotional arousal by violating expectations in certain ways or by delaying the predicted outcome’ (Salimpoor *et al.*, 2011, p. 5). Moreover, given that this music is enjoyed in dancing contexts, Trevarthen’s notion that pleasure comes from the anticipation of expressing musicality through dancing and physical movement (1999, p. 7) is also relevant.

In Chapter 3, I described three related but distinct musical elements. The first of these, low frequencies, affect the body more powerfully when played at louder volumes and bind the other musical elements such as melodies, higher-register synthesisers and percussion. The second element, repetition, is one of the key targets in criticisms of dance music. It is also a minimum requirement for moving to music and a source of pleasure in dancing as Montague (2001) and Garcia (2005) respectively highlight. Repetition also adds to the building of anticipation for the third element I have discussed in Chapter 3 – periodic musical contrasts. In the style of dance music I described, contrasts occur in the form of breakdowns consisting of dramatic reductions in texture. These are the most significant structural changes in tracks and DJ sets, and their length, style and intensity vary according to genre. I would consider the three elements described here to be both important for dancing and characteristic of the vast majority of electronically produced dance music.

Chapter 4 – Sound

This chapter explores the phenomenon of sound in the context of dance music, in relation to the ways that perceived qualities of sound can provoke bodily movement. The phenomenology of auditory experience is a crucial point of exploration for understanding how music makes us move. The term ‘sound’ is used by clubbers, DJs and producers to describe any sonic event in dance music. These include sound types (as in, ‘I will add this snare sound to the mix’) or perceived qualities of these sounds (as in, ‘this kick drum is mellow because it has a slow decay’).⁴⁷ In addition, it is used as an all-encompassing term for the ‘aesthetic’ of a track (as in, ‘Surma’ is heavy and laboured) or of a DJ set (as in, ‘Fatboy Slim’s sound was particularly harsh last night’). It can also be used in the place of the sound of a genre (as in, ‘it has a drum ‘n’ bass rhythm with a distinctly hip hop sound’). I use all of these meanings of ‘sound’ throughout Chapter 4.

Dance music rarely focuses on lyrical or programmatic content and is primarily functional – that is, music for dancing. Without a focus on lyrics or explicit extra-musical concepts, an alternative attraction to dance music is through the appeal of the sound. Producers carefully sculpt, design and manipulate sound to create particular effects on the listener, typically to fit within a particular genre. Pre-existing sounds are created for particular genres, designed for production software, and often sold along with this software as a package. Producers, unlike most other participants, can relate what they hear to their understanding of the physical properties of sound. They are not only composers of music, but also often act as sound engineers, using their expertise to fully control and manipulate the musical outcome. I will now demonstrate some of the distinctions between the sound of music from popular genres that involve ‘live’ elements and electronically produced music. The below examples include an acoustic song, its amplified version and its cover version by a dance music producer. The video excerpt below is an acoustic performance of a well-known 1985 song by Bryan Adams, ‘Heaven’. Note that the term ‘acoustic’ still often encompasses some degree of amplification. Although this YouTube video is of the whole song, the reader can simply

⁴⁷ Given that my research focuses on the ways in which clubbers, DJs and producers experience music, I emphasise perceived qualities as distinct from physical qualities. I attribute my understanding of the distinction between the physics and the perception of sound to Setharis (2005, pp. 11-12).

choose a short excerpt to watch and listen to, such as from 12 seconds to 1 minute and 15 seconds (one verse and one chorus):

Video 1. Bryan Adams - 'Heaven' [Acoustic]⁴⁸

Video 2 is also a live performance by Bryan Adams, this time an 'electric' version. Again, the reader can select the same verse and chorus from the whole performance (8 seconds to 1 minute and 10 seconds). Alternatively, the sound of the larger ensemble can be heard from 1 minute and 55 seconds into the clip:

Video 2. Bryan Adams - 'Heaven' [Electric]⁴⁹

While the acoustic guitar has similar sound qualities to other plucked, stringed instruments, the sound of the electric guitar relies not on the physics of the hollow wood for resonance (with some amplification in this and many other cases), but on electrical amplification. The effects added to amplification on the electric guitar create a contrasting timbre, altering the overall sound of the song. It is common for pop and rock artists to perform both acoustic and electric versions of their songs; the contrasting sound character allows for a contrasting mood to be expressed, and is often emphasised with tempo and dynamic changes as well. Straying further still from the original acoustic sound, the below video depicts a cover version of 'Heaven' in a stage performance on Top of the Pops, 2002. This version is produced by DJ Sammy and Yanou, featuring a live synthesiser and the singer Dominique van Hulst, known by her stage name Do. Any section of this clip can be played to gain a sense of the timbral differences between the instrumental and electronic versions:

Video 3. DJ Sammy & Yanou feat. Do - 'Heaven' [Electronic]⁵⁰

Aside from the dramatic tempo difference, the sound is fundamentally different due to the presence of particular electronic sounds and their recognisable qualities (that do not

⁴⁸ Adams, B. (2008) *Bryan Adams – Heaven – Acoustic Live*. Complete (4.45)

⁴⁹ Adams, B. (2008) *Bryan Adams – Heaven – Live at Slane Castle, Ireland*. Complete (4.52)

⁵⁰ Van Hulst, D. (2002) *DJ Sammy & Yanou Ft. Do – Heaven (Live @ TOTP UK 2002)*. Complete (3.10)

resemble the guitar). The melodic synthesiser sounds are comprised of sharply articulated, arpeggiated pitches and chords, the beat is created by digitally produced sounds (no live drum kit) and the bass line is delivered by a sound that is clearly not a bass guitar.⁵¹ The only remaining aural aspect of liveness is conveyed by the sound of the human voice. There are a number of signs that Do is singing this live rather than miming along with a studio recording. These include that she is singing slightly out of tune, that her voice sounds a little bit more distant in the mix than in the recorded version and that there is some audible strain in her voice when the richer texture leads to a dynamic increase in the track.⁵² There are moments in the performance above that suggest that Do is possibly singing along with the recorded version, for example, in every second line of the first chorus (1.11 to 1.38). In these moments, her live voice and her recorded voice, slightly out of tune with each other, are both audible. Additionally, the ends of a number of phrases are sung with ornamentation that is recognisably different to the recorded single, excerpted below in Audio 25:

Audio 25. DJ Sammy & Yanou feat. Do - 'Heaven'⁵³

The tuning has been adjusted in the studio after her voice has been recorded, and there are more defined vocal effects added such as reverberation. Most importantly, the quality of her voice is markedly different – there is less strain, and a clear tone is achieved even in sections where other sounds are quite loud. While the non-vocal sounds are almost identical to those in the Top of the Pops performance, the difference in tone colour between the voice after studio production and the live voice is notable. Every element of this track is probably electronically produced. One exception to this is in the bridge section of the song (0.03) in which the sounds of acoustic guitar are accompanied by synthesised, sustained notes, before launching back into the entirely synthesised mix:

⁵¹ The term 'arpeggio' in dance music does not solely denote a broken chord as in classical musicology. In dance music, arpeggios can also refer to the same pitch or pitches repeated in rapid succession, sometimes at varying dynamics and often with an emphatic rhythmic pattern. These are a standard and recognisable element of the trance genre, and are often pre-programmed as part of particular sound samples. In other words, a producer does not necessarily have to manipulate a single sound and manually program it to repeat.

⁵² 'In the mix' can refer to the placing of particular sounds within the overall context of the track.

⁵³ DJ Sammy and Yanou feat. Do (2002) 'Heaven'. 02.45 – 03.10

Audio 26. DJ Sammy & Yanou feat. Do - 'Heaven'⁵⁴

The difference between a studio recording and a live performance of 'Heaven' is comparable to that of any other pop music. However, I have used the first two performances of the original 'Heaven' to draw attention to a distinction between the perception of individual sounds and overall sound, and to how the former influences the latter. I have here deliberately juxtaposed the popular dance cover version in both the live and recorded forms against the acoustic and live band original versions. This highlights that the fundamental differences between the sound of electronically produced dance music and the sound of live popular music can be partly attributed to the characteristics of individual sounds, and to perceptual differences between what we perceive as live and not-live.

The idea that individual sounds are perceptually separable can be compared with the way a violin and a trumpet playing in unison unambiguously conveys to a listener that there are two different instruments producing this sound. This, however, is complicated in electronically-produced sound. What constitutes one programmed sound can often contain more than one perceivable sound. In other words, some programmed sounds in dance music are made up of more than one distinct quality – one electronic sound can comprise two distinct characteristics and thus be heard by a listener as if they were two separate instruments playing in rhythmic and melodic unison. In the below excerpt, the two sounds that are the focus of this breakdown duplicate melodic and rhythmic material. They are, however, slightly out of sync; the synth pads (the sustained sounds) are heard as an echo of the sounds characterised by a sharper attack and faster decay. These sounds also echo themselves through rapid repetitions at softer volumes. I hear this effect as analogous to the skipping of stones on the surface of water:

Audio 27. Tiësto - 'Bright Morningstar'⁵⁵

⁵⁴ DJ Sammy and Yanou feat. Do (2002) 'Heaven'. 02.16 – 02.36

⁵⁵ Tiësto (2007) 'Bright Morningstar'. 04.50 – 05.20

Most dance music listeners are broadly aware of common labels for individual sound types such as bass lines, beats (kick drums), sound effects, vocals, synthesisers and any sounds that mimic recognisable acoustic instruments or the musical functions of these instruments. Sounds are often discussed by participants in terms of their emotional or bodily impacts. Certain qualities of sounds are more likely to be recognised by producers and DJs than by clubbers, perhaps discussed in terms of techniques in DJing or production, or in terms of their musical affect. As already described, producers use a specialised terminology based on machine and computer-based music production. This language includes detailed descriptions not only of sound types (hi-hats, snares, pads) but also of the ways in which sounds can be manipulated. Below, I present a list of the variety of words and phrases that respondents in this study have used to describe sound (see Tables 1 and 2). Words that simply describe standard sound types (for example, ‘bass line’) are not included in this list. Many words are from more than one interviewee, and others derive from multiple usages within a single interview. The list of individual sound descriptions is headed by the sound types to which interviewees refer.

Table 1. Participant Descriptions of Individual Sounds

DESCRIPTIONS OF SOUNDS	
Bass and/or kick	Hi-hat
Crunchy/crunching	Refreshing
Chunky	Annoying
Heavy	Like opening the window and letting cool air in.
Full	If used more subtly, can add a nice layer.
Noisy	Like the sizzle of molten rock sending a shock to your body clock. Acoustic alchemy.
Squelchy	Crisp, repetitive, sharp. Perfectly married to a good sounding snare.
Like a heartbeat	What makes me jack the most, the hat is the head of the party.
Hitting You	Like the top slice of bread in a sandwich with the kick as the bottom
Staccato	
Activating	
Artificial	
Beefy	
Growl/growly/growling	
Tinny	
Funkier	

Feeling it in more than just the ears	slice and everything else in the middle.
Warping	Freshens a piece of music, just when
Thick	it's getting turgid, it completes the
Raw	groove.
Absorbing	In its absence, rhythmic dancing
Driving	becomes more difficult.
Woompa Woompa Woompa Woompa	
Anchor knees and butt	Sound Effects
Epic	Rustling
Slamming	Lifting
Rolling	Sireny
Wobble	Tick
Snare	Dream noise
Hits you in chest	Hissy
Crisp	Hum
Vocals	Crackle
Soulful	Squeak
	Ambient
	Swooshing
	Tickles
	Acid sound

Table 2. Participant Descriptions of Overall Sound

OVERALL SOUND	
Harsh	Excitable
Distorted	Full power
Subdued	High energy
Clinical	Energetic
Elastic band stretching then releasing	Light and shade
Relaxed	Spacious
Density	Dry
Sparse	Clattery
Abrasive	Deep
Filthy	Lush
Swell	Gutsiness
Lighter	Dirty
Dark	Coming from a physical, deep place

Organic, machine-driven	Ear getting raped
Glued together	Big
Machine that is breathing, coughing etc	Hard Warm
Muffled	Cold
Cleaner	Fluffy
Instrumental	

There is evidently a substantial breadth of metaphors and imagery that participants draw upon to describe sound. Given that we cannot see or hold sound waves in their naturally occurring form, these words illustrate a tendency to turn the invisible into bodily or visual analogies. A valuable comparison to this sample is in the participant responses to Vinoo Alluri and Petri Toiviainen's experiment (2010). For instance, the term 'fullness' is used by their respondents in relation to the movement of lower frequencies, whereas the term 'thin' is used by a number of participants to describe lack of change during low frequency sonic events (p. 235). Participants interestingly associate high frequencies, to which the human ear is most sensitive, with the word 'activity' (Alluri and Toiviainen, 2010, p. 235). This is particularly fascinating in relation to the way in which participants in my study discuss the triggers for dancing, as they consistently refer to low-frequency sounds, on one hand, as setting off bodily movement in the first instance, while increased activity in the upper body occurs with the introduction of higher frequencies. This increased range of motion is especially associated with melody lines, to be discussed in detail in Chapter 5. In addition, all of the perceptual 'dimensions' that people describe are associated with 'fluctuations in the spectrum' (Alluri and Toiviainen, 2010, p. 235). This data can inspire future research into the way in which particular shifts in sound relate to physical responses on dance floors.

Particular sounds often have impacts on a large number of dancers at once. An example confirmed by interviewees is that sound effects such as sweeps are sensory triggers that bring about positive feelings, and increase dancers' energy levels, thereby making them want to dance more. This is particularly reported to be the case by participants who use MDMA. The sweep can be a non-pitched sound effect that crescendos, rises in pitch, decrescendos, or falls in pitch. It is often used during a breakdown, or as a structural

signpost for a change or progression in the music. The example below, 'Umzug' by Jay Shepheard, contains a subtle sweep whose quality changes gradually. The aural impression is akin to a rising of pitch, and it is likely that the apparent thinning out of the sweep is created by filtering techniques. The sweep that begins at the start of Audio 28 precedes and then accompanies a brief and gradual fading out of the kick drum. At 13 seconds into the excerpt, this lowest frequency part then returns with new layers of sound, including a low-register, squelchy riff:

Audio 28. Jay Shepheard - 'Umzug'⁵⁶

The below house track also opens with a sweep effect. While its aural outcome is similar, its means of production are different. This sweep effect (audible from the beginning of Audio 29) involves the application of a dynamic crescendo to a pitched vocal note, instead of the filtering out of particular frequencies. A shorter, additional sweep, applied from approximately 2 seconds into the excerpt, also crescendos and rises rapidly in pitch:

Audio 29. Tube & Berger - 'Straight Ahead (Extended Mix)'⁵⁷

The same effect is employed on a regular basis throughout the track in 'chopped' forms:

Audio 30. Tube & Berger - 'Straight Ahead (Extended Mix)'⁵⁸

In the part of the track excerpted in Audio 31, another brief and subtle, non-pitched, crescendoing sweep is used as a structural marker. In this case, it denotes the break down that is about to occur (0.14):

Audio 31. Tube & Berger - 'Straight Ahead (Extended Mix)'⁵⁹

⁵⁶ Jay Shepheard (2010) 'Umzug'. 03.00 – 03.20

⁵⁷ Tube & Berger (2003) 'Straight Ahead (Extended Mix)'. 00.00 – 00.05

⁵⁸ Tube & Berger (2003) 'Straight Ahead (Extended Mix)'. 01.05 – 01.20

⁵⁹ Tube & Berger (2003) 'Straight Ahead (Extended Mix)'. 01.45 – 02.15

By contrast, the following progressive house track contains multiple, extended sweeps, for example at 4 seconds, leading into the breakdown. Some of these ascend then descend in pitch during the long breakdown such as from 0.57 to 1.08 and from 1.26 to 1.37. When the bass finally drops at 2.20, the sweeps are repeated in rapid succession. The manner in which they double the hi-hat on the offbeat makes them sound like reverse cymbals or hi-hats. Within two bars the pulsating sweeping is rapidly faded out:

Audio 32. Paul Thomas - 'Ultraviolet'⁶⁰

In the following almost wholly percussive techno example of Andy Notaldez's remix of 'Beach Cruise' by Aaron Underwood, the sweeps provide the only sonic contrast in the track, where they mark the entry of new textural layers as the track builds (for instance, at 0.13). These markers often function for the benefit of DJs rather than clubbers, who would not usually hear the first one to two minutes of the track while on the dance floor:

Audio 33. Aaron Underwood - 'Beach Cruise (Andy Notaldez Remix)'⁶¹

The sweeps are also central in the first breakdown, adding interest through musical contrast and through their increase of the overall volume. They also act as the thread for the breakdown. Some of them are softer, underscoring the whole breakdown and providing background 'noise', while others are prominently featured, such as at 0.22:

Audio 34. Aaron Underwood - 'Beach Cruise (Andy Notaldez Remix)'⁶²

Throughout the whole track, the only sounds longer than a single beat in length are the sweeps and the rare sound of a bell. This bell at 0.30 is reverberant and marks the end of the breakdown and return of the main section:

Audio 35. Aaron Underwood - 'Beach Cruise (Andy Notaldez Remix)'⁶³

⁶⁰ Paul Thomas (2011) 'Ultraviolet'. 03.25 – 05.55

⁶¹ Aaron Underwood (2011) 'Beach Cruise (Andy Notaldez Remix)'. 01.00 – 01.55

⁶² Aaron Underwood (2011) 'Beach Cruise (Andy Notaldez Remix)'. 03.15 – 03.50

The prominent sweeps in the track generally descend in pitch and crescendo, then taper off relatively quickly. Some sweeps are also interrupted midway and repeated in quick succession in time with the downbeat (the kick drum), such as throughout most of the following excerpt:

Audio 36. Aaron Underwood - 'Beach Cruise (Andy Notalez Remix)'⁶⁴

The effect of these interrupted sweeps is to add rhythmic emphasis to the offbeat at the micro-level. At high volumes on the dance floor however, the overriding effect is sensory. Other sounds which act in similar ways to the sweep often add to this impact. In the above excerpt, for example, the breakdown is concluded at 0.14 with a sweep in addition to a descending whistling glissando. This initially sounds on the beat before the kick drum returns, and then continues to sound on the kick drum beat as it tapers off. These sounds do not only occur in techno and house but extend to other genres of dance music such as drum 'n' bass. In Audio 37, 'Frozen Still' by Silent Witness has a machine-like sound at 0.09 that functions in a similar way to the sweeps in the tracks above. This sound rapidly descends in pitch toward the sub-bass frequencies with which drum 'n' bass is associated. As it reaches its lowest frequency, it increases in volume dramatically:

Audio 37. Silent Witness - 'Frozen Still'⁶⁵

The sounds that attract people to dancing are partly dictated by the expectations that they have of genres. For example, some clubbers find high levels of noise and 'rougher' soundscapes attractive and consequently enjoy the genres that most often deliver this aesthetic. Conversely, some genres contain sounds with less noise. In these cases the role of noise can often be to muffle rather than intensify the overall sound. However in any genre, sounds with noisier mid- and high-range frequencies will often provoke more energetic, 'whole-body' dancing. Dominant low frequencies such as those in Andy

⁶³ Aaron Underwood (2011) 'Beach Cruise (Andy Notalez Remix)'. 04.15 – 05.05

⁶⁴ Aaron Underwood (2011) 'Beach Cruise (Andy Notalez Remix)'. 03.30 – 03.50

⁶⁵ Silent Witness (2010) 'Frozen Still'. 03.30 – 03.50

Notalez's 'Beach Cruise' remix (excerpts 33-36) mainly provoke movement of feet and heads. By contrast, dancing to the mid- and high-register frequencies of noisy dubstep often also involves movement of the upper body and arms. Dubstep track 'Holy Guacamole' by J. Rabbit is one example of a track that might trigger such movements:

Audio 38. J. Rabbit - 'Holy Guacamole'⁶⁶

It would be unreasonable to claim that one aesthetic is inherently more danceable than another, as danceability is a form of expressing musical taste. However the ways in which different sounds dominate some styles will affect the ways in which people dance, including how much energy they expend. A pertinent example of how this plays out is through one of my experiences of playing the three-fold role of clubber, DJ and promoter at *Soundwaves* in January, 2012. At this event, one room was used for playing techno, while the other was used for contrasting styles such as electro and drum 'n' bass. In the latter room, my levels of physical exertion as a dancer were far greater – I would move around the floor, bend my knees, and use my upper body more. I would also alternate the directions that I was facing – the walls, the floor, or the ceiling – and my eyes would remain open. In the techno room, by contrast, I would maintain a fixed position on the floor, my head movements were contained, and my body faced the DJ, although I often closed my eyes. Broader observations of differences between dancing to different genres can also be made, particularly in relation to energy levels. In techno, for example, dancing is almost always more minimalistic than in other styles. An extreme version of this is visible at Berlin techno events where bodily movement can be difficult to see at times. Noisier genres invoke precisely the opposite: accentuated, visible and high-energy dancing.

In order to highlight the significance and impact of individual sounds on dancing, I will now outline the role of one of the most common sounds. What is referred to as a 'hi-hat', or sometimes just a 'hat', can range from a sample of a drum kit hi-hat, to a synthetic percussive sound whose hi-hat role is defined by its timing in between kick drum beats and its high pitch compared with other percussion sounds. After a number

⁶⁶ J. Rabbit (2010) 'Holy Guacamole'. 01.00 – 01.30

of producers brought up the topic of the hi-hat outside the context of interviews, I specifically asked some participants to tell me their views about this particular sound. These responses are represented in Table 2 together with the terms that participants used for other sounds (unprompted). A large number of respondents make reference to hi-hats that they recognise as belonging to drum machines, most frequently the well-known sampled sound of the Roland TR 909, as well as the Roland TR-626, TR-707, TR-808. The hi-hat in techno functions in much the same way as in a standard drum kit rock or pop beat pattern. Although the hi-hat is only referred to occasionally by producers and DJs during interviews, it is clear that when a hi-hat enters a mix off the beat, the track instantly becomes less robotic and more danceable. This is partly due to syncopation and a resultant sense of buoyancy. Middleton's discussion of Elvis Presley's 'Heartbreak Hotel' provides an example (in a contrasting musical style) of how the placement of emphasis on off-beats can be 'physical, demanding movement, jerking the body into activity' (1990, pp. 18-19). As Dan, a Berlin-based DJ and producer from Edinburgh explained to me, 'it gives you something to dance *off*'. The importance of the hi-hat for dancing is also due to the contrast of its weight in the mix to the kick and bass elements, created by its high frequency, thin timbre, short duration and soft dynamics. Hi-hats, in other words, provide sensory relief from the heaviness of the beat and the bass. Some hi-hats have a longer, more reverberant quality, creating a perceptual link between sound and physical space, such as those that recur throughout 'Objective T' by Back Pack Poets:

Audio 39. Back Pack Poets - 'Objective T'⁶⁷

In other instances, the hi-hat is more sharply articulated, such as in 'Tantra' by Davide Cali and 'Incoming' by Dani Sbert. It is also worth noting that 'Incoming' (Audio 41) has a prominent snare sound that can change the aural effect of the hi-hat:

Audio 40. Davide Cali - 'Tantra'⁶⁸

Audio 41. Dani Sbert - 'Incoming'⁶⁹

⁶⁷ Back Pack Poets (2011) 'Objective T'. 02.30 – 03.00

⁶⁸ Davide Cali (2011) 'Tantra'. 03.30 – 03.45

The hi-hat can also visibly and immediately alter dancing styles. Dancing occurs on the downbeat when bass, kick and snare parts are not complemented by a hi-hat. When a hi-hat enters the mix, rhythm is interpreted differently; some clubbers dance on the hi-hat, off the beat, whereas others maintain a kick drum, downbeat emphasis. Dancing uniformity dissipates, heads begin to move in different directions and clubbers achieve more freedom of movement. There are, of course, always exceptions to this observation. At some events, people will largely move in unison regardless of what interpretative possibilities are offered by the music. At an event at the Sub Club in Glasgow, I was able to count only two or three people in a room of hundreds whose ‘ups’ and ‘downs’ were not in unison with the rest. At the majority of events that I have attended however, a range of dancing styles and ways to interpret rhythm are represented, including varied bodily interpretations of the hi-hat sound.

I will now consider a broader conceptualisation of sound that is brought up in debates between fans of dance music and those who prefer genres based primarily on live instruments. For some, the pleasure gained from electronic sound is not sufficient to determine musical worth, and the value of a track is diminished by a lack of live instrumental performance. However, dance music producers often consciously intersperse a sense of artifice with impressions of realism or liveness. This is achieved through the micro-manipulation of sounds, such as adding reverberation to attribute a sound with a sense of physical space. For listeners, some dance music sounds can be easily compared with tangible objects or actions, illustrated in Table 1. Other sounds, by contrast, are more difficult to place in the imagination. In these, the perceptual link between action and object is established through an understanding that a track has been electronically produced. Many dance music tracks contain both ‘live’ and ‘electronic’ sounds. As the bridge section in DJ Sammy and Yanou’s ‘Heaven’ (Audio 26) exemplifies, the presence of both types of sound can complicate our aural distinctions between electronic production and live instrumental playing. ‘Afrotech’ by Beat Pharmacy is another example of this phenomenon, excerpted in Audio 42, below. It

⁶⁹ Dani Sbert (2011) ‘Incoming’. 04.30 – 04.45

incorporates a shaker or maraca-like sound as part of its repeated percussion pattern, a prominent rhythm guitar-like riff that lasts for the whole excerpt and distorted vocals with effects applied (0.00 – 0.06 and 0.18 – 0.25):

Audio 42. Beat Pharmacy - 'Afrotech'⁷⁰

These instrumental sounds are intermittently contrasted with some sounds that are more clearly electronically produced. Some of these include the rapidly repeated low-frequency sound from 5 seconds into Audio 43, a sudden and brief entry of another at 7 seconds into Audio 44 and another at 14 seconds into Audio 44. All of them differ in timbre, duration and therefore effect:

Audio 43. Beat Pharmacy - 'Afrotech'⁷¹

Audio 44. Beat Pharmacy - 'Afrotech'⁷²

Even the sounds that are more obviously produced electronically can be perceived by listeners as pertaining to physical objects or actions. At 2 seconds into Audio 45, for example, a distinctly electronic sound (repeated four times) enters 'Afrotech' that reminds me of bubbles being blown underwater:

Audio 45. Beat Pharmacy - 'Afrotech'⁷³

Yet these interpretations are often individualised; this sound may remain abstract and affective on a sensory level for another listener, reminding them of nothing physical at all. It is also possible to argue that this distinction between worldly and unworldly sounds is irrelevant to dance floor experience, as music played at extreme volumes can simply cause overwhelming physical responses. It would certainly be hard to justify the effort required to imagine or visualise an external source for every sound in the mix on the dance floor. An electronic effect may be similar to the sound of an aeroplane

⁷⁰ Beat Pharmacy (2005) 'Afrotech'. 01.45 – 02.10

⁷¹ Beat Pharmacy (2005) 'Afrotech'. 03.48 – 04.00

⁷² Beat Pharmacy (2005) 'Afrotech'. 00.00 – 00.25

⁷³ Beat Pharmacy (2005) 'Afrotech'. 01.50 – 02.00

passing overhead, but in the moment of dancing this effect might only be experienced as a surge of sound that crescendos and diminuendos, leading clubbers to bend their knees more deeply.

Current theories on sound perception can help us gain insight into how participants both experience and conceptualise sound. Daniel Barreiro's notion of 'acousmatic' or 'extrinsic' versus 'reduced' or 'intrinsic' listening (2010) is a similar categorisation of perceptual experience to the one I have just made in relation to dance music. Barreiro argues for an awareness of sound source (acousmatic or extrinsic) on one hand and of the characteristics of sound itself (intrinsic or reduced) on the other (Barreiro, 2010, p. 35). Suk-Jun Kim supports this notion in his article 'Imaginal Listening', in which he engages with our subjective experience of sound-images (specifically, 'body' and 'place') and with the ways that we both 'perceive' and 'imagine' electroacoustic music (2010). Specifically, Kim suggests that listening to electronic sounds involves shifting between the 'semiotic' (representations of worldly phenomena) and 'spectromorphological' (intrinsic) modes of perception (pp. 47, 50).⁷⁴ Kim further expands on this through a second, related dichotomy – the imagining of 'Body' versus 'Non-body' and 'Place' versus 'Non-place' (p. 45). Body associations are created when a sound, as Barreiro states, 'suggests the presence of a human agent' (Barreiro, 2010, p. 38) such as someone hitting a drum. Non-body perception occurs when any features that suggest human involvement are absent (Kim, 2010, p. 45). Place is the type of sound that provokes in the listener an association with or a sense of place (Kim, 2010, p. 49). Non-place, like Non-body, is perceived when the features that might otherwise suggest a sense of place are 'distorted, omitted, placed in conflict with others, or made discontinuous' (p. 45). In other words, Non-place and Non-body can be applied to sounds that are more abstract than representational.

In dance music, the most obvious Body sounds are vocal lines, closely followed by sampled acoustic instruments such as Do's vocals and the acoustic guitar in the bridge of 'Heaven'. Non-body sounds could be the synthesised sounds added to the mix at the end of the bridge in 'Heaven'. Place and Non-place are potentially more complex and

⁷⁴ The latter type of listening was famously promoted by *musique concrète* composer Pierre Schaeffer (Barreiro 2010, p.35).

problematic concepts when applied to dance music. In Kim's discussion, these terms refer to the way that a particular kick drum might sound 'placed' when reverberation is added. For example, we imagine the sounds of music in a large hall with hard surfaces to be highly reverberant. Conversely, a synthesised sound that is used for a melody line does not seem 'placed' as it is largely dry, which in sound production terms, means it does not have reverberation applied to it. Reverberation is a common and popular effect in dance music production that adds to the illusion of Place, and it is rare that every sound in a track is completely dry. Indeed, according to Michael Fletcher (2011), it has been found that listeners derive great pleasure from the sound of reverberation.⁷⁵ Fletcher argues that the manipulation of spatial qualities at the sound production stage 'provide[s] the illusion of [the music's] placement in a unique physical space' (*ibid.*). Allan Moore articulates similar phenomenon in his discussion of the 'sound-box' created for listeners by the production and recording of rock (Moore, 1993, pp. 106-10).

Yet Kim's discussion of Place and Non-place relates only to the design of sound itself, outside the context of its performed acoustic environment. This is interesting given that one of the examples that he uses is the recorded form of Alvin Lucier's experiment with sound and space, 'I Am Sitting in a Room' (Kim, 2010, pp. 43-4). As William Moylan notes, the sense of space in a recording is heard together with the characteristics of a spatial setting (whether real or virtual). Kim's description of Place and Non-place could not be applied to the deliberate saturation of a whole space with sound as is the case in clubs. Dance music in this context is supposed to provide participants with the sense that they are being physically enveloped by sound. The music is produced, sound systems are designed, and speakers are placed in a manner that can lead to a hyper-consciousness of the physical environment. For example, panning techniques – movement of sound between left and right stereo speakers – can lead to a reminder of a clubber's spatial consciousness.

On the other hand, the impressions of physical objects and actions in the electronically-produced sounds themselves also add to the enjoyment of dance music. For example, I have observed DJs playing air piano, air drum kit and air percussion when engaging with

⁷⁵ According to Reynolds (2008, p. 29), Arthur Russell, an avant-garde composer and cellist influenced both by the minimalist sounds of Phillip Glass and disco believed that some dance music did not include enough reverberation.

particular sounds in a track that they are dancing to, using it as a point of interaction with each other as well as a way to embody the music. These actions can be classed, according to Rolf Inge Godøy, as ‘sound-tracing actions’. That is, although playing air piano does not produce sound, the mind does not easily separate the action and production of this sound (2010, p. 60). Godøy (2010, p. 59) argues that listeners tend not only to associate sounds with objects, space and their physical selves, but also with the gestures that led to the creation of those sounds. This notion, exemplified by the act of playing pretend instruments, is also known as motor or action imagery (pp. 59-60). Thus, as illustrated in a later work by Godøy (2011, pp. 13, 18), the urge to play imaginary instruments can be attributed to the way that sound is associated with the bodily movement (whether real or imagined) that produces it (see also Barreiro, 2010, p. 40). Thus, as Daniel Smalley (quoted in Barreiro, 2010, p. 37) notes, the notions of intrinsic and extrinsic relate both to listening and to the sensations of physical movement provoked by sounds. Listeners tend to associate sounds with external sources, sometimes even searching for these associations where they are not immediately obvious (Smalley, cited in Barreiro, 2010, p. 38). As Kim argues, we tend to imagine things and places when it is ‘useful’ for us to do so (2010, p. 47). As I suggested above, in the case of dance music, it is not necessarily ‘useful’ to fabricate these associations for the purposes of dancing. Indeed just as Kim proposes that ‘the perceptual confusion [in electroacoustic music] attracts listeners greatly’ (p. 50), this may also be the case for dance music participants. Given that during dancing there is neither the need nor the time to find a link to real world sources, it might be argued that dancing lends itself to an increased appreciation of the intrinsic properties of sound.

A somewhat different perceptual dichotomy proposed by Sethares (2004) is that of ‘analytic’ versus ‘holistic’ listening, a distinction made throughout this chapter between individual sounds and the overall aesthetic that they comprise. Some sounds can be heard either as a chord – more than one note sounding together – or as a single note (p. 27). This perceptual ambiguity is related also to the example provided above of an electronic sound that can be heard as a single or two sounds. In the below excerpt of ‘Off To Battle’ by Model 500, the melodic riff that enters at 0.07 may be considered to be composed of single pitches by listeners or producers, yet they may also be heard as

chords, as if they have been split into their constituent harmonic parts as part of their programming:⁷⁶

Audio 46. Model 500 - 'Off To Battle'⁷⁷

Godøy also addresses the way in which sound is perceived holistically and leads to an overarching impression, determining that 'overall dynamic, pitch-related, and timbre-related envelopes of the sound, and various rhythmical and textural patterns, as well as melodic motives' can be perceived and interpreted in a period of 0.5 to 5 seconds (2011, p. 18). Robert Gjerdingen and David Perrott's (2008) music cognition study of the ways in which genres can be identified from extremely short musical excerpts (pp. 93, 98) supports the notion of a significant relationship between timbre and genre differentiation. Schaeffer (in Godøy, 2010, p. 57) refers to this impression of sound as a 'holistically perceived fragment', while other authors refer to it as a sonic object, or a 'chunk' (Godøy, 2011). The distinction between this kind of holistic sound and a single sound is discussed in a fourth dichotomy by Alluri and Toiviainen (2010) in their comparison of listener perceptions with acoustic properties of what they refer to as polyphonic timbre. Monophonic timbre, they argue, is simply the perceived quality of a single sound, while polyphonic timbre encompasses the many sounds that form the overarching impression of sound in music (2010, pp. 223-25).

When applied to dance music, monophonic and polyphonic perceptual processes are distinct yet related; many individual sounds that possess unique characteristics ultimately define the overall impression of sound. In the experiment undertaken by Alluri and Toiviainen, mentioned earlier, participants used similar descriptive terms for both polyphonic and monophonic timbre (2010, p. 234). The authors' inference that perceptual processes are therefore the same is interesting, as these are abstract notions that participants would not be accustomed to speaking of in everyday conversation. Thus, the limited vocabulary used in the experiment may not necessarily reflect

⁷⁶ According to Sethares, an even deeper level of analytic listening can be trained – listeners can learn to hear the partials or overtones that make up a single sound, rather than hearing it only as a sum of its parts (Sethares, 2004, pp. 25-7).

⁷⁷ Model 500 (2005) 'Off To Battle', *Juan Atkins: 20 Years 1985-2005*. [CD]. Tresor Records. Tresor 216. 00.00 – 00.30

perceptual experiences. Additionally, the authors do not mention the possible bias in results from participants who are all staff or students from their department of music (p. 226). This is an important consideration, as data from other music cognition studies show how practising musicians perceive music differently to non-musicians (Pollick, 2011).

The above studies mainly focus on electroacoustic composition, which, as established earlier, is a fundamentally different form to dance music. However many of the theories in these studies are transferrable, as there are overlaps in uses of technology and in the skills required for production between art and dance electronic music. These studies are helpful as only a small range of dance music literature discusses sound in depth, often relying upon genre for discussions of sound (see Eshun 2000; Reynolds 2008; Rubin 2000; Sharp 2000). This seems appropriate given that one of the ways in which participants understand sound is through genre. The cultural-historical accounts of Brewster and Broughton (2010; 1999), Reynolds (2008) and Sicko (1999) also derive references to sound from the key DJs, producers, fans and promoters featured in their narratives. For example, Detroit techno pioneer Kevin Saunderson is quoted as saying: 'I used to imagine what kind of sound I would like to have coming out of a system like that' (quoted in Reynolds, 2008, p. 12).⁷⁸ However, the explorations of sound are usually limited to and rarely developed beyond genre categories and quotations. Furthermore, the terms for sound used in dance music terms are adopted by authors but not explained to readers, presupposing that readers already have this knowledge and exposure. For instance, Sicko refers to the sound of 'Chicago house' (pp. 27, 74) without providing a sense of what this means, instead merely juxtaposing it against what it is not (Detroit techno). Other works mainly refer to sound in relation to its enhancement by drugs, as in McCall (2001, p. 97), Push and Silcott (2000, p. 48) and Reynolds (2008, pp. xxx-xxxii). Butler (2006; 2001) and Garcia's (2005) musical analyses also do not address timbre in detail, focusing largely on rhythm.

Nonetheless, some dance music literature provides valuable insights into the nature of dance music sounds. Reynolds (2008) explores sound quite frequently throughout his

⁷⁸ The phrase 'like that', refers to the low-frequency emphasis of the Paradise Garage sound system (Reynolds, 2008, p. 12).

book, using his own experiences to evoke the possible ways that a listener could perceive sound. As discussed in Part I, Reynolds tends to use a mix of formal musical terminology and his own metaphorical descriptions. He defines the sound of early house music through the ‘four-to-the-floor kick-drum’, ‘hissing hi-hat patterns, synthetic hand-claps, synth-vamps, churning bass-loops, drum rolls that pushed the track to the next plateau of pre-orgasmic intensity...’ (2008, pp. 17-18). Additionally, he describes the track ‘Voodoo Ray’ by A Guy Called Gerald, a breakaway member of 808 State, as having ‘undulant groove and dense percussive foliage’ (p. 80). I have provided a short excerpt of this track in Audio 47 so that this description can be compared with the sound itself:

Audio 47. A Guy Called Gerald - 'Voodoo Ray'⁷⁹

Similarly, 808 State’s ‘Sunrise’ is described by Reynolds as including ‘tendrils of flute, mist-swirls of spectral sample-texture, and lambent synth-horizons, conjur[ing] up a Polynesian landscape’ (2008, p. 81):

Audio 48. 808 State - 'Sunrise'⁸⁰

Reynolds also tells of how the sounds of particular synthesisers inspired Juan Atkins to DJ and produce electronic music (Reynolds, 2008, p. 3). Also quoted by Sicko (1999), Atkins states that Kraftwerk’s ‘clean and precise’ synthesiser sound was attractive to him (p. 71). Sicko refers to the sound of Cybotron’s (Atkins’ and Davis’) album *Alleys of Your Mind* as ‘unique’ (*ibid.*) and Cybotron’s sound as ‘complicated, murky, and grim’ when compared with Kraftwerk (p. 70). Sicko also compares the timbres of the Kraftwerk and Cybotron singers, by labelling Kraftwerk’s as ‘sharp’ and Cybotron’s as ‘deep, resonant’ (*ibid.*). Although Sicko focuses on the history and development of a genre defined by sound, these are his only notable explorations of sound.

⁷⁹ A Guy Called Gerald (1988) ‘Voodoo Ray’. 01.45 – 02.15

⁸⁰ 808 State (1990) ‘Sunrise’. 02.30 – 03.00

Technologies often receive attention with reference to sound, such as the Roland TB-303 bass line. This is a sound-producing machine that receives attention in the literature as a defining sound of dance music. The 303 is noted by Nick Prior (2010) to produce a unique sound that has contributed to its cult, mythological status. Both the analogue 303 and its digital imitations are recognisable in any track, as the sound includes ‘wiggly nuances and glissandi, curlicues and whorls’ (Reynolds, 2008, p. 25). In order to use the instrument, various sound parameters are manipulated by the user, who programs a bass line manually (Reynolds, 2008, p. 24). According to Reynolds, the first track released with the 303 as its bass line instrument, ‘Acid Tracks’ (1987) is ‘just a drum track and endless variations on that bass sound: somewhere between a faecal squelch and a neurotic whinny, between the bubbling of volcanic mud and the primordial low-end drone of a didgeridoo’ (p. 24). What is more, the machine-produced sounds are ‘so distorted they sound like a dog barking... in some ways, it’s like the wah-wah guitar: instantly recognizable, yet capable of infinite variations and adaptations’ (p. 27). A further association of a particular technology with a particular sound is the Roland TR-808 drum machine. During the 1980s, a band, 808 State, named itself after this instrument (p. 80), due to the way in which its distinct sound dictated the aesthetic of a great number of dance music tracks.

Reynolds also helpfully relates sounds to their narratives and attributes meaning to these sounds through human experiences. The below ‘story’ is an example of this:

[Larry Levan] ... developed a science of total sound in order to create spiritual experiences for his followers... he custom-built the Garage’s sound-system, developing his own speakers and a special low-end intensive sub-woofer known as Larry’s Horn... during his all night DJing stints he would progressively upgrade the cartridges on his three turntables, so that the sensory experience would peak around 5 a.m. And during the week, he would spend hours adjusting the positioning of speakers and making sure the surround sound was physically overwhelming yet crystal clear. Garage veterans testify that the sheer sonic impact of the system seemed to wreak sub-molecular changes in your body. (Reynolds, 2008, pp. 28-9)

This account effectively illustrates the power yet refinement of the sound system, with an emphasis on low-frequencies, and care taken to ensure sound is ‘physically overwhelming yet crystal clear’. This notion of sound perfection still endures; many

clubbers and DJs use similar terms when describing sound systems that they see in a positive light.⁸¹

In this chapter, I began by discussing the differences between live instrumental sounds (whether ‘acoustic’ or amplified) and electronically-produced sounds. I proceeded to an exploration of different terms for sounds used by dance music participants, highlighting the different ways that individual sounds or groups of sounds may affect the reception of music and impact upon dancing. I conducted a musical analysis of various sounds and their effects in a number of dance music excerpts, comparing the soundscapes of a range of different genres. I discussed the importance and functions of different elements of sound in most dance music tracks, using the hi-hat as an example. The second section of the chapter examined the notions of artifice and reality in sound in detail, drawing upon literature on electroacoustic music. Finally, I briefly examined some examples of sound discussions within dance music literature. Overall, I would conclude from the above analysis that electronically produced dance music is conducive to dancing not only because of its beat and bass focus, but also because producers sculpt individual sounds with the primary goal of triggering sensory responses in dancers. The sources of these abstract sounds can be perceptually linked to real-life sounds, yet these links are not essential for enjoyment of dance music. The intrinsic qualities of the sounds that trigger physiological and emotional responses can be equally powerful.

⁸¹ For further sound descriptions, see Reynolds, 2008, pp. 32-3; p.66.

Chapter 5 – Melody and the Voice

The writer of the following essay had, from early youth, felt the delightful effects of simple and pathetic melody. He frequently noticed, what many others no doubt have experienced, that different strains made various impressions on his mind – that some highly exhilarated the spirits, while some gently soothed the mind, inclining it to tenderness and pleasing melancholy; and others inspired it with a kind of mental courage and elevation, easier to be felt than expressed. (Melody – The Soul of Music, 1798, p. 5)

Beginning with an illustration of the multiple ways that the concept of melody is understood by participants, I will argue in this chapter that melody adds emotional meaning to dancing. Melody can include a sole, repeated pitch, such as in ‘Objective T’ by Back Pack Poets (also excerpted earlier):

Audio 49. Back Pack Poets - 'Objective T'⁸²

Alternatively, it can include just a few pitches, such as in ‘Elizabeth’ by Christian C, in which it is dominated by one or two notes and occasionally alternated with a third:

Audio 50. Christian C - 'Elizabeth'⁸³

It can also include phrases that last for several bars. The extended melodic line in ‘Sugar’ by Dapayk and Padberg can be heard in the vocal part:

Audio 51. Dapayk & Padberg - 'Sugar'⁸⁴

By contrast, the Lucio Aquilina remix of ‘Meine’ by Daso and ‘Flying Belt’ by Kaddish have extended melodies in non-vocal parts. Extended melodies of this nature are relatively unusual in dance music:

Audio 52. Daso - 'Meine (Lucio Aquilina Remix)⁸⁵

⁸² Back Pack Poets (2011) ‘Objective T’. 00.00 – 00.30

⁸³ Christian C (2011) ‘Elizabeth’. 01.00 – 01.30

⁸⁴ Dapayk & Padberg (2009) ‘Sugar’. 01.31 – 02.11

⁸⁵ Dapayk & Padberg (2009) ‘Sugar’. 01.31 – 02.11

Audio 53. Flying Belt - 'Kaddish'⁸⁶

Participants often use the term 'melody' to mean any use of definite pitches in middle or higher registers. Melody does not normally refer to a bass line, even if a bass line is the most melodic layer in a mix. The term is sometimes used to refer to chords where they underpin key melodic material, or describes chord progressions more generally. I often perceive the highest pitches of these chord progressions as more prominent and functioning as melody notes due to the attuning of my ears to higher registers. In what can be heard either as a C sharp minor (in second inversion) or G sharp phrygian harmony in Audio 54, the highest pitches are easiest for me to attend to:

Audio 54. Bart Skils - 'Observer'⁸⁷

Melody is a term also used to refer to patterns of arpeggiated pitches that occur in tracks such as 'Violets' by Pig & Dan and Mark Reeve:

Audio 55. Pig&Dan and Mark Reeve - 'Violets'⁸⁸

Below, I provide a transcription of the melody notes in this track along with the main percussion parts and bass line. This can help score-readers understand which sound to listen for in this reference to melody and set this against the bass line that is pitched but not melodic. The harmony can be heard as a blues scale of C sharp with the G natural missing or implied, or alternately as a part of the C sharp natural minor scale in which each arpeggiation contains the root note:⁸⁹

⁸⁶ Flying Belt (2009) 'Kaddish'. 06.00 – 06.30

⁸⁷ Bart Skils (2012) 'Observer'. 01.20 – 01.35

⁸⁸ Pig&Dan and Mark Reeve (2012) 'Violets'. 01.15 – 02.00

⁸⁹ I have referred to pitch names, tonality and keys for the purposes of defining melody and its various uses by dance music participants. However, my primary conceptual interest relates to the reception of melody in a dance floor context. While tonality (such as whether the pitched material in a track is major, minor, or modal) undoubtedly impacts its perception, the labels of pitches and keys are not my focus.

SCORE 1.

Violets

Pig & Dan and Mark Reeve

The musical score for 'Violets' is written in 4/4 time and consists of five staves. The top two staves are for a piano, with dynamics ranging from forte (f) to pianissimo (pp). The bottom three staves are for a drum set, with a dynamic of mezzo-forte (mf). The score includes various musical notations such as notes, rests, and articulation marks.

- Pig & Dan and Mark Reeve 2012, Bedrock Records.

This is only my hearing; given the pace and blending of some of the sounds, it is unlikely to precisely match what others hear. For example, the transcription of the same track by composer and jazz flautist Richard Worth represents some pitches heard differently and emphasises only the semiquavers that he hears as accented. The other semiquavers are viewed only as echoes of the accented ones, or 'ghosted notes' as he refers to them (Worth, 2013).

Melody in dance music can be viewed on one level as functional and on another level as affective. It is functional in that it provides, first and foremost, a pitch component for listeners to focus their attention on. Pitch can be the sole function of a melodic line, or can be combined with other functions such as rhythmic, timbral or textural.

Consequently, whether a pitched part is referred to by participants as melody or as another type of sound depends on which of the above functions it fulfils. A single pitch of extended duration, such as that of a synthesised string sound, for example, might be referred to as 'melody', if its function is primarily pitch. Sometimes the function of a series of pitched sounds can be determined by its prominence in a track, including how

loud it is, whether it has a duration that notably contrasts that of other sounds with which it is surrounded, or whether its frequency differs significantly from surrounding sounds. For example, ‘Take My Breath Away’ by Gui Boratto contains a backdrop of relatively soft percussive sounds and a series of prolonged pitches that could be heard as distortion effects played on the electric guitar. The latter pitches are the most dynamically prominent in the mix and are contrasted (from 0.18) with a melodic pattern made up of shorter and higher pitches. The shorter pitches are rhythmic as well as melodic in function, due to their contrasting articulation and the way in which their syncopated attacks emphasise a pulse. They are also textural and timbral, as they alter the overall sound of the mix:

Audio 56. Gui Boratto - 'Take My Breath Away'⁹⁰

When sounds of definite pitch with unique qualities are introduced to a mix for the first time, they can become the point of focus for the listener due to their timbre, their melodic shape, or both. If a listener perceives the effects of the pitches themselves to be equally or more important than other attributes such as timbre, then these pitches would be definable as melodic material. In other words, a listener might hear a series of pitches as melodic because the pitches themselves protrude from the rest of the mix. The pitch pattern melody might be hummable, or simply heard first and foremost as pitches, not sound effects or rhythms. Conversely, a listener might only hear pitches as melodic, and not timbral or rhythmic. In the below excerpt, timbre could resemble other sounds in the track, or equally, could be entirely unremarkable to the listener. Moreover, although the pitches in the P.Toile remix of ‘Face’ by Cosmic Cowboys (excerpted in Audio 57) are not sharply articulated, they still constitute prominent melodic material:

Audio 57. P.Toile - 'Face (Cosmic Cowboys Remix)'⁹¹

In the below excerpt of ‘She’s My Lady Friend’ by Addled, the melodic line could be as clearly defined by its timbre and register as its pitch. Alternatively, if the timbre does not

⁹⁰ Gui Boratto (2009) ‘Take My Breath Away’. 02.50 – 03.30

⁹¹ P.Toile (2011) ‘Face (Cosmic Cowboys Remix)’. 03.10 – 03.40

grab the attention of the listener, it could also be heard as exclusively melodic in function:

Audio 58. Addled - 'She's My Lady Friend'⁹²

One of the functions of melody in the largely percussive and rhythmically-driven form of dance music is to provide musical variety and interest to dancing. A dance demonstration by Edinburgh-based clubber Pat highlights the differences between dancing to bass lines and kick drums in isolation, and dancing to melodies over the top of these elements. His demonstration uses two trance tracks, one house, one techno and one drum 'n' bass track and underscores two perceivable differences between these elements. First, the feet, head, knees and hips move in time to low frequency sounds, while arms and upper torso move to melody lines as they are introduced. Second, the range and energy of all bodily movement increases with the addition of melodies. This demonstration is an 'up-close' example of a phenomenon that also occurs on dance floors. Although minimal techno often does not include melodic elements, even this genre provides contrast and relief from persistent bass sounds through higher frequency percussive layers.

The above phenomenon often becomes more visible during the types of breakdowns in which rhythmic parts are removed from the texture. In these moments, the punctuated, fist-pumping, metronomic dancing often ceases or softens, and many arms are often raised. Additionally, clubbers sometimes close their eyes while their heads are tilted upwards, while others whistle or cheer to show their appreciation for the music. Still others smile at each other, hug, or simply talk to their neighbouring dancer while the volume is lower.

Edinburgh techno DJ Dom reinforces the above point with his account of the effects of melody:

Tami: So you mentioned big synth chords and people looking at the sky...

⁹² Addled (2009) 'She's My Lady Friend'. 01.00 – 01.30

Dom: Yeh, and moments of euphoria (*yeh*). That's a different... I think that's a different kind of dancing though, because you're not just dancing from the beat, you're dancing, you've got a melody there (*mmbmm*) and you know it's sort of like that, that's em, that's sort of one of the... and I think people's dancing changes actually in those moments as well, I think people are sort of (*mmm*) you know, it's sort of, it's maybe not quite as frenetic, you know, and it's more sort of people, sort of just eyes shut (*mmbmm*). Which is nice, you know. I mean one of my favourite things sometimes at the end of a gig, is if a DJ just takes it, takes it right to as loud as it'll go, loud as it'll go, and just stops it, and just plays something beautiful to finish. You know, something like, really groovin'. Like, something by Joris Voorn or something like that. Something really groovin'. But just like... you know, I'm sorry, I get shivers on the back of my neck thinking about it now actually (*mmm*) you know it's just sort like that moment at the end, when you're just sort of, you know, soaked in sweat, and hammered and just like...

Tami: Wait, but by beautiful, do you mean melodic?

Dom: Yeh, definitely, I think like... well, em, yeh. I think, there is beaut... well, I think a lot of techno is beautiful, a lot of techno is... isn't beautiful as such, but it, I suppose it is beautiful... well, in a way. But I mean, by beautiful in this context, I mean, sort of, you know, melodic, you know, something, that, you know, that there are certain hooks, and there are certain chord progressions that all musicians I think know, that if they put in that chord progression that people *will* latch onto, (*yeh*) you know.

Dom is describing the impact of melody on an affective level, that is, beyond the merely functional. In this sense, melodic lines add an uplifting emotive component to many dance music participants' experiences. Unlike the above detailed analysis of function, noticeable emotion is very difficult for participants to rationalise, and also probably not particularly helpful to attempt to do so. I use 'uplift' to describe emotional and physical reactions to melodic lines by participants. The term is inspired by Dom's physical demonstration of the impact of melody on dancing in an interview. Dom's arm movements indicate an upward momentum of the body as response to melody. He also uses the word 'lifting' to denote the overwhelming sense of being lifted out of oneself in a euphoric state. This sense of uplift is often consciously built into dance music by

producers through their employment of melody. In addition, when the physical signs of MDMA use are displayed (jaw-clenching, displays of amicable intimacy between individuals, sweating, enlarged pupils, prolonged dancing without breaks) reactions to melodies also appeared to be significantly amplified.⁹³

Melody is highly valued by producers and DJs, who view it as a tool for increasing the immediate impact and popularity of their tracks on dance floors. Trance and house are the genres most dominated by melody and are simultaneously the most popular of dance music genres. Trance is a genre that has more recently acquired a reputation for such clichés as those described by Hawkins (2003) with reference to ‘the aesthetic of house’ (p. 93). Samuel Barber’s ‘Adagio for Strings’, for instance, has been remixed by more than one producer for its memorable melodic line, most recently by the trance producer Tiësto:⁹⁴

Audio 59. Tiësto - 'Adagio For Strings'⁹⁵

Sam, an Edinburgh producer, demonstrates below how integral melodic material is to danceability:

Sam: I suppose[...] musically, a very important thing is chord progression and structuring of... of your notes (*mmbmm, ok*) you know, the way... the way that you move through your set so you need moody, minor, and, you know, sort of that... that thing, and then building up into major crescendos and then back down, and, (*mmm*) you know, keeping it varied between... between your keys... you can never have it too sort of monophonic for too long (*uh huh*). Changeable. (*Mmmbmm*). You need to change it up, (*right*) that keeps people dancing as well.

Tami: Right. Mmmhmmm. And does ‘up’ mean that you go up, literally, in pitch, or does that necessarily... could it mean something else musically?

⁹³ This could be one of the reasons that trance as a genre has a reputation within the dance scene for being specifically produced for experiencing while under the influence of MDMA; it is a particularly ‘melody-heavy’ genre containing multiple layers of pitch material.

⁹⁴ International DJ Sasha refers to the phenomenon of sampling classical music in trance in a critical manner (Brewster and Broughton 2005). This attitude of cross-genre animosity which will be explored further in Part III.

⁹⁵ Tiësto (2004) ‘Adagio For Strings’. 02.30 – 03.00

Sam: No, I mean, changing it up, I mean, just like... that's kind of a colloquialism I guess (*mmbmm*). What I really mean is it doesn't matter whether you go up or down, but having music theory when you're DJing, absolutely helps (*mmbmm*). If you can find out the key that your tunes are in beforehand, and know how to make key changes as if you were playing a piano (*ok, yep*) that... and that really you know, that strikes emotions with people, because I think on a subconscious level, people probably sort of remember those chord structures from other tunes, and... and strikes different emotions within people, so... (*mmm*). But then again, you know, having said all of that, some of the best tunes to get people dancing are one note and a kick drum, and maybe at the end of a phrase, that note goes up a fifth (hums an example). And it's like boom. And that is enough to make people, like, go wild, so it's really interesting that contrast between huge amounts of musical theory and then being able to just press one note... or two notes on a piano (*mmm*), and different spacing and make people go wild.

Melody within dance music is an aural hook, providing a distinct object for focus. Tracks that contain prominent melodies, including from other genres of popular music are often the most popular and the most easily recognised by listeners. This may be in part because melodic material is easier to recall than a repertoire of timbres or rhythmic patterns in a track, regardless of whether these features help to make the melody more memorable. Zoe, a visual DJ (VJ) states that melody was one of the factors along with bass lines that would determine whether a track is 'good' and thus whether she would dance to it. Producer, DJ and promoter Michael also articulates his views on the role of melody in producing successful, memorable dance music:

Michael: A dance track doesn't have to be melodic, there are whole genres of it which are non-melodic, but a lot of these tracks get forgotten over the years. Em, so for something to be a standout, be an all-time classic, it would need to have, uh, a strong melody.

Warren, a psytrance producer, notes that there are certain times at events, during which 'fluffy' (melodic) music is more conducive to the mood of the environment than others.

When brought out by DJs at those times, melodic moments can provoke people to begin dancing again after a prolonged period of sitting:

Warren: But then, you... not necessarily... you know, different sorts of tracks have different kinds of appropriate times. So, you know, there's... maybe some of the fluffier tracks will either be at the very beginning, or possibly, you know, in the morning, when everyone's absolutely knackered and they've stopped and they're sitting on the grass, and everything. But you put a nice track on like that, and people... It gets a few people start dancing then it can inject more energy back into it.

Warren, further argues that his choice to bring out melody is made gender-consciously:

Warren: Yeh, I mean, if you use some sort of melodic element, what we would used to call fluffy, fluffy techno, or fluffy trance, then that's a way to get the girls dancing, very often.

Tami: Ok.

Warren: And once the girls start dancing, then everybody else starts dancing.

Tami: Ok.

Warren: Uh, and that sounds like a cliché, or it sounds... but, but, you know...

Tami: It's just what happens?

Warren: It's just what happens. In every time I've seen it.

Melodies, as suggested above, are reflected in arms and upper body movements, and tend to be the most energetically expressed element in dancing. Uplift is expressed literally through upward tilting of the head, facing the ceiling or sky, raising of hands into the air, and sometimes 'pointing to God' as Dana and Dom describe it in their separate interviews. Since having these gestures highlighted by Dana and Dom, I have

observed that ‘pointing to God’ often occurs in time with the kick drum. Uplift is expressed at its peak through an upward impetus of the whole body – jumping – in time to the kick drum, either during or after long breakdowns. In addition, melodic lines, more than any other musical elements, appear to provoke particularly intimate social interactions, including physical gestures of affection – touching, hugging or smiling at others, as is suggested by Dom, above. Physical and social uplift appears most prevalent when melodic or vocal parts are first introduced or reintroduced after their absence from the texture. This is discussed by Ron, an occasional clubber:

Ron: Ah, I guess, if something... if... if something has been really percussive and sparse, and then all of a sudden some kind of evocative chord progression or melody emerges, that can be quite effective, you know... instead of just being one kind of linear progression all through the night, if there’s some kind of shift in... in mood, at some point, that can be quite inspiring.

Dom and Ron’s words are repeatedly confirmed by my observation of the effects of melodic elements at dance events, both on the dance floor and on stage or in the DJ booth. While on the dance floor, I am able to observe the responses to melody of individuals nearest to me. As a DJ, I gain a wider insight into the impact of melody on Edinburgh techno dance floors. Dance floors can be transformed from mostly head-nodding to whole-body movement when prominent melody is first introduced to a DJ set. Occasionally it can be appropriate to play melodies earlier on, and more percussive sounds later, as melodies are arguably ‘gentler’ on the ears. It can be equally effective to alternate melodic and non-melodic tracks, to provide continuous contrast. In my own DJing role, I am often drawn to minimalistic, percussive and what the *Circus* DJs I work with would call ‘deep’ or ‘dark’ music. An example of such a track is provided in Audio 60, below:

Audio 60. Dustin Zahn and Edit Select - 'Tunnels (Dub Tool)'⁹⁶

However, I have, over time, increased my use of melodic material due to a perceivable uplifting effect on the dance floor. During less melodic DJ sets, promoters have

⁹⁶ Dustin Zahn and Edit Select (2012) ‘Tunnels (Dub Tool)’. 01.30 – 02.00

expressed concern for the mood of my musical choices. On one such occasion, I contrasted the sounds of Dustin Zahn and Edit Select's 'Tunnels (Dub Tool)' with 'Observer' by Bart Skills (also excerpted earlier):

Audio 61. Bart Skills - 'Observer'⁹⁷

As luck would have it, I played 'Observer' unintentionally due to an incorrectly labelled CD. However, Kane, the promoter, seemed pleased at the resultant change of mood. Although clubbers were dancing to non-melodic tracks such as Dustin Zahn and Edit Select's 'Tunnels (Dub Tool)', Kane was concerned that their enthusiasm might not have endured had I persisted with this for the duration of my hour long DJ set.

Melody is often associated with euphoria, yet its effect can also be forceful and even uncomfortable. For this reason, I was uncertain what clubbers' reactions would be to 'Chardon' by Mike Dehnert, when I played it later in the aforementioned DJ set:

Audio 62. Mike Dehnert - 'Chardon'⁹⁸

On this occasion, the contrast between the piercing melody line, the driving kick drum and swinging percussion led to clubbers shouting, stomping and even whistling in unison with it. Dancing triggers evidently do not have to be perceived as pleasant or beautiful. However, the most powerful responses arose to a melodic track that I chose to close the event with – 'Eternalize' by Jan van Lier:

Audio 63. Jan van Lier - 'Eternalize'⁹⁹

During the breakdown, clubbers densely gathered directly opposite the stage, raised their hands into the air, smiled, shouted and whistled. This contrasted with their heads-down, fist-pumping styles of dancing that took place during the three successive non-melodic tracks that I played.

⁹⁷ Bart Skills (2012) 'Observer'. 05.00 – 05.30

⁹⁸ Mike Dehnert (2010) 'Chardon'. 02.00 – 02.30

⁹⁹ Jan van Lier (2011). 'Eternalize'. 03.20 – 03.50

As I have demonstrated through participant perspectives and ethnographic observations, the perceived potency of melody can be rationalised through its possible musical functions. However the sense of uplift gained from melody derives from uncalculated musical responses. Thus, these rationalisations should be understood in conjunction with affect. I have aimed to provide an insight into this physiological and emotional response through the above aural excerpts and through reflections on my own DJing and dancing experiences. Melody lines can be moving for clubbers, and powerful tools for DJs and producers. In the earlier discussion of build-ups and breakdowns in Chapter 3, I referred to research on the release of dopamine when ‘peak emotion’ is anticipated by a listener to music (Salimpoor, Benovoy, Larcher, Dagher and Zatorre, 2011, p. 1). I propose that melody arguably both contributes to and is impacted by this phenomenon. Melody is often most exposed during breakdowns which epitomise anticipation and build-up of tension; the elation that is observable in these moments may be as much a reaction to the build-up of anticipation, as they are to melody itself. I will now proceed to a brief survey of melody as discussed in musicological, scientific, ethnomusicological and dance music literature.

As highlighted in Chapter 2, Kennedy defines melody as ‘a succession of notes, varying in pitch, which have an organized and recognizable shape’ (2004, p. 469). The meaning of the phrase ‘recognizable shape’ is unclear in this definition. It could be simply recognition of the fact that this shape is a melody, or alternately, recognition of a more specific resemblance to the shapes of other melodies heard in the past. As I have shown, melody in dance music is understood by participants as a broader concept, in line with the Grove definition of ‘pitched sounds arranged in musical time in accordance with given cultural conventions and constraints’ (Ringer, 2012). In the latter definition, there is no need for notes that vary in pitch, and any ambiguity of the phrase ‘recognizable shape’ is removed. If we consider the subjective or emotive impact of music more broadly (putting melody aside), ethnomusicologist John Blacking (1979, p. 10) asserts that it is not possible to ‘measure the effects of music with precision... common-sense knowledge proclaims that these responses are of minor significance compared to the depth of feelings and quality of experience evoked by music’. Despite this, studies of responses to music have been almost exclusively in the sciences, tending not to take into account the influence of people on one another in social musical

contexts. Even those that promote a focus on subjective responses to music approach their subjective data quantitatively (Schäfer and Sedlmeier, 2011, p. 46). Authors such as Trevarthen (2012; 2011; 1999) and Godøy (2011; 2010) are notable exceptions who specifically investigate relationships between human to human interaction and musicality and music making. In addition, Tia DeNora's analysis of the way in which music in the aerobics class is used to give participants a sense of 'bodily agency' (2000, pp. 90-102) is a fascinating sociological insight into the inseparability of cultural and social perception and actual bodily experience. This has implications for the way that dancing triggers can be understood.

The above research contributes to an understanding of how humans gain meaning from music, and these frameworks can be applied more specifically to the relationship of melody to affect. According to Thomas Schäfer and Peter Sedlmeier's research on the effects of music on arousal, positive emotional effects of music are key motivators for the repeated return to music as a recreational activity (2011, p. 45). Similarly, Robert Hatten argues that 'music serves as a vehicle, trigger or catalyst for emotional experience' (2010, p. 83) and Bloch (cited in Saffle and Yang, 2010, p. 322) reinforces the notion that music can be emotionally transformative. The opening quotation I chose for this chapter was written over two centuries ago. It refers particularly to melody as an evocative musical element, described by an anonymous author as the 'voice of nature' (1798, p. 17). The below continuation of this passage also resonates for dance floors of the twenty-first century:

Independent of articulate language, these [melodies] are instinctively and universally understood. And they are not only understood, but by a sympathetic power, they communicate the feelings of one person, in some degree, to another; forming thus one of the links which unite mankind... And, imitating the pathetic tones and inflections, and interweaving them in its strains, it penetrates to the heart and excites the corresponding affections. (*Melody – The Soul of Music* 1798, pp. 16-17)

I do not agree that melody or any aspect of music is 'instinctively and universally understood' (1798, p. 16). Instead, I draw upon Blacking (1979) to argue that meanings of melodies are culturally developed. For Blacking, 'musical intervals are social facts and

not always founded on the law of acoustics' (p. 6). Sound is in one sense a phenomenon of nature, but as Trevarthen, Delafield-Butt and Schlöger contend, music is 'heard as sounds of the human body moving reflectively and hopefully, with a sociable purpose that finds pride in the telling of 'make-believe'' (2011, p. 12). I would also add that seemingly automatic emotional responses to music, or specifically to melody in the case of dance music, are learned (Hatten, 2010, p. 95). Like other aspects of music, melody can call to mind (and body) the human connection with the world at large. The quality and range of melodic movement can evoke the sounds of the human voice, animals, and the natural or human-made environment. In one sense, physical, acoustic sound sources are not considered part of the technologically-conscious aesthetic of dance music. Yet the connection of sounds to the tangible environment may be culturally embedded deeply enough that electronic melodic lines tap into our 'natural' musicality (Blacking, 1979, pp. 5-6; Trevarthen, 2012, pp. 260-4, 276-7). Thus emotional reactions do not simply occur as a result of the sounds of music, but also as responses to circumstances (Schäfer and Sedlmeier, 2011, p. 40). For instance, as Schäfer and Sedlmeier suggest, 'dancing or meeting new people can elicit arousal that might be attributed to the music being played' (p. 47). While melody appears to manifest through bodily movement almost as much as rhythmic features, it is worth noting that this is not necessarily universal; there may be clubbers for whom melody does little in the way of arousing pleasure.

In dance music literature reviewed in this study, melody is a neglected musical feature of discussion, with the exception, once again, of Reynolds (2008), who presents part-metaphorical, part-technical descriptions:

'Chime' pivots around a tintinnabulating, crystalline sequence of notes that hop and skip down the octave like a shiver shimmying down your spine. This motif is one of the first instances of what would become a defining hardcore device, the melody-riff: a hook that is as percussive as it's melodious. Then a Roland 303 enters, jabbering like a bunch of funky gibbons, while a second sub-bass line quakes beneath it at half-tempo. At the breakdown, muzak-strings (sweeping, beatific) clash with staccato string-stabs (impatient, neurotic), then the melody-riff cascades in again like a downpour of diamonds and pearls. And your goosepimples run riot. (Reynolds, 2008, pp. 103-4)

For comparison with this rich depiction by Reynolds, below is a short audio excerpt of 'Chime' by Orbital:

Audio 64. Orbital - 'Chime'¹⁰⁰

Reynolds differentiates a melody-riff from simply a melody *or* a riff, it would seem, by demonstrating that a melody-riff is a rhythmic device with pitch as an additional feature. Perhaps the melody-riff loops a pattern of notes over and over again to the point of listener-hypnosis, rather than having the varied trajectory of a traditional melody. Melody is discussed by Reynolds in terms of its timbres and effects on the listener rather than its pitches, an effective approach that closely reflects the actual experience of dancing to this music on a dance floor.

In sum, melody (pitch material) functions, in its many forms, as a point of focus for clubbers. It animates the soundscape beyond the fundamental low frequencies of dance music. Amidst the backdrop of powerful bass lines, driving rhythms, engulfing timbres, and intricate textures, melody can move dancing clubbers into states of energetic, collective bodily engagement. It can provoke demonstrative interaction with other participants. Whether several pitches in motion successively, vertically-layered simultaneous pitches, or one repeated pitch, melody can lead to an emphatic, energetic drive, or a meditative, blissful euphoric state that can help lend to hours of dancing a sense of common purpose.

Vocal lines provide a tangible link with materiality and the human body, and therefore are often one of the sounds in dance music that people can most readily identify with. This identification undoubtedly also relates to a cultural familiarity with the voice in popular music generally (Middleton, 1990, p. 261). As the DJ and promoter Kane states, 'people latch onto vocals a lot more, because for a person who isn't specifically into dance music, it's something recognisable to them.' This widespread appeal relates to Bruno Nettl's notion that one of the few 'tentative' human universal features of music is the use of the voice for music making; every society sings (2000, p. 468).

¹⁰⁰ Orbital (1990) 'Chime'. 01.45 – 02.15

Vocal lines are not always melodic in function, but are often described by participants as having similar emotional effects to melodic lines. In contrast to the role of the voice in many other popular music styles, vocal lines do not consistently dominate the textures of dance music, functioning rather as another layer of sounds that occasionally delivers lyrics. Vocal lines do, as in other pop, often take front and centre positions in the mix. However their role, overall, is versatile. Dance music vocals can function as melodic, timbral, lyrical, rhythmic or textural, or, as is often the case, a combination. Vocal lines, along with melodic lines, are often the easiest elements to recall. Participants who no longer attend dance music events often recall vocal lines before other musical features. Kylie, who primarily attended dance music events eleven to thirteen years before I interviewed her, recounts her nights out as follows:

Tami: If you could think back to when you're at a club night or a rave, just off the top of your head, what sort of things make you dance?

Kylie: (Laughs). Um... the music! And the drugs I suppose... or the combo... um. Yeh, short and sweet. Um. Do you want me to talk about the music itself?

Tami: Um, if you like, if... if it's significant to you.

Kylie: Well, I think for me, um, in the olden times, in the olden times, the prehistoric times, it was more the vocals, so, um, I'm talking, kind of, around, the mid-nineties, a little bit earlier, before that happy hardcore shit came out. It was um, yeh, the vocals. Female vocals, it was really melodic, and then there was a lot of piano, um, I don't know what to call it... piano... samples, in it, as well.¹⁰¹

Thus, for Kylie, the function of the voice in dance music is primarily melodic.

Reactions to vocal lines in dance music settings are immediate and visible, with the subtle differences between vocal styles also influencing people's dancing styles. In the below passage, Ben, an Edinburgh DJ with a taste for a variety of genres, makes a link between the cultural familiarity of rapping vocal lines and crowds' drive to dance:

¹⁰¹ The beginning of this exchange highlights Kylie's awareness of an idea of 'music itself' conceptually separated from other aspects of dance music. In the second part of this dialogue, Kylie humorously depicts a past 'era' using the phrase 'olden times', evoking a sense of the whimsical - a fond memory. This type of nostalgia will be discussed in Chapter 6.

Ben: American vocals [...] are generally like, ghetto vocals. Like, stuff that won't necessarily go with that style of music. But it's something I've been doing quite a lot. I don't know what the style they call it. I think it's called ghetto... ghetto booty, things like that? (*Yeb*). It's generally quite crude. They'll be hip hop lyrics that have been put over tracks. But once you do that, it just seems that people... everyone responds to hip hop, and even if there's no beat people they'll just hear the lyrics and that'll get them going. There's a guy I know who's got very big in the past year or so in America. I think that's due to more than half of the songs are remixes of the Wu Tang Clan, or em, NWA. He gave them all away free. But, if he just plays a tune, he just drops into the old hip hop.

Tami: Hmmm. Ok. So you think everybody somehow relates to that hip hop style?

Ben: Not everybody.

Tami: Not everybody but a lot?

Ben: There's a lot in the crowd. And some people, like they don't even relate to hip hop, it's just they like, they like how funny the vocals can be at times.

When I asked Ben to be more specific on how 'ghetto' vocals impact upon dancing, his response incorporated a range of stereotypes based on both race (blackness) and gender (femininity):

Tami: If you put on those ghetto vocals, what... what do people do, exactly? What have you noticed?

Ben: It changes the way some people dance (*mmbmm*), like they'll start being... they might start throwing their arms a bit more eccentrically and accentuated. Mainly because as they recognise that as being ironic, when it's being played, then they just loosen up a bit.

Tami: Mmhmm, right. So humour loosens them up. That's kind of an interesting one, yeh.

Ben: And they're, they're usually quite sexual orientated. So, um, they'll make guys laugh, but there's some girls, it'll make them react in a... basically in a slutty way.

Tami: Right.

Ben: Not, not... maybe like one or two of them in the club, but it definitely happens.

Many clubbers are influenced to varying extents by the above associations, even if only subconsciously. The following track contains samples of the word 'ecstasy', sung by a female vocalist:

Audio 65. Butch - 'XTC (Riva Starr Cut)'

My subjective response to the vocal style of this track is to think of African American gospel music, and on the dance floor, this association would translate into an expression through movement. Others may then also mirror this movement whether or not they consciously make similar associations. The copying can occur rapidly, creating an illusion that it is happening to everyone on a dance floor simultaneously and 'naturally'. The house track 'Entrance Song' by Eats Everything has a different pace and energy to 'XTC', but the vocal style leads me to make similar associations, which has translated into similar dance movements in dance floor settings:

Audio 66. Eats Everything - 'Entrance Song'¹⁰²

The fact that I have no idea whether the vocalists featuring in either track are actually African American women does not affect whether my cultural assumptions transform into dance movements. For me as a dancing participant, these effects subconsciously relate to a concept of African American femininity reinforced in many popular music cultures that includes the vocally embodied notion of *soulfulness*. An Edinburgh clubber,

¹⁰² Eats Everything (2011) 'Entrance Song'. 01.30 – 03.00

Ron, who is a fan of older African American R 'n' B music, refers to vocal lines in similar terms:

Ron: Sometimes it'd be something really subtle like just if a vocal is thrown in that could be really soulful, or... or just sparks your imagination I guess, you know, just something in your unconscious and you just want to start dancing...

The infusion of African music extends beyond just that of African *American* influences such as gospel, soul, blues, or funk, into music from the African continent. This is most often expressed in the form of percussive elements, such as those throughout 'Kakra Hurricane' by DJ Lion and Luigi Rocca:

Audio 67. DJ Lion and Luigi Rocca - 'Kakra Hurricane'¹⁰³

As distinct from the African American influences in Audio excerpts 65 and 66, the below excerpt includes solo and ensemble singing style that is African in origin. The ensemble sings the melodic parts in the main rhythmic sections. By contrast, the solo parts dominate the lengthy introductory section (excerpted below):

Audio 68. Âme & Amampondo - 'Ku Kanjani (Âme Live Version)'¹⁰⁴

The following excerpt of 'Cape Town' by Beat Pharmacy combines African-infused melodic parts and rhythms with a jazzy feel – reminiscent of the broadly labelled world music genre:¹⁰⁵

Audio 69. Beat Pharmacy - 'Cape Town'¹⁰⁶

Human or simulated vocal parts are used in dance music in a considerable range of ways, with or without effects. Vocal lines that originate as audio samples of real human voices may be associated with their origin by listeners, depending on how other

¹⁰³ DJ Lion and Luigi Rocca (2011) 'Kakra Hurricane'. 04.30 – 05.00

¹⁰⁴ Âme & Amampondo (2012) 'Ku Kanjani (Âme Live Version)'. 00.00 – 00.45

¹⁰⁵ See Frith, 1996, pp. 84-5 for a background on the construction of the category of world music by the record industry.

¹⁰⁶ Beat Pharmacy (2005) 'Cape Town'. 01.30 – 02.00

production effects are applied. Vocal lines as they are heard by listeners may or may not have lyrical content. Some vocal lines are only partially discernible, if a listener is attending to them closely, while some can be distorted to the point of being indecipherable. Vocal parts, whether real or synthesised, may be spoken (no definite pitch) or sung (definite pitch), may or may not clearly convey a sense of meter and may occur in breakdowns, intros, outros, main sections, or throughout whole tracks. It is not always clear whether sounds come from female or male bodies. On the whole, female vocals are more often sung, while male vocal parts are more often spoken. These norms are associated with particular genres, such as male MCs in drum 'n' bass and female singers in house and trance. Particular vocal styles characterise genres, such as gospel-influenced singing in house, 'chipmunk' style vocals – generated by a production effect of speeding up and raising the pitch of the original vocals – in happy hardcore, spoken tones – akin to the voice-over for advertisements of dramatic television shows – in hardstyle, trance, and breaks, and rhetorical styles derived from well-known political speeches in house and techno. In some instances, such as in the below example, the latter style is achieved through the direct sampling of real recorded speeches:

Audio 70. Rhadow - 'Discourse'¹⁰⁷

The associations of vocal lines with femininity are etched into dance music philosophy beyond merely the musical product. There is a widespread assumption that women initiate dancing at any given club night, and that men invariably follow due to their seeking the attentions of women. In many environments, this is frequently true. Many DJs, producers and promoters presume, perhaps for reasons that relate to trends in other popular music, that women particularly enjoy music with vocals. It is thus not uncommon for producers to compose vocal lines in their track, when aspiring to fill dance floors:

Cam: There's always the odd tricks like, em, playing a, you know, a record that's got like a cheeky vocal on it or something. Get girls dancing generally you'll get boys dancing, that's a good rule to follow and it's not something that I particularly like using because I don't really try to kind of categorise my records as being you

¹⁰⁷ Rhadow (2012) 'Discourse'. 03.50 – 05.20

know, 'oh that one's a bit more for the ladies'. You know, I don't really like records like that, I like just good electronic music, but there will be records where you know this one might get a few girls up dancing, and if you can get a, like a wee troop of girls up, you know, five girls up there, if they're on their own night out, then generally they will be followed by a pack of lads, and once you're onto kind of like ten or fifteen people on the dance floor, it's much easier to build a dance floor...

This idea also permeates non-dance music cultures. As a wedding DJ, I have been explicitly instructed by my employer to play music with female vocal lines to ensure that female guests would dance and men would follow. This perceived link between vocals and femininity has emerged frequently through my discussions with exclusively male producers and DJs. As women's involvement in dance music increasingly includes that of production and performance in addition to consumption, this bias is slowly beginning to break down in some dance music communities. Moreover, in particular genre-based scenes, and in particular cultures, it is the men who take to the dance floor first. In Edinburgh techno scenes, for example, men often begin to dance as soon as the music commences. It is, in these instances, their intention to dance for the full duration of the event – momentum is gained by starting early.

One of the key points of discussion in subsequent chapters of this thesis are the ways in which taste-based musical preferences, and consequently approval or disapproval of other participants, are raised in interviews and manifest through behaviour. Discussions of vocal lines by Edinburgh-based DJs Kane, Michael and Bernhard, presented below successively, are suggestive of this attitude:

Kane: I guess, you know, a lot of time, you know, I play at *Scram* and *Time Out*, and I, I tend to play, like, sort of, house music more. Because people respond well to vocals very much I find...

Michael: Any form of music with a vocal, is eh, more easily accessible by more people, and therefore, uh, tracks with vocals are more likely to be elevated to that classic status.

Bernhard: I usually do have a few, like, tracks that I know people will not only know but will dance to, like at that *Pilgrimage* gig, for example, like for ‘Hit the Road Jack’, that one immediately caught people’s ears, and even though it was, you know, a house song, there are a few, kind of say, cheesy songs, that people would know, and once people know a song, they’re more likely to flock to the dance floor, to dance to the song that they know. And then if the next song is good, [even if] they don’t know it they’ll hopefully continue dancing and then hopefully you can keep people there.

During the latter interview, I specifically asked Bernhard firstly how he chooses tracks to make people dance while he is DJing. I also asked how he recognises success in this goal. He provided the following response:

Bernhard: Well, usually the vocal parts especially... things that people can sing along to. [...] With cheesy tracks, like, if I put on like *Riverside* or something like that, people will usually, I think it would be more related to the vocal parts, but it would be like... (hums a melody)... but yeh, the vocal parts, the chanting the hands in the air...

Bernhard refers to vocal elements of these tracks as ‘cheesy’, in part because they are crowd-pleasers. At *Pilgrimage* and later gigs, Bernhard would apologise to me for playing these tracks, even though his choice made the dance floor the most active it had been on this particular night. Like many other DJs whose focus is non-commercial dance music, this qualifying statement conveys that these musical choices are made despite his personal taste in order to fill up a dance floor. He does not want to be misunderstood as having a taste for those types of tracks. When a crowd flatters Bernhard’s choices by dancing to music that does not fit with his conceptions of tasteful, he must find other ways to highlight the distinction between his and their tastes, in order to save ‘face’ or ‘positive social value’ in Goffman’s terms (1972, p. 5), in the presence of other DJs. He has voiced his disdain for the tastes of this crowd over a number of casual conversations.

As Frith (1996, p. 191) and Middleton (1990, pp. 261-4) both note, the voice in popular music serves as a reminder of the bodily origin of the music, although it is in one sense

detached from this origin through technological mediation. Dance music vocals are ‘produced’, yet still recognisable and materially human. The voice, according to Frith is, in essence, ‘the sound of the body’ (Frith, 1996, p. 192). That is, the voice always unconsciously expresses aspects of physical and emotional feeling (Frith, 1996, p. 192; Middleton, 1990, p.264; Trevarthen, Delafield-Butt and Schlöger, 2011). The raw, sensual quality of vocal lines is captured in Hawkins’ account of ‘French Kiss’ by Lil’ Louis:

Suddenly the break section is upon us and the regular 4-4 beat becomes layered with the amorous moans of a female vocalist lifting our emotions to a higher plateau. Next the rhythm and bass drop out leaving the voice on its own, raw, exposed, orgasmic. Flanged into the mix, pleasurable groans fill the air as the strobes dissipate into a flood of purple haze. You want to swoon, fall, float, as suspense in waiting for the return of the beat becomes an excruciating eternity. Caught in time, the crowd appears in a trance swaying with arms raised in response to the ecstatic moans of the female vocalist.¹⁰⁸ (Hawkins, 2003, p. 80)

To this I would add that this sound is ‘sex’ explicitly communicated through a sampled female voice – a pornographic performance, for a heterosexual male audience. A feature mentioned by Hawkins (p. 84) that I would argue contributes to the framing of this pornographic performance is a drawn out and extreme *ritardando*; in most dance music, dramatic tempo changes such as these are rare. The slowing provides sonic space for the solo vocal line to become more exposed. The below excerpt of ‘French Kiss’ is illustrative of the latter features:

Audio 71. Lil’ Louis - ‘French Kiss’¹⁰⁹

In contrast to the material, the below passage by Reynolds suggests that the voice in dance music can also evoke the divine:

Pivoting around the same eight-note sequence of psalmic female vocal... ‘Belfast’ always make me think of Wim Wenders’s *Wings of Desire*, with its guardian angels who invisibly bring succour to the anguished. (Reynolds, 2008, p. 104)

As I have shown, the voice is frequently the common element in the most popular dance music repertoire because of the immediacy and explicit nature of its link to the

¹⁰⁸ See Frith, 1996, pp. 193-196 for a useful discussion on relationships between the embodied voice and sex and sexuality.

¹⁰⁹ Lil’ Louis (1989) ‘French Kiss’. 05.15 – 06.15

body juxtaposed with the detached electronic soundscape. The voice also imprecisely connotes relationships with particular modes of femininity, sexuality, and African cultures. It occupies a double-edged status, conflicted by its attraction for clubbers and some DJs' professed distaste for it. According to these DJs the voice cheapens dance music and attracts tasteless crowds. The evident blurring of aesthetic and social issues within interpretations of the voice is therefore a fitting and representative issue on which to conclude this section. All triggers for dancing that I have labelled 'musical' occur within a specific context of philosophies and associated social practices. Low frequencies, repetition, contrasts, qualities of sounds, melodies and vocal lines cannot therefore be considered triggers in an isolated sense – they are shaped by and inseparable from these philosophies and practices. The following chapters will bring this blurring to the fore, by addressing those triggers for dance that confuse musical aesthetic judgements and social ideological positions.

Chapter 6 – Genre, Familiarity and Nostalgia

The musical attributes thus far described fit into dance music participants' socially formed understandings of danceable genres or styles. Participants' musical preferences are therefore in part based on genre preferences, which in turn are shaped by more than purely aesthetics of sound. In this chapter, I will examine how participant perspectives on dance music genres integrate with their broader notions of danceability and discuss this ethnographic data in relation to existing theories in popular music literature. There is no theory of dance music genre as such – no single official documentation of the classifications that participants use. The two best mainstream web sources are *The Discogs Style Guide* (Discogs, 2012) and *Ishkur's Guide to Electronic Music* (Ishkur, 2012), which, as the author of the latter explicitly warns, should not be taken too seriously. None of the web 'genre guides' credit their sources, but the latter two are presumably based on experience in dance music settings. Similarly, genre definitions are not formally taught, but learned through extensive exposure to or immersion in music. This knowledge is not acquired by dance music participants simply through the listening and dancing process but through conversations with other participants. Notions of genre are perpetuated by participants but there is no overarching authority or consensus to lead to the formation of fixed definitions. Differing definitions of genre are commonplace, especially across geographical boundaries, and definitions evolve. Within contemporary techno, for instance, multiple definitions exist; 'techno' in late 1980s Detroit is different to 'techno' in early 21st century Britain. I have also learned through a series of miscommunications and confusions during my field work that 'electro' can describe different musical styles in Australian, British and German scenes, and can even be an all-encompassing term for dance music.

Genres in Edinburgh's dance music community are defined by their social circles, and the ways in which these circles define themselves is through the highlighting of musical difference. Some participants comment about the power of 'dance music' as a broad musical style, but almost invariably qualify this statement with what they feel constitutes 'good' or 'quality' dance music. One of the easiest and most common starting points through which to express this is through an articulation of what they do not like

(Fabbri, 1981, pp. 58-9; Frith, 1996, p. 75). For Edinburgh techno DJ Kane, good dance music is not dubstep, while for a drum 'n' bass participant, good dance music is not 'four-four music' – that is, music with a non-syncopated, regular meter, articulated by a kick drum such as house, techno, or trance. The tone of interviews suggests that participants feel that certain genres are more conducive to dancing than others. The below excerpt is demonstrative of this:

Tami: Could you tell me firstly, when you're at a club night, on a really, really general level, what kinds of things make you dance?

Zoe: Um... I would say that it of course has a lot to do with what kind of music is playing, and how I feel about that. Like, I have, like certain genres that I like.

Tami: ... would you say that there are specific things in the music that you go to club nights to listen to, that really make you tick? Like, specific musical elements you could put your finger on?

Zoe: Definitely. I think that I'm like really into, like, a lot of *deep* techno.¹¹⁰

It is noteworthy that the 'specific things in the music' I ask about are encompassed in Zoe's understanding of the genre itself. In response to the same question, Gemma also begins with a discussion of genre:

Gemma: To be honest, I think it depends what style of music we're talking about. It's... it's really different for every genre... so, I think if it's house, or if it's vocal bass music, often I think it'll be when I think that it's quite lush, when I feel like it's... it's reached quite a highly... I suppose... it's reached a peak point in the song. Um... and often that's when the vocals come in...

With... with tech... oh sorry... with drum 'n' bass... I suppose... I suppose, with... with dubstep, it's... it's when... it's when it's really not boring because most of it *is* quite boring. So when I find that it's... when I'm like 'oh, there's a bit of

¹¹⁰ The term 'deep' when placed next to 'techno' can denote either a subgenre, the quality of sound (timbre), or pitch (frequency).

intelligence behind this, they know what they're doing and it's not just (mimics the wobble bass sound with voice), sort of thing, and there's something to it, that's cool. With drum 'n' bass it's the same thing, it can often be quite simplistic. With tech I suppose it's the same thing too.

Gemma importantly highlights the way in which different genres inform dancing style, and demonstrates this through her examples of 'lush' textures and vocal lines. I do not wish to imply that all techno fans, or fans of any 'four-four' music hate drum 'n' bass (or any music with a breakbeat), and vice versa. On the contrary, many participants have a wide range of genre interests. Some of these can be considered to fit in the overarching category of dance music, such as an interviewee who likes minimal techno, drum 'n' bass and psytrance relatively equally, in part because of their contrasting practices and differing social groups. Others, such as Ron, enjoy genres that are not considered electronic dance music, although they are undoubtedly music for dancing. Ron states that he is more comfortable dancing to funk and R 'n' B than he is to techno and house although he enjoys both. This is, according to him, partly due to the fact that he has more experience dancing to the former genres, and his association of these styles with positive memories, dancing with his primary group of friends over a number of years.

Producers and DJs use their understandings of genre as a starting point for decisions made in production or at performances. They also make stronger assertions than clubbers about the value of genres – perhaps because they have to defend their musical integrity. International DJ and producer Sébastien Léger, for example, uses his Facebook page to make a point about his ideas on genre, in response to a fan's request for more 'progressive-house', arguing, 'I'm not a prog house or whatever you can call it, so that's ONE THING for sure you won't have ! EVER :) [*sic*]' (Léger, 2011a). Producers and DJs such as Léger rely upon the loyalty of their followers to the genres in which they see their music fitting. Many of these followers are their friends, as genre scenes are based as much around the interactions of close social groups as they are around the music being played. It is clear, for example, that at *Circus*, the club night in which I most frequently participate as a clubber and perform as a DJ, a core group of friends are guaranteed a night out with people they know. If one participant arrives alone, they will undoubtedly see at least fifteen friends and acquaintances. Many of the *Circus*

participants grew up and went to school together. It is not unusual for participants of *Circus* to discuss the poor musical taste of the majority of clubbers in Edinburgh, and to point out the ways in which their crowd is different from other crowds. This phenomenon is reflected in other studies, such as Bennett's examination of the Newcastle dance music scene (2000, pp. 88-9).

The promotion of genre-focused club nights tends to rely heavily on common understandings of genre. If, for instance, a participant is handed a promotional flyer that promises dubstep at a forthcoming club night, they can reasonably expect to hear a proportionately high concentration of musical features that characterise dubstep. These include the 140 or 70 BPM tempos (depending on how dancers feel the tempo), particular syncopated rhythms, deep sub-bass lines, sudden contrasts and dramatic breakdowns. This participant can also expect to find a uniform style of dancing at this advertised club night that is almost exclusively associated with the embodiment of dubstep. Thus, following the Grove definition of genre by Samson (2012), the word 'dubstep', the sound-matter that constitutes dubstep and the dubstep style of dancing combine to create the overall meaning of 'dubstep' as a genre.

The genres and the musical characteristics that I choose to explore in some depth here are representative of the majority of my musical experiences while researching Edinburgh club nights. I focus my analysis on three genres: techno, house (more specifically, the subgenre tech-house) and drum 'n' bass, and unpick some of their features. In addition, I refer very briefly to the popular genres of trance, electro and dubstep, providing an audio excerpt of each for illustrative purposes. I have approached the analysis and delineating of genres with caution, as it demands a form of essentialism which may risk displeasing those who have contrasting notions of the genres I discuss. Moreover, this analysis may stress characteristics significant to my listening experiences that are utterly irrelevant to another participant. For instance, I have conversed with other participants about the same music, discovering in the process that each of us paid attention to a markedly different set of musical characteristics. In order to highlight genre difference, I am attentive to musical detail, and use my exposure to sufficient quantities of similar music to understand the examples in their contexts, consequently recognising and identifying features common to the genre of focus. Naturally this is also

a process of discrimination, of choosing which aspects to highlight, and which to discard. The subjective nature of this process however does not detract from its value. In undertaking analysis of dance music genres, arguments are made with an understanding that numerous others are equally valid.

The first genre I will discuss is central to my research, and arguably has the most variable, flexible definitions. This flexibility may be in part related to its occasional use as an umbrella term for all dance music (McCall, 2001, p. 21). Techno in Edinburgh is often characterised by tempos from 120 to 135 beats per minute (BPM), generally leaning toward the slower side at *Circus* events and faster at many of the others. Its meter is denoted by evenly spaced electronically produced kick drum beats, snares on every second kick drum beat, and hi-hats precisely in between each kick drum beat. Techno is on the more subdued end of the timbre scale of contemporary dance music genres. The track 'Obey' by Robert Hood exemplifies this, its muted and low-pitched sounds contrasting with the dominant mid- and high-registers in trance, electro and dubstep:

Audio 72. Robert Hood - 'Obey'¹¹¹

Techno tracks are often between 6 and 10 minutes in length. The form of techno is defined by main sections and breakdowns, yet overall, texture and tension are built up gradually. Techno can be compared with the minimalist art music of Steve Reich and Phillip Glass, in that it is sparse, percussive and protracted. Techno is a style in which gradual build-ups are expected, which is problematic in a city such as Edinburgh, where club nights are restricted to an average maximum of four or five hours. In Edinburgh, rather than simply playing highly energetic and intense techno from start to finish, techno DJs sometimes deal with this issue by building up their music on fast forward – in compressed versions of the longer club nights that take place in cities such as London or Berlin.

Techno, the most consistently high-brow of the primary electronic dance music genres, is not always produced for dancing.¹¹² Some techno, particularly the subgenre minimal

¹¹¹ Robert Hood (2009) 'Obey'. 01.00 – 01.30

techno, is considered by some promoters to be too repetitive, obscure and alienating to perform at club nights. The musical features of techno thus embody and reflect its socially-defined status: aloof, and anti-popular. I do not mean that techno has no following; on the contrary, there are techno performers who fill stadiums on a regular basis. However, techno has rarely if ever made it onto mainstream pop charts, and thus, unlike other styles such as hip hop and house that have infiltrated the large-scale commercial music industry, it is not experienced by the population at large, and is not consumed and absorbed involuntarily in everyday settings such as shopping centres, doctor's surgeries and while on hold on the telephone. By this definition, even classical music holds a position in popular consciousness that techno does not. This attitude derives from the 1980s Detroit origins of techno, with producers and DJs such as Juan Atkins, Derrick May and Kevin Saunderson influenced by European musical and political culture (see Albeiz, 2012; McCall, 2001, pp. 19-21; Sicko, 1999). Fascinatingly, techno has returned to Europe in a reconstituted form, now widely perceived as a 'white' scene (Atkins, cited in Albeiz, 2012, p. 463; McCall, 2001, p. 24). McCall claims, contrary to my ethnographic research, that 'techno's foremost intention is danceability' (*ibid.*). However, this is contradicted by renowned producer Carl Craig, whose statement, '[r]ap stayed street, rap stayed urban, it stayed within the community... Techno went somewhere else' (Craig, quoted in Rubin, 2000, p. 121) alludes to the loftiness of the scene.

Pope (2011), whose work I will review later in more depth, draws on Frith's notion of '*unpopular popular*' music (1996, p. 20, italics in original) to extend the idea that techno is better for having gone 'somewhere else' (Craig, cited in Rubin, 2000, p. 121). Pope promotes an idea of techno as straying from 'its many admitted influences' (Pope, 2011, p. 41) through its pushing of artistic and political boundaries. Techno, for Pope, is musically defined by its wordlessness, repetitiveness, and 'its modulated industrial noises such as alarm bells or sirens, all of which combine to produce a post-human, though funky, musical form appropriate to a dystopian environment' (Pope, 2011, pp. 37-8). Pope stresses that through ultra-repetitiveness, techno demands more of the listener – including an appreciation of subtle and gradual changes that give the music 'soul' and 'funk' (p. 39). If this claim is to be accepted, minimalist art music such as that by Steve

¹¹² I use Hall's definition of 'primary' genres here (2008, p. 179): house, techno and breaks.

Reich also has ‘soul’ and ‘funk’ – and unsurprisingly, some dance music producers and DJs argue this very point – it is not a coincidence that Steve Reich has been a ‘special guest’ at a number of dance music festivals. The hypnotic loops of art music minimalism are a realisation of the restrained philosophy of minimal techno, an infinite breakdown that is never broken by the drop of a pounding, sub-bass frequency, four-four kick drum.

Thus, Pope, a scholarly author, shows here an unabashed favouritism for techno above all other genres, in a style that is at least as polemical as that of most participants. As I will reinforce in my later review of genre literature in this chapter, this kind of scholarship can ultimately be absorbed back into a culture’s perception of itself, and heighten existing prejudices. Pope’s statement that ‘Detroit techno *is* altogether more ‘serious’ and artistic than a genre like trance’ (Pope, 2011, p. 36) supports the anti-trance sentiments of DJs such as Alexander Coe (known as Sasha):

Now I go to one of those festivals and you see how powerful that trance music thing is. You see 15,000 kids going nutty to one of those classical pieces of music. With a 145 bpm trance beat behind it. It works in that environment, but it’s a million miles away from where the scene came from. The only credible music I’ve ever seen work in that environment is the Chemical Brothers and Underworld. Underworld especially. They just know how to do it. It’s that stadium sound, and they’ve done it without being cheesy. But they’re one of the few that can actually pull it off. (Coe, 2005)

Sasha, widely known as the man who changed the status of DJ to rock star (Coe, 2005), here promotes Underworld and Chemical Brothers, the most successful incarnations of the techno genre, as the only acts to credibly and effectively perform to stadium crowds. When a figure of stature such as Sasha expresses views such as these, participants undoubtedly listen.

Among the scenes studied in Edinburgh, house is understood to be a particular genre of music, but among dance scholars and professional dancers, it is also understood to be a formal style of dance with prescribed stylistic characteristics and even steps.¹¹³ The metric basis of house is almost exactly the same as techno in the cases I have researched

¹¹³ I learned this at a conference in 2011 (PoP Moves) in which there were two presentations about house – one by a cultural historian, Tim Lawrence, who presented on the house *scene*, and one by a dancer and lecturer at UEL, Carla Trim-Vamben, who presented on house as a dance style, and workshoped house dancing steps to other delegates.

– characterised, like its disco roots, by a metronomic drum machine pattern that punctuates every beat. House ranges from approximately 120 to 130 BPM. While it is often slower than techno, it is also often identifiable through a sense of lightness that techno does not possess. It is arguably just as repetitive as techno, but often does not feel that way to the listener, as it contains more melodic material. Sommer (2009) provides a helpful, if subtly different definition of house to my own:

...house encompasses a wide range of musical and dance styles. Its fundamental premises, however, are baseline tempos that hover around 125 to 130 beats per minute, versus the slower 100 beats per minute of hip-hop or the faster 150 to 180 beats per minute of electronic-techno rave music. (Sommer, 2009, p. 286)

In addition it is common for house to use sounds that are recognisable as live instruments or their electronic imitations, including the voice. Vocal lines are more common in house than in techno, functioning as additions to the texture while also commonly conveying important melodic and sometimes lyrical content. Sommer (2009) effectively describes the vocal lines of house:

...the vocals (if any) ride the music and enhance the beat. Words are not as important as the sound of the voice, the prolonged high wail of rapture. The lyrics tend to be self-referential to the underground scene... The insistent repetition of a few words, the fixed rhythm, and the song wailing obscure meaning. Decontextualised, the lyrics seem decidedly flaccid. When coupled with the high emotionality of the music, however, the words taken on a rhythmic intensity and meaning, turning into a narrative exhortation that propels the dancers. This sonic/tactile fusion situates the receiver in a space very different from the everyday. (Sommer, 2009, p. 286)

Other 'live' instruments also feature in house, although their liveness is often illusory, more likely to simply be reminiscent of live instruments. For instance, the below excerpt of 'Kaleido' by Marek Hemmann (Audio 73) may include samples of a real bass guitar (audible throughout the excerpt) or a horn section (such as at 0.00 to 0.03 and 0.17 to 0.19). However, a sense of artifice is maintained by a continuous metronomic beat and by the effects added to the vocal samples that occur during these 'horn' parts. There is no confusion that this is electronically produced music:

Audio 73. Marek Hemmann - 'Kaleido'¹¹⁴

¹¹⁴ Marek Hemmann (2009) 'Kaleido'. 02.30 – 03.00

The use of melodic pitched material in addition to vocal lines and recognisable references to live instruments contributes to the popularity of house as a genre, in contrast to techno. Some of the most well-known club dance tracks since the 1980s can be considered house, and some house tracks analysed throughout this thesis have been popular chart hits at various points, with their reach ultimately extending beyond nightclubs into radio and television. This is rare for any other genre of dance music, with the exception of some popular trance, which developed more recently than house. Given that house arguably has the widest reach in terms of audience, it is the genre that nightclubs most commonly advertise that they play, particularly as DJs have a large repertoire of ‘floor fillers’ from which to select.¹¹⁵

The subgenre tech-house can be simply and most effectively described as combining various elements of techno and house. However, rather than being understood as a subgenre that sits precisely between the two primary genres, it would be more accurate to argue that tech-house has its own distinct and recognisable aesthetic. Tech-house is played at the club night *Circus* equally if not more than techno, depending on the DJs invited to play at each gig. ‘We Do’ by Chaim is an example of tech-house that includes the percussiveness of techno with a gentler bass line. Rhythms sound as if they might be placed very slightly off the metronomic beat to provide a sense of swing or buoyancy. A clear, pitched layer is introduced along with the first percussive sounds at the start of the excerpt, at a register that allows it to stand out in the mix. When the vocal layers enter at 0.13, the house essence of this track is brought to the fore:

Audio 74. Chaim - 'We Do'¹¹⁶

Another vocal layer later enters at an interval of a third above the first. Solo voices are occasionally singled out from the ensemble, creating a sense of a group of backing vocals with the occasionally improvised part:

¹¹⁵ A copy of the CD to which I refer – *FloorFillers: The Ultimate Party Album* (2006) – was provided to me by the agency through which I was contracted to be a mobile wedding DJ. The CD contains a selection of popular songs from various eras that were claimed to be ideal for filling a dance floor. I was initially averse to this kind of prescriptive selection, yet its promise was fulfilled at thirteen successive weddings at which I performed.

¹¹⁶ Chaim (2009) ‘We Do’. 01.40 – 02.10

Audio 75. Chaim - 'We Do'¹¹⁷

The vocals do not overwhelm the other parts through their dynamic level, but still draw the most attention, in part through sparser textures that create listening room. 'We Do' shares many characteristics in common with techno such as its speed and multiple percussive layers. However, its easily discernible vocal lines and bouncing hi-hat make it distinguishable from techno. Additionally, the short, melodic vocal motifs contain discernible lyrics, while in techno, lyrics are often spoken rather than sung.

Another tech-house track, Losoul's 'Up The Beach', builds up percussive layers from the track's beginning to its texturally thickest point. It contains a large array of sound effects, some of which have a vague sense of pitch but would not be considered melodic. There is also a low-register riff that acts as a bass line. The below excerpt illustrates this range of sounds:

Audio 76. Losoul - 'Up The Beach'¹¹⁸

'Up The Beach' does not have a particularly heavy or dominating bass line, and the lightness that this provides the track, along with its slower tempo of 121 BPM could put it into the category of tech-house. Although its electronic soundscape is shared with techno, its slower tempo and lightness arguably supersede these features due to their overall impact on the mood of the track. As in 'We Do', 'Up The Beach' contains slight displacements of rhythms from meter. Moreover, hi-hats, snares, and other high frequency percussion sounds are fairly evenly balanced with other parts, while in techno, the kick drum can unambiguously dominate the texture.

The third tech-house track I have chosen for analysis is 'Darkened Room' by Edinburgh production duo The Setup. It has a vocal line that articulates the word 'house', a bass line that is discernibly melodic and a number of pitched layers which function as melodic riffs:

¹¹⁷ Chaim (2009) 'We Do'. 04.00 – 04.30

¹¹⁸ Losoul (2009) 'Up The Beach'. 05.00 – 05.30

Audio 77. The Setup - 'Darkened Room'¹¹⁹

The vocal style is reminiscent of an older style of house that contains chopped yet soulful vocal samples, simple parallel melodic stabs, bass lines which reflect their funk lineage and familiar drum breaks. The Afro-percussion, multilayered rhythms and impression of lightness created by the melodic stabs and tempo contribute to my categorisation of this as tech-house rather than simply house. These features can be heard in the below excerpt:

Audio 78. The Setup - 'Darkened Room'¹²⁰

The vocal parts in 'Darkened Room' have multiple functions that include lyrics, rhythm, melody, timbre and texture. In the first of the two above excerpts, the female vocal line functions as a melodic, rhythmically punctuating sound. This layer complements the instrumental stabs with which it is in dialogue. The male vocal is both textual ('house... everybody house') and rhythmic. Unlike the female vocal part, it is not melodic, but a spoken line. In the below excerpt, the effects that are added to the female vocal stabs allow the boundaries between the human voice and machine sounds to be blurred:

Audio 79. The Setup - 'Darkened Room'¹²¹

'Darkened Room' also uses extensive sweeping sounds and other non-melodic, atmospheric effects that rise in frequency and thin out (due to filtering). These sounds, audible for the first 20 seconds of this excerpt, also contribute to the 'tech' in the label 'tech-house', and are used in the breakdown:

Audio 80. The Setup - 'Darkened Room'¹²²

¹¹⁹ The Setup (2012) 'Darkened Room'. 02.15 – 02.45

¹²⁰ The Setup (2012) 'Darkened Room'. 05.30 – 06.00

¹²¹ The Setup (2012) 'Darkened Room'. 03.30 – 04.00

¹²² The Setup (2012) 'Darkened Room'. 05.10 – 05.40

A complementary, helpful method of examining genres is through observation of and participation in dancing. In the case of tech-house, subtle musical features are reflected in dancing styles. The subtle forms of swing in tech-house are embodied by clubbers through hip movements and a greater range of upper body movement. Syncopations (emphases on off-beats) are reflected through accentuated head and shoulder movements. The on- and off-beat movements of the DJ playing this fast tech-house set are shown below, with the DJ joined by a clubber on stage in the second excerpt:

Video 4. *Circus* - October 2012¹²³

Video 5. *Circus* - October 2012¹²⁴

Historically, disco pre-dated house, and was arguably one of the most pervasive influences on it; what was to become understood as house was sometimes referred to as ‘post-disco’ (Fikentscher, 2000, p. 19; McCall, 2001, p. 17). It is also claimed that house music, which began as an explicit reference to the venue known as the Warehouse in Chicago (Brewster and Broughton, 1999, pp. 312-15, 317-19, 322, 331; Butler, 2006, p. 40; Eshun, 2000, p. 75; McCall, 2001, p. 18), was ‘an attitude and a feeling’ rather than ‘a particular genre of music’ (Brewster and Broughton, 1999, pp. 314-15; McCall, 2001, p. 18). House only later became associated with the style of *music* that was played at the Warehouse (McCall, 2001, p. 18). According to Brewster and Broughton (1999, p. 314) and Eshun (2000, p. 76), the style of dance that accompanied early house music in Chicago was called ‘the jack’. This style is described by Juan Atkins as ‘like a jerk motion... if you were to get hit from behind in an auto accident... that would be similar to jacking’ (Atkins, quoted in McCall, 2001, p. 19). The dancing in the above footage could be seen as a variation on this theme.

Drum ‘n’ bass is a distinct style of music that diverges aesthetically from house and techno and has developed into a self-contained culture (see Belle-Fortune, 2004, pp. 10-21; Hall, 2009, pp. 134-56; Noys, 1995, pp. 321-5; Reynolds, 2008, pp. 238-254). Some drum ‘n’ bass participants in Edinburgh perceive themselves as either separate to the

¹²³ Gadir, T. (2012) Fieldwork footage, Clip #viii, *Circus*, 26 October 2012. 48.39 – 48.49

¹²⁴ Gadir, T. (2012) Fieldwork footage, Clip #ix, *Circus*, 26 October 2012. 05.35 – 06.05

rest of dance music culture, or as constituting the most advanced end of a dance music continuum that began with other forms of breakbeat. The demographic of the drum 'n' bass scenes in Edinburgh is mostly white and within an age range of eighteen to twenty-four. Most drum 'n' bass participants that I have encountered during research are undergraduate students at the University of Edinburgh, and are either from England or the United States. Unlike the techno scenes that I study, a large proportion of the attendees of drum 'n' bass nights are male and those most heavily involved in the drum 'n' bass scene adopt a way of dressing that constitutes a particular kind of cap, loose and low-hanging trousers and t-shirts, and fashion sneakers (see Hall, 2009, pp. 1-2, 182, 203-4, 206, 208, 218). Although fashion is a visible aspect of drum 'n' bass and does not exist to the same extent in house or techno scenes, the music is the focus for participants.

The sound of drum 'n' bass is characterised by very fast breakbeats; one producer, Phil, described a drum 'n' bass beat to me as simply being 'a hip hop beat that is sped up four times', a point reaffirmed by Benjamin Noys (1995, pp. 321-2). Drum 'n' bass is a genre with varied and diverse manifestations, and is defined almost exclusively by its rapid, percussion-based rhythmic patterns and contrasting, slower but dominating bass lines. It is therefore easier to identify a drum 'n' bass track, and there is less room for disagreement, than in the cases of tech-house and techno; anything that has this particular rhythmic formulation using percussive sounds and a tempo of approximately 170 BPM or higher is unambiguously classified as drum 'n' bass. Drum 'n' bass that is played in Edinburgh club nights is often noisy, with 'dirty' and 'wobbly' sounds, to use Hall's descriptions (2009, p. 1). 'Hammer House' by Cause4Concern, excerpted below, is illustrative of this preferred style:

Audio 81. Cause4Concern - 'Hammer House'¹²⁵

The distorted male vocal lines are spoken rather than sung. The distortion adds to the abrasive aesthetic of the track. In the same track, the breakdown is dramatically jerked back into movement by an emphatic return of drum rhythms and bass lines at 23 seconds in the excerpt below, as is often the case in drum 'n' bass tracks:

¹²⁵ Cause4Concern (2010) 'Hammer House'. 01.15 – 01.45

Audio 82. Cause4Concern - 'Hammer House'¹²⁶

Another type of drum 'n' bass is more anthemic and melody-based. One such example is 'Join The Foray' by Firefly, in which an evocative, almost cinematic synthesised string part holds pitches for an extended duration, accompanied by a prominent bass line:

Audio 83. Firefly - 'Join The Foray'¹²⁷

The deep sub-bass and the fast percussive rhythms constitute the bread and butter of drum 'n' bass. These function as the support structure for a track that comprises various melodic riffs of a range of timbres in a minor tonality. In a later section of the 'Join The Foray', a root position broken C minor triad is played repeatedly, dominating the texture through its register and timbre:

Audio 84. Firefly - 'Join The Foray'¹²⁸

The above track contains no vocals but a 'wobbly' modulating sub-bass that, together with the propulsion of the drum rhythms, add a sense of aggression that counters the otherwise syrupy melodic layers and sustained synth-strings. This anthemic style can be taken a step further into vocal drum 'n' bass tracks. These, I argue, fulfil the drum 'n' bass genre criteria only in that they contain distinctly drum 'n' bass rhythms, without which they might easily be confused with other vocal pop music. The introduction of Calibre's 'Even If' excerpted in Audio 85 is a track that fits this analysis, providing little clue to what will follow:

Audio 85. Calibre - 'Even If'¹²⁹

Although those familiar with drum 'n' bass may anticipate the style of the remainder of the track through the pace of the above cymbal hit, the drum 'n' bass character is only

¹²⁶ Cause4Concern (2010) 'Hammer House'. 01.15 – 01.45

¹²⁷ Firefly (2011) 'Join The Foray'. 04.45 – 05.15

¹²⁸ Firefly (2011) 'Join The Foray'. 03.30 – 04.00

¹²⁹ Calibre (2010) 'Even If'. 00.30 – 01.00

revealed the moment that the kick drum drops. This occurs after a crescendo, a distortion of one of the melodic synth-string parts and a clipped reverse cymbal or sweep:

Audio 86. Calibre - 'Even If'¹³⁰

This form of drum 'n' bass is unlikely to be heard at an Edinburgh drum 'n' bass event. This is due to the shorter length of club nights, not as conducive to gradual build-ups or wind-downs as events of longer duration. Drum 'n' bass DJs, aware that they have a limited time to bring out the maximum energy of clubbers, are more likely to play all of their most 'banging' tracks than techno DJs, aiming for a maximum release of energy from clubbers. Calibre's 'Even If' is arguably better suited to home listening or lounge space than for dancing in a main room DJ set. Its bass line does not have the abrasive tone of the more aggressive drum 'n' bass tracks, and almost disappears into the background in a manner comparable to the accompaniment of a double bass in a string ensemble. This is an appropriate analogy given the string ensemble allusions that consistently make up the background of this track:

Audio 87. Calibre - 'Even If'¹³¹

Trance is a genre that shares elements with other genres of popular music. For example, there is a stronger than usual focus on traditional melodic formulations (rather than the one-note melodies of techno described in Chapter 5). While trance tracks, like techno, are propelled by powerful and persistent bass lines, treble parts can be seen to dominate the texture, and would likely command the attention of the Western listener. Similar to the genre of house there is almost invariably a dominant melody line whether in vocal or non-vocal form, which may be set against one or more counter-melodies. Paul Van Dyk's 'For An Angel (PVD E-Werk Club Mix)' contains a non-vocal melodic line that is doubled at the octave and emphasised through its echoes in arpeggiation (similar to Tiësto's 'Bright Morningstar' excerpted earlier):

¹³⁰ Calibre (2010) 'Even If'. 01.20 – 01.40

¹³¹ Calibre (2010) 'Even If'. 02.45 – 03.15

Audio 88. Paul van Dyk - 'For An Angel (PVD E-Werk Club Mix)'¹³²

While the genres of electro and dubstep also contain higher register sounds that dominate their textures, they differ from trance in that their mid- and high-registers contain distinctive and coarse timbres. I have generally experienced the cultures that surround them as more aggressive, male-dominated and macho than trance, house or techno although this would vary from place to place. In order to best illustrate the aesthetic differences between these genres to techno, house and trance, I have provided one short excerpt of a track by well-known electro artist Justice, 'Waters Of Nazareth', and a dubstep track by superstar Skrillex, 'Scary Monsters And Nice Sprites' respectively:

Audio 89. Justice - 'Waters Of Nazareth'¹³³

Audio 90. Skrillex - 'Scary Monsters And Nice Sprites'¹³⁴

I will now draw on the literature examined for this thesis to expand theoretically upon the above discussions of genre. Tastes are, as Bourdieu highlights, a result of cultural exposure over time, influenced by social circles, the resultant development of understandings of aesthetic rules, and formal and informal musical education (Bourdieu, 1984, pp. 23, 36, 43-5, 47-9, 59, 61, 68). The existence of genres allows people both to distinguish their tastes from those of others and to simultaneously create a sense of closeness with people who share their tastes (Bourdieu, 1984, pp. 50-6; Dibben, 2002, p.123). Genres, according to Grove Music Online, can be defined as 'class, type or category, sanctioned by convention... [that] codify past repetitions, and invite future repetitions' (Samson, 2012). The process of categorising helps audiences navigate through artworks (Frith, 1996, p. 77; Samson, 2012). This is pertinent to dance music, whose quantity and breadth of music is vast, and in which, as McLeod (2001) highlights, there are hundreds of genres and subgenres (p. 60). The above discussion aligns with Frith (1996, pp. 88, 93-5) and Hall (2008, p. 178), showing that genres constitute a way

¹³² Paul van Dyk (2002) 'For An Angel (Pvd E-Werk Club Mix)'. 04.15 – 04.35

¹³³ Justice (2005) 'Waters Of Nazareth'. 02.15 – 02.45

¹³⁴ Skrillex (2010) 'Scary Monsters And Nice Sprites'. 0001.15 – 01.45

for fans of music to socially belong. As the Grove article argues, genres can be seen as 'dependent for [their] definition on context, function and community validation, and not simply on formal and technical regulation' (Samson, 2012). Studying genre should therefore not be restricted to analytical studies of music as object, but also investigate the interaction between music and its audience (*ibid.*). More specifically, musical genres should be examined together with their associated 'scenes', which Peterson and Bennett define as the social environments in which musicians, fans and other key agents create performances of particular musical styles (2004, p. 3).

According to David Hargreaves, Dorothy Miell and Raymond MacDonald (2002), one of the main social functions of music is to exhibit one's sense of identity (p. 5), and genre, as already argued, is one of the key ways for dance music participants to assert their collective identity. Identity has many components, is expressed in many complex forms, and 'indicates forms of passionate attachment, whether of two persons or many, united by shared beliefs, interests or values' (Poole, 2010, p. 13). Genre as identity for dance music participants is embodied through shared producing, DJing, dancing, listening and discussing. Moreover, identity, in the form of genre, is also, as I have shown, tied up with location. The geographically-specific studies of Bennett (2000), Fikentscher (2000), Hall (2009) and Malbon (1999) support the link I have established between participants' understandings of genre and their locations (see also Connell and Gibson, 2003). As Bennett observes, while tastes in particular types of music are often shared globally, 'they become infused with distinctive knowledge and sensibilities which originate from the particular region in which they are lived out' (2000, p. 27). Following Mark Tarrant, Adrian North and David Hargreaves (2002, p. 135), I argue that identity can be carefully 'managed'. In the specific case of genre identity, this 'management' occurs in all the aforementioned modes of sharing (from producing to dancing and discussion), taking place not only among other participants but also for the benefit of outsiders who observe and judge them. Yet another form of identity often discussed in relation to dance music is consumer identity. Bennett (2000, pp. 25-7) and Malbon (1999, pp. 20-4) argue that the act of dancing to dance music is an expression of consumption that contributes to clubbers' identities and ultimately contributes to their sense of autonomy or agency. I will examine the notion of agency later with reference to the musicological analyses of Butler (2006; 2001) and Garcia (2005).

A multitude of subgenres exist within dance music primary genres (see McLeod, 2001; Reynolds, 1997, pp. 84-6). These are divided by vague boundaries which, according to Fabbri (1981, pp. 59-61), Frith (1996, p. 93) and Hargreaves, Miell and MacDonald (2002, p. 14) are always in flux. As Frith notes, it is this state of flux that means genres are only definable in hindsight, when they are no longer fresh, when they are *passé* (1996, p. 88). Fabbri argues that new genres sprout from existing genres, and therefore share most characteristics with past genres, only diverging from them enough to mark out their newness (1981, p. 60). Subgenres are often formed through an exaggeration of particular features of existing genres, so that these features become central to identification of the new genres. The aforementioned example of minimal techno exemplifies this phenomenon. In this case, as in others, more artistic credibility is attributed to the form when the features of the genre that make it relatively unpopular are exaggerated. The DJ and producer Robert Hood, whose music I excerpted above, suggests this through his assertion that minimal techno represents a 'return to the original underground' (Sicko, 1999, p. 200). The creation of subgenres, while making categorisation more challenging (or in the case of dance music, almost impossible), allows characteristics to be illustrated more clearly (Dubrow, cited in Samson 2012), and also lends itself to the ability to define features in greater depth. The ability to demonstrate knowledge of subgenres lends credibility to the musical choices of a participant, with taste consequently being considered a set of informed opinions. These ultimately lead to the negative definitions of genre referred to above, and by extension a differentiation between differing groups (Hargreaves, Miell and MacDonald, 2002, p. 5).

As early as the 1940s, Adorno observed that popular music was divided into genres by fans, and referred to this as a proof of popular music's 'pseudo-individualization' and the illusion of choice that it presented listeners (Adorno, 1941, p. 26). Contemporary dance music genre labels are also partly constructed, or at least perpetuated, by participants (Hall, 2008, p. 180, 188). However, dance music retailers and magazines have a strong hand in establishing and disseminating genre and subgenre names (McLeod, 2001, p. 61). As Frith (1996, p. 88) and Fabbri (1981, p. 53) note, it is impossible to determine exactly the starting point of consensus on genre labels. Rather, Frith sees them as the result of 'an interplay between musicians, listeners, and mediating

ideologues', based on the paradoxical balance between the 'promise of exclusivity' and the intent of the music industry to 'mak[e] them available to everyone' (Frith 1996, p. 88). The written account provides an artefact of the otherwise ephemeral experience (Straw, 2004, pp. 91-2) and allows cultural knowledge to be transmitted. Media, for instance, that both distributes the music and subsequently talks about it, occupies an ideal position for dissemination of this knowledge (p. 96). An example of this is the way in which Beatport releases particular EPs, while also contributing to their publicity through their news page that allows the reader to listen to a track by the featured artist and buy it with one click of a mouse. I would extend this argument further and propose that retailers, labels and media (in other words, industry) are joined by popular and scholarly literature on influencing how dance music participants understand genres.

The above outlines of techno, tech-house and drum 'n' bass and the subsequent discussions of literature, show the extent of subjectivity in the process of genre interpretation, the seemingly arbitrary nature of genre boundaries, and the challenge of choosing musical features to highlight these boundaries. Genre is discussed by every interview respondent regardless of the nature of their participation in dance music, helping them to describe or encompass musical elements. Genres are not closed systems, but constitute a helpful framing 'typology' to insiders, a shorthand method for describing musical elements that form recognisable styles. Despite its open-ended and fluid nature, genre functions as one of the most important ways for fans to share their musical experiences, and define themselves socially.

Familiarity and nostalgia are key social triggers for dancing. These are two concepts that relate to each other and also to the previously discussed theme of genre. A sense of comfort and belonging can be important starting points to encourage a crowd to dance, and familiarity can help to foster this atmosphere. Familiarity occurs on multiple levels, such as attention to a single familiar sound, recognition of a track or a song, association with other familiar music, or acknowledgement of a familiar genre or style. It also has different functions, such as to assert cultural know-how or to fit in with a social group. Familiarity with specific tracks is less common for genre-focused participants, where

music that DJs play is rarely, if ever, heard outside the context of club nights. Clubbers whose main dancing experiences are accompanied by ‘chart toppers’ or ‘mainstream music’ tend to prefer dancing to music that they know from radio, television or the World Wide Web. These songs often have vocal lines with lyrics; the social experience of dancing to this music revolves as much around singing along to songs as dancing in time to the beat. The theme of sharing is key for Edinburgh clubber Gabi, who identifies that enjoyment of a song combined with the experience of sharing are her key triggers for dancing:

Gabi: I guess, if my friends are with me, and it’s [a] song that like, I share with my friends, it’s one of those things that you want to dance with them too.

While Gabi does not explicitly state that she has to be familiar with the music in order to like it, the events that she attends are made up almost exclusively of songs from pop charts that are assumed by the DJ to be familiar to clubbers already. Another clubber, Fran, describes a complex, socially aware response to familiar music that she does not necessarily enjoy. Specifically, even if she does not like a song, Fran expresses enthusiasm if others are doing the same, in order to blend in with the positive mood of the dance floor:

Fran: There’ll be a song which I’m like ‘oh I hate that song! I hate that song!’ and I’ve heard it loads of times. But then if I’m in a club, and just the opening bit to the song, just ‘cause I know it, I’m like, ‘I love this song!’ And then it starts, and I’m like ‘oh wait, no I don’t.’ But just because you... but yeh... in a club... it’s just like everyone’s having a good time.

This form of awareness is also required of DJs, although many do not prioritise attention to the social dynamic of their dance floor. Additionally, Fran describes the process that she undergoes at every club night to avoid being self-conscious on the dance floor, namely, ‘minimising [her] movements’ in order to avoid drawing negative attention to herself. These comments lead me to question whether her choice to dance even to the tunes that she does not like is for the benefit of the collective atmosphere. Perhaps Fran’s attraction to this kind of conformity is rather to the way that it allows her to blend into the crowd.

Fran and Gabi are the exceptions to the majority of participants in my research. When choosing a night out, most respondents tend to seek club nights that will play music within their preferred genres. However, even Gemma, a clubber who prefers techno, expresses similar sentiments to Fran about the way in which recognition provokes a reaction, regardless of whether she likes the music:

Gemma: ... I've often had moments where, you know, I recognise the hook, I recognise that piece of music, so that's... and-and-and I -yeh. And I want... I-I've often gone (sighs) you know, it's at that point when you're like... when you think, well, do you really like that or do you just like it because you recognise it, and at what point does recognition play a part in you liking a piece of music? But yeh, it's like when you hear a song on the radio, and you want to let everyone know that you know that song too (laughs).

Here, Gemma implies that the reasons she will express recognition of something in a nightclub might be similar to the reasons that she 'want[s] to let everyone know' when she is familiar with a song playing on the radio – in order to display her knowledge. By contrast, Gabi continues to discuss dancing in terms of shared experiences with friends, attributing her urge to dance to familiarity and positive feelings associated with songs that she knows and likes:

Gabi: I guess just songs, that when you hear them you're like (gasps) 'I love this song!' And... em... that feeling of recognising something.

The majority of interviewed participants who are part of Edinburgh techno scenes enjoy clubbing to music that they do not hear on the radio, and that does not have lyrics or consistent vocal lines. Part of the thrill for these participants is to be taken on a journey by the DJ that is almost entirely made up of unfamiliar tracks. Therefore, familiarity is generally only applicable to these participants at the level of genre, with an occasional recognition of musical elements and reminders of other tracks that they know. It is rare for tracks to be known to techno clubbers by their titles or names of producers, even if they are recognised by sound. Only the most involved participants – usually DJs and producers – are exposed to enough music to potentially recognise and name specific

tracks that are played at a techno night. Even in this case, however, the method of music purchase for most DJs is online, and the extensive range of music to be found digitally would make it unlikely that DJs would buy exactly the same music.

Nonetheless, genre-focused participants do appreciate the rare moments when they do recognise a track. Genres such as trance are popular enough to have a range of 'hits' known by a larger spread of people. Thus, trance nights lie somewhere in between the events that play music from the charts and techno music that few people on the dance floor have heard; participants at large trance events would expect to hear some tracks that they know. Harry is a clubber in Sydney who enjoys going to trance nights. His response to 'what makes you dance?' makes sense in light of his interest in trance:

Harry: If, like a song that I know really well and really like, then I might get up and get my friend to come have a dance with me.

This is not just important to people who like 'hits' in the pop charts or trance. An Edinburgh clubber, Victor, who likes a range of genres including techno and psytrance, similarly notes that recognition is one factor that increases his enjoyment of dancing. However, it is interesting to note that he mentions the familiarity of smaller-scale musical elements before discussing recognition of whole songs:

Victor: If anything catches my ear, like a little catchy riff, a loop, or something that I recognise from another song and I go oh, what's this! Or anything, you know, even if it's just like cheesy mainstream stuff, but like the chorus is catchy, and you hear it once, and then you can sing along. It's fun. And, like, that helps. Just see like everyone doing that. Like there's a... sort of group feeling thing.

The important 'group feeling thing' also attaches to familiar music a sense of weight or significance, as clubber and *Circus* co-promoter Dana highlights:

Dana: ...familiarity is something which'll grab me... if you hear those, then that'll always get me... it's that sort of lovely thing of, 'I know this, this means something to me.'

Although Dana enjoys techno that she has not heard before, familiar music evidently lends emotional meaning to her dancing experiences. Overall, the accounts of the above participants demonstrate the ways in which familiarity can contribute both to a willingness to dance and to increasing the pleasure and meaning gained from dancing.

The experiences of familiarity described by participants above, also point to a theme that commonly occurs in conjunction with musical experiences, that underlies a great deal of discussion about dance music: nostalgia, effectively encapsulated in the below lyrics accompanying a Dubfire DJ mix:

*When I look back into the days,
The better days,
Things would be so smooth,
People were dancin',
People were smilin',
The music was pumpin',
There was a feelin',
Life was a party,
The party was life.
But somehow things changed,
It just don't feel the same,
Have you ever thought about the days,
You know, the better days,
Do you ever try to come up with the ways,
You know, better ways,
To make it feel like it did,
In the better days?*¹³⁵

Nostalgia, in one sense, is an experience that can often begin with an acknowledgement of familiarity, and end with the connection of this familiar sound to a memory or association that is not about the sound but about surrounding circumstances. Whether these are real memories or fanciful projections, they are significant to the listener and make listening and dancing more meaningful. This phenomenon is of course not

¹³⁵ This is a transcript of lyrics from the vocal sample in a live mix by Dubfire on a BBC Radio 1 *Essential Mix* broadcast on 2nd September, 2007. The vocal sample does not feature in the original track 'Ribcage' that it is accompanied by in the live mix, so presumably was produced only for the show. The sound file of this particular live broadcast has been since been removed from the BBC website and the only record of it online is a written track list on the archives (available at: <http://www.bbc.co.uk/radio1/essentialmix/tracklistingarchive.shtml?20070902>).

specific to dance music, but a common experience to all forms of music that are associated with meaningful circumstances in people's lives. On a dance floor, nostalgic emotion can be expressed through intensified movement to the music.

Some participants use nostalgia as a way to display maturity and knowledge in a similar manner to Fran and Gemma's display of recognition of a track or song. Nostalgia can also be used to show regret for the disappearance of an original, uncorrupted scene with original, uncorrupted music. Older participants discuss this issue most frequently, as they have a longer history of involvement with a scene. However, somewhat surprisingly, nostalgia also permeates the consciousness of eighteen or nineteen year-old clubbers. One participant, Mark, aged eighteen at the time of his interview, uses similar terms to older clubbers and ex-clubbers to describe how his scene is evolving.

Participants in Edinburgh techno scenes often express a sense of injustice at the changes that their scene has undergone. On one hand, techno is considered by its participants to be true to its underground roots both in musical style and in drug consumption – specifically of MDMA. On the other hand, some participants believe that while techno club nights of the past were filled with people on the same drug (MDMA), this is no longer the case at contemporary techno events. According to Frank, a DJ and promoter of a long-running club night in Edinburgh, clubbers are 'more engaged' or 'attendant' when on the same drugs, and 'get off on the music more'. By contrast, Frank states that some contemporary clubbers take ketamine, are resultantly 'very dull', and are usually 'on something, alcohol included' but that it is 'very mixed up now'. Another Edinburgh DJ and promoter, Cam, has similar concerns; the below is an extended response to the question that addresses how Cam decides what features or factors make people dance while he is DJing:

Cam: Drug changes affected a changing scene, people less likely to stay 'til the end, now it's more cocaine and snortable drugs and less ecstasy. The scene took a turn for the worse, it became less friendly and more about status.

It is likely that the discussions in these interviews are not the first that Frank and Cam have had on this topic. These assertions that are encountered not only during interviews but also in conversations at afterparties, circulate firstly among older participants who

were present for the 'original' scene, and their fluid manner leads to their appropriation by younger participants who learn to discuss this 'original' scene as if they were there. Cam feels strongly about the link between the quality of music, crowd and drugs that recreate what he sees as the best aspects of the past techno scene. These views affect his choices as a DJ, promoter and clubber, and leaks into his responses to almost all my questions, even those that do not obviously relate to this issue.

The DJ and promoter Ben argues that Red Bull and vodka, and caffeinated drinks more generally have started to dominate clubs. Although he later underplays this comment by suggesting that the drugs themselves have not changed as much as the 'generations' of clubbers who take them. The fact that drugs are a significant component of nostalgic experiences appears to be exploited by authors who use drug-related metaphors to evoke nostalgic sentiments, and through these sentiments, a disappointment with a scene's negative transformation. As Blaze (quoted in Eshun, 2000, p. 85) argues, '[y]ou go to a club now and you just get real hard music... it's like being on speed, it's not a spiritual experience'. It is also possible that, although it is the 'hard music' that causes the feeling of 'being on speed', this is in fact a euphemism for actual MDMA or ecstasy experiences being replaced by speedy, less empathetic drugs.

Nostalgia is not the only way that events of the past are processed by participants. One issue revealed through participants' extensive, unprompted communication of nostalgia and the past more broadly, is that older techno DJs, producers, promoters and even clubbers assume the role of connoisseur, being experts not only on dance music but also its culture. They are expected to conduct themselves with an air of serious professionalism. The way in which this kind of older participant deals with the past is not by glorifying a past scene but through a reverse nostalgia – a categorical denial of their former experiences of dance music. This includes the lack of acknowledgement of extensive and frequent drug use and a silence on the central position of mass drug use at the techno events for which they perform, promote or produce music. These older participants perceive themselves as having grown out of their reckless drug-taking phases. When asked about how they came to be involved with dance music, they discuss the instruments that they played before learning to DJ or the evolution of dance music

more broadly. At least three DJs state that they are optimistic about the ability of dance floors to appreciate music without drugs. This is fascinating as almost all of their early experiences of techno involved heavy drug use. One DJ and promoter, Kane, who decisively stopped consuming drugs during the course of my research, was asked in an interview whether drugs impact how he DJs to a dance floor. He provided the following response: ‘I would like to think people can enjoy the music without drugs’.

The social triggers of familiarity and nostalgia have a distinctly psychological flavour. In a contemporary study of music and the mind, Krumhansl, along with Peretz, Godreau and Bonnel (in Ziv and Omer, 2010, p. 191) have demonstrated that subjective musical preferences are determined in part by whether or not we are familiar with the music we are listening to. Promoters of the types of music that require effort and strain for their appreciation certainly do not see this as a justification for playing familiar music at their nights. Theodor Adorno is well-known for his negative judgement of music that fits into this category, and some of the reasons for this are expressed in his discussion of the process of musical recognition (1941). Adorno divides the act of recognition of a popular song or piece into five stages (p. 33), some of which fit into the types suggested in my above discussion of familiarity. Summarised, they involve the initial general recognition of sound, the specific recollection of sound, the association with a title and author (knowledge that can lead to social acceptance), the sense of ownership of the recognised music and the ascription of value to it (pp. 33-7). These stages unfold as an intrinsic component of the reception of vulgar popular music and its problematic rewards. In techno scenes, the phenomenology of familiarity most often stays at Adorno’s first stage – ‘vague remembrance’ – if even reaching this point. Progression through all five stages would only occur, and infrequently, for experienced DJs and producers. Techno club nights are musically fleeting, and familiarity is not an openly promoted experience. It is, as I suggested above, perceived by those who consider themselves discerning, as an antithesis to correct ways to experience techno. Thus the philosophical connections made by Pope (2011) between Adorno and techno are quite plausible. For Adorno, familiarity is merely the result of an oppressive method used to convince listeners to ‘accept’ popular music: that is, through the ceaseless repetition of songs (1941, p. 32). Likewise, techno DJs are ideally expected to form new set lists for each performance, being afraid to repeat the music played by other DJs.

The nostalgic recollection of dance music history as a bygone era of rebellion and subversion through music and dance is a popular interpretation disseminated not only by participants but also by media. As Thornton (1995, p. 162) argues, this content then feeds back into participants' understandings of the scene. A newspaper article in *The Scotsman* (2007b) makes a political argument for acid house culture in the 1980s, for example. In this article, 'the hip young things left conspicuous consumption behind' when they started dancing to this liberating form of music. It is, of course, within the interest of club owners to promote these philosophies if it attracts the kinds of crowds with which they wish their clubs to be associated. As Sub Club director Paul Crawford explains, '[w]e were aware that we were part of a scene, an underground movement (Crawford, quoted in *The Scotsman* 2007b). This statement has undertones of nostalgic sentiments that link the seminal scene in Crawford's reputable club to the overarching development of global dance music culture. For Crawford, this scene 'lost its credibility' when 'it became mainstream', and the commodification of raves is to blame for this. In another Scotsman article (2007a), age also adds to the underground credibility of the famous Glasgow venue. In its original state, the 'underground' club is described as 'a shabby Seventies bolt hole' (*ibid.*).

The way that familiarity and nostalgia affect dancing demonstrates the way in which enjoyment of music is one of the key social prerequisites for filling a dance floor. The cause of this enjoyment may conflict with the philosophies of a particular scene, as is the case in techno, but will nonetheless continue to be an essential factor. Familiarity appears in various incarnations, taking on a greater depth of personal and social meaning when it is succeeded by impressions and expressions of nostalgia. Familiarity in all its forms, in addition to nostalgia as an extended response to this familiarity, are useful concepts through which to begin to understand the conflicts within the philosophies of techno.

Chapter 7 – Intoxication

During the course of this research, acquaintances who are not participants in my study have occasionally inquired about my research topic, subsequently volunteering to tell me what makes *them* dance. Most often, they have stated, intoxication is the apparent trigger for dancing. Such responses tend to come from people who do not view dance as their first choice of leisure or entertainment. Hence, when they find themselves on a dance floor for rarer social occasions, they require a boost – either of energy, or of confidence – in order to dance, or to enjoy dancing. By contrast, participants in genre-specific dance music scenes usually stress the musical and other social triggers, rarely raising intoxication as a response to the question of what makes them dance. The differences between these two types of response are noteworthy, as the use of illicit drugs is socially acceptable within contemporary dance music cultures, an attitude that is not matched by the broader population (Shiner and Newburn, 1997, pp. 517-18). Producers and DJs in my case study underplay the importance of perceptions of music under the influence of drugs. This is matched by celebrity international DJs and producers who periodically make public statements denouncing drug use as the means of enjoying their music. Paul Van Dyk, for example, has attempted to dissociate dance music from drugs, although he produces trance, a genre strongly associated with ecstasy use (Reynolds, 2008, p. 441). The relative silence of all participants within my case study has made the ethnographic research of drug-use a significant challenge.

This chapter is therefore as much about exploring these challenges as discussing intoxication, particularly on MDMA or ecstasy, as a trigger for dancing. In researching this topic ethnographically, I draw partly upon my *folk* knowledge – a highly fluid and non-verifiable understanding of a topic that is further complicated by the illegal nature of the practices being discussed. My understanding includes how particular drugs affect dancing to music, recognition of the visual signs of changes in physical body-states and behaviours that indicate participants' drug use. I have spent several years in the company of people under the influence of drugs at club nights and afterparties, I have performed as a DJ to hundreds of people who are on drugs, and I have danced under the influence of drugs. However, in the absence of my respondents' discussions of this

phenomenon, I will, in this chapter, draw upon literature that both supports my observations and raises a range of additional problems with the research of recreational and illicit drugs.

MDMA is a chemical sometimes consumed in its pure form, and also known as the key ingredient in the street drug ecstasy, in which it is often mixed with other substances to make it less pure and more profitable. Sometimes the mixing of MDMA with other substances in ecstasy pills amounts to additional or different effects to pure MDMA. Hence, to be completely accurate, the terms should not be used interchangeably as ecstasy pills are often deliberately designed to have different effects to pure MDMA, for example, with additional stimulant effects of amphetamines that help to increase users' energy levels for the purposes of dancing. Occasionally, ecstasy pills contain no MDMA at all; users refer to these as 'duds', particularly if they have effects that do not compare with those of MDMA. Further, MDMA is used primarily in its pure (and more expensive) form by the participants in dance music scenes that I researched, and less in the form of ecstasy pills, which can be, according to the experiences of some participants, unpredictable. This is also geographically specific – pure MDMA is more widespread in Britain than in Australia, where ecstasy pills are more common. However this chapter includes references in literature and by clubbers to both manifestations. Hence, I will overlook these differences and refer to both with the understanding that even when ecstasy is used by participants it is still the MDMA experience that is generally sought by clubbers.

The environments in which MDMA use takes place are varied, including both club nights and afterparties. While it is not a musical trigger, it is also not exactly a social trigger such as genre, familiarity or nostalgia. Instead, I argue that MDMA is first and foremost a drug that increases participants' attention to and appreciation of all of the musical triggers I have discussed to this point. This fact undoubtedly influences DJs' and producers' musical practices. For example, the combination of MDMA with adrenaline-inducing sweeps and filtering effects is understood by producers and DJs to propel the dancing body into a heightened state of pleasure. The 'low pass filter sweep' is one such example, exploited by superstar French producers Daft Punk, according to Reynolds (2008, pp. 491-2). DJs often use this understanding to sculpt sets that mould

the mood of the dance floor, using visual cues of the mind and body-states of clubbers (see p. 465). In the words of Reynolds, 'MDMA... [has] a uniquely synergistic/synaesthetic interaction with music, especially uptempo, repetitive, electronic dance music' (2008, p. xxx). Moreover, use of MDMA increases clubbers' willingness to socialise in dance music environments. This enhancement occurs both through the process of its consumption and through physiological responses to the chemical. It is not common for people to take clubbing drugs while alone. Thus, participants' understanding that taking MDMA is a social act, together with the readiness of participants to embrace its physiological effects, makes the drug a powerful social stimulant that contributes to the desire to dance.

My focus here is primarily on MDMA; as mentioned above, it is consumed extensively at Edinburgh techno nights. However, other drugs are also a part of Edinburgh techno participation. For example, alcohol is the common denominator in local clubbing scenes, and cannabis is frequently used both after and in between nights out. Some participants also consume cocaine, and others ketamine. During afterparties, cannabis is often smoked in large quantities along with consumption of additional MDMA and alcohol. A small minority of clubbers choose to take hallucinogenic drugs at techno nights. One participant, Sarah, however, prefers to take MDMA for dancing to techno, and LSD for dancing to psytrance. Although she enjoys taking LSD more, Sarah has experienced 'bad trips' combining LSD with techno and has changed her drug use as a result.¹³⁶ Another participant, Pat, has commented that his impressions of the techno music at the techno and house club night *Circus* were less positive while he was on LSD than on other occasions or on MDMA. This may be, in part, attributed to the way in which participants 'find' techno or house through their consumption of MDMA, while others have their first exposure to psytrance while consuming hallucinogenic drugs such as LSD. These formative first experiences seem to contribute to long-term associations between drugs and musical styles.

¹³⁶ I do not address drug use associated with the psytrance scene as it has rather a different culture and phenomenology, focused more on hallucinogens (see, for example, Reynolds 2008, pp. 443-5). Edinburgh has a small local psytrance scene that has occasionally overlapped with the techno scenes I researched, but the parties are generally separate.

The time at which MDMA is first consumed at a club night varies between individual clubbers. Some participants dance for a period of time in a club before taking MDMA, and others take it when they first begin to dance. A number of clubbers take it before they reach the door of the venue, and some do so at home or at a friend's home before departing for the club night. These practices are usually determined by the factors that help participants to maximise their pleasure from drug use, in addition to being influenced by the practices of their friends. Choices such as these also relate to whether clubbers are reliant on the effects of the drug for dancing, or alternatively, whether they take pleasure from dancing while sober. This, again, can be said to correlate with clubbers' levels of energy or confidence before they feel affected by the drug.

Thus, depending on the degree to which clubbers rely on MDMA or use it to enhance their enjoyment of music, its visible impact on dancing can range from subtle to obvious. Although most MDMA users display some physical signs of their use, for example through jaw clenching, some clubbers consciously make efforts to hide these outward signs. Additionally, the dancing movements of some participants can appear the same whether sober or affected. For others, dancing movements suddenly and dramatically alter in pace, range of movement, style and energy, in the first moments that they feel the effects of the drug. Some participants do not dance at all until they feel its effects, thereby making their mind-state particularly visible to others who recognise its effects. For example, before the period of my research, in Sydney, I observed the behaviour of an all-male group of five friends at a club night. They stood on the perimeter of the dance floor, silently watching those already on the dance floor who were primarily women, and bore facial expressions that suggested boredom or indifference. After approximately half an hour, they made eye contact with each other for the first time, shared in a 'group hug' and began to dance enthusiastically. For this group, on this night, drugs and dancing were unmistakably interdependent.

The drug-taking practices of DJs and promoters 'on the job' can be different to those of clubbers who attend purely for leisure. For example, some interviewees tend to remain sober while working, while others are accustomed to working while affected. Of those who work while sober, many take MDMA and other drugs, or drink alcohol with friends and colleagues, after the end of their club night. Afterparties in Edinburgh last

until the afternoon or evening following the club night and are held at participants' homes. Many participants take MDMA in the middle or near the end of club nights, consequently feeling awake, and keen to socialise when clubs are scheduled to close. The afterparty is therefore the inevitable next stage of the night – a space and time for participants to take more MDMA (or in the case of DJs and producers, take it for the first time), drink alcohol and bond with friends for many hours.

In my above descriptions, I have sought to illustrate the large range of ways that MDMA is consumed by participants during nights out. This range of practices is matched by the variety of effects that MDMA has on different users, although some of the broader phenomena I will now explore are common to most experiences. MDMA is one of a number of drugs associated with changing users' perceptions of time. Some participants feel that time accelerates, and are taken by surprise when the end of a club night is reached. Others perceive time as slowed down, static or frozen; in these cases, a minute of dancing can feel significantly longer. Jörg Fachner's study (2011) also highlights the way in which perceptual changes of temporality caused by drugs (in his study, primarily cannabis and LSD) can lead to an expansion or contraction of time during musical listening (pp. 266, 269-71). This suggests that the time-warping effects of MDMA are comparable to other drug experiences.

The altered sense of time is not restricted to 'clock time' but can also affect the perception of tempo. Sean Leneghan's PhD thesis (2010) offers a different insight into the way tempo is felt by clubbers on ecstasy, and the consequent impact on dancing. At a Sydney club night, he observes that the music increases in tempo, thereby increasing the energy and speed that clubbers dance (pp. 53-4, 234). This is an unusual observation – it is rare for the tempo to be changed at an aurally perceptible level throughout dance music events. Neither clarifying which genres of music are performed in the context of this analysis, nor providing any other musical details, Leneghan may be perceiving changes in density of sound, or thickness and intricacy as changes in tempo. It could equally be a result of the overall change in temporal perception, and of the ways in which bodily processes accelerate and intensify while under the influence of MDMA.

An altered sense of time can also mean that participants' perceptions of rhythmic elements are changed. In some cases, the smallest rhythmic unit in a track is audible, while in others, users perceive a holistic impression of a track, DJ set, or whole club night. Additionally, Fachner's observation that cannabis and LSD can influence the listener's sense of musical meter (2011, pp. 272-3) also applies to some of the possible effects of MDMA. Lastly, the repetitive beat, an element that undoubtedly affects temporal experience, is conducive to the physical and mental state produced by MDMA use. As Reynolds (2008, p. xxxii) and Shapiro (2003, p. 253) highlight, repetitive physical movement that is already induced by MDMA is further augmented by these repetitive and rhythmic elements in the music. Participants become locked into the combined hypnotic elements of the music and their responsive movements to it. Moreover, as Malbon argues, it is the *combination* of perpetual motion of the music and the environment of the club night that helps to subvert participants' perceptions of temporality (1999, p. 102). It also helps that participants under the influence of MDMA are able to, on one hand, forget time, particularly if it passes more quickly, or on the other, have a more patient relationship with it when it seems to move slowly, than what they would while sober. This change of the nature of participants' emotional relationship to time contributes significantly to the ability of people on MDMA to dance for several hours longer than they can do while sober, or under the influence of alcohol alone.

MDMA helps to trigger dance through drawing a user's attention to sensory processes. Senses that are taken for granted come to the fore of the clubber's consciousness and become a source of pleasure and exploration. The reason for the popular categorisation of the drug as an *entactogen*, meaning 'to touch inside' (Beck and Rosenbaum, 1994, p. 79; Pentney, 2001, p. 216) is that the extra pleasure gained from touch is one of the most commonly discussed effects of MDMA – touch of others, of the self, of the moving body in space, and of the dance floor. As Beck and Rosenbaum (1994, pp. 73-4), Measham, Aldridge and Parker (2001, pp. 38-9) and Push and Silcott (2000, p. 8) note, touch becomes more pleasurable specifically through being more pronounced. Additionally, the enhancement of the sense of hearing is the main means through which the musical triggers – low frequencies; loudness; tension-inducing breakdowns; qualities of electronic sounds; uplifting melodies; empathy-inducing vocal lines – have their

maximum impact. The sense of sight – of other clubbers; the DJ; the space; lighting – is also affected. Specifically colour, shape and movement can often be perceived in new ways.¹³⁷

There are as many subjective experiences of everyday life as there are individuals, so it is hardly surprising that the ways in which MDMA enhances sensory experiences vary dramatically between participants. One clubber, for example, recounts that during her first clubbing and ecstasy-consuming experience she became fascinated by the movements of how her arms looked and felt in motion. This fascination became her primary mental and visual focus for some time during this event. Another clubber says that the greatest pleasures of MDMA for her are tactile – being massaged, stroked and hugged by others. My own initial response involves a shimmering or flickering of my field of vision that settles into a light haze within seconds or minutes. The remainder of my trip is centred upon a unique auditory experience that involves a considerable transformation of timbre perception, aligning with Malbon's argument that MDMA fundamentally alters perceptions of music (1999, p. 132). Kick drums and bass lines, along with sharper, crisper sounds seem smoothed-out, their edges removed. Synthesised, high-pitched 'brass' sounds used in some house music, distorted guitar sounds used in some electro, dubstep and drum 'n' bass, and high-pitched percussion sounds from minimal techno, that are painful to my ears while sober, transform into sounds that further propel dancing movement. As a result, I tend to remove my earplugs while I no longer notice the negative effects of loudness. As Reynolds (2008, pp. xxxii, 379) notes, louder music becomes more pleasurable under the influence of MDMA, allowing for the tactile senses to be stimulated in addition to the auditory.

The differences between sensory effects are further illustrated by Reynolds' descriptions of musical perception on ecstasy. For Reynolds (2008, p. xxxi), music becomes 'crisper and more distinct, but also engulfing in its immediacy'. Having discussed in Part I the challenges of using words to describe subjective experiences of hearing and dancing to dance music, it is difficult to ascertain whether this is a contrasting way to describe a similar experience, or a perception of musical timbre that is the opposite to my own.

¹³⁷ For accounts of the way in which MDMA or ecstasy affects the senses inside and outside of the clubbing context, see Beck and Rosenbaum, 1994, pp. 15; Leneghan, 2010, pp. 74-5; Malbon, 1999, p. 108; Reynolds, 2008, p. xxxi, 110-112, 234; Sanders, 2006, p. 6, 48, 73-4.

Although the subjective nature of this description can be read as implicit, it is not openly acknowledged. Reynolds' also relates the effects of ecstasy to genre. For Reynolds (2008), '[h]ouse and techno producers have developed a drug-determined repertoire of effects, textures and riffs that are expressly designed to trigger the tingly rushes that traverse the Ecstatic body' (pp. xxxi-ii). This point is then extended into another vivid metaphorical account:

Today's house track is a forever-fluctuating fractal mosaic of glow-pulses and flicker-riffs a teasing tapestry whose different strands take turns to move in and out of the sonic spotlight. Experienced under the influence of MDMA, the effect is synaesthetic – like tremulous fingertips tantalizing the back of your neck, or like the aural/tactile equivalent of a shimmer. In a sense, Ecstasy turns the entire body-surface into an ear, a [*sic*] ultra-sensitized membrane that responds to certain frequencies. (Reynolds, 2008, p. xxxii)

Reynolds' argument that particular genres are 'designed' for drug use is also made in his tentative suggestion that the genre he most praises, hardcore, cannot be wholly appreciated by those who have not experienced the sensations that listening to it on ecstasy can produce (2008, p. 131). For example, the 'chipmunk' style of high-pitched vocals that I have referred to previously ostensibly heightens the physical sensations brought on by taking ecstasy (p. 126). However, I contend that many dance music genres have their own 'repertoire of effects, textures and riffs' that are potentially enhanced by MDMA use, and further, that responses to these effects are as much culturally and socially developed as physiologically caused. Hence, it would be misguided to argue that one or two dance music genres are best matched to the effects of MDMA. Instead, MDMA can be said to enhance a variety of musical triggers that would vary according to setting and genre.

The above effects, while being strong attractants for participants to the experience of dancing on MDMA, are not necessarily the main draw for its use for the majority of participants. As McElrath and McEvoy (2009, p. 206) note, all aspects of the social settings in which MDMA use takes place, contributes to the degree to which its effects are enjoyable, including the taken-for-granted celebratory atmosphere in which it is often consumed. What is more, as Howard Becker's (1953) reputable sociological study of cannabis use illustrates, a starting point for gaining pleasurable experiences from a mind-altering drug is learning how to take it from more experienced users. This involves

the learning of specific techniques that contribute to achieving a desired experience (Beck and Rosenbaum, 1994, pp. 62-3; Becker, 1953, p. 237; Kelly, 2009, p. 24). In the case of MDMA, the techniques are likely to be focused on enabling longer-lasting dancing, gaining more pleasure from dancing and feeling comfortable being under the influence of the drug in the company of others. Although these are often understood to be the goals of MDMA use, they are not always natural or initial responses to its effects. If a first- or second-time user becomes a more experienced user, these learned processes eventually become 'natural'. With specific regard to triggering dancing, I would argue that the desire to be in the company of others and share communal experiences helps to encourage people to dance together. MDMA is known to increase participants' awareness of and concern for the feelings of others, contributing to its reputation as a drug which is primarily enjoyable in company. As Pentney (2001, p. 216) and Push and Silcott (2000, p. 8) highlight, the alternative label to 'entactogen', for describing the psycho-active effects of MDMA, is 'empathogen'. This is reflective of the way in which MDMA is believed to make it easier for users to reach out to, communicate and empathise with others.

Ethnographic, sociological and cultural accounts of MDMA and dance music culture stress the role of MDMA as a catalyst for social bonding in the clubbing context (Beck and Rosenbaum, 1994, p. 66; Leneghan, 2010, pp. 67, 98, 159-6; Measham, Aldridge and Parker, 2001, p. 39; Push and Silcott, 2000, p. 8; Reynolds, 2008, pp. 38-9, 44). For example, as Leneghan (2010, pp. 155-6) observes, people under the influence are often more willing to share with strangers intimate or personal details of their lives. This willingness is articulated by Beck and Rosenbaum (1994, p. 68) and Reynolds (2008, pp. xxxii-iii) as a need – to 'direct' their feelings of empathy toward others. Interestingly, this need implies a loss of control of the filters for the kinds of conversations usually reserved for close friends. What is considered appropriate in topics of conversation shifts significantly during club nights and afterparties where MDMA use is common. The effects of MDMA can even drive users to attempt to resolve disagreements, by allowing them to address their concerns without the judgement or resentment that might otherwise be attached to these interactions. The drug has also acquired a radical reputation for encouraging people with 'fixed' hostilities (such as rival football teams) to show respect. According to Brewster and Broughton (1999, pp. 428-9, 431, 435, 442-3),

Push and Silcott (2000, pp. 62-3, 70-1) and Reynolds (2008, pp. 44-6, 57-60), for a brief period in the late 1980s dance events were being promoted by leaders of football clubs, and their efforts to successfully control football-related conflicts could be attributed to the large numbers of club members under the influence of ecstasy. However, Brewster (in Push and Silcott, 2000, p. 62) and Push and Silcott (2000, pp. 70-1) caution against giving too much weight to the positive effects of ecstasy and clubbing culture in this context, highlighting that football tribalism in Scotland and the whole of Britain did not disappear.

The participants of Edinburgh techno scenes have experiences on MDMA that outlast the ephemeral dance event. However, unlike participants in the sociological studies of Beck and Rosenbaum (1994, pp. 70-3, 83-93) and Measham, Aldridge and Parker (2001, pp. 25-7), Edinburgh participants do not explicitly evaluate the loss of social inhibition and willingness to speak with strangers that they experience while under the influence of MDMA as transformative or spiritual in nature. While they may, as highlighted above, explore personal topics in their conversations, their primary associations with MDMA are fun, dancing, appreciation of the musical triggers discussed above, loss of social inhibitions, and consequently, what Leneghan describes as ‘E-Talk’ – discussing superficial or ‘nonsense’ topics that serve no purpose other than to display a positive mind-state (2010, pp. 151-2). Active socialising between strangers does occur at the Edinburgh techno night, *Circus*, and there is an atmosphere of familiarity on the dance floor. I have observed long-term friendships being either forged or reinforced between participants through mutual MDMA or ecstasy use during and/or after club nights. These interactions are primarily concentrated within the pre-existing social groups that include DJs, promoters, regular friends and supporters. I would therefore argue that the extent to which the drug can contribute to the breaking down of social barriers is only proportionate to the willingness of participants to use the drug for this purpose. Nonetheless, ‘deeper connections’ can and have been made between participants based in part on the use of MDMA (Beck and Rosenbaum, 1994, pp. 68-71; Leneghan, 2010, pp. 154-5).

The state of *Extasis* is to be simultaneously within and outside oneself (Malbon, 1999, p. 49), *in touch* with others and with bodily sensations. This effectively summarises the

complex combination of physical and social responses to MDMA described above. This phenomenon can be compared with clubbers' own references to experiencing *euphoria* (see also Malbon, 1999, pp. 105, 107). The term euphoria not only evokes an elevation of bodily and cognitive pleasures but also encompasses the state of wakefulness often felt when under the influence. Euphoria is perhaps implied in Malbon's use of the phrase, 'sensations of upness' (p. 107), an idea that corresponds with the uplifting effect that I earlier explored with reference to the impacts of melodic lines. Scientific studies of MDMA and other drugs also address this idea through measurement of physiological 'chills' (see, for example, Grewe, Kopiez and Alternmüller, 2009; Salimpoor, Benevoy, Larcher, Dagher and Zatorre, 2011).

The extent to which MDMA is researched in laboratories may be a partial response to the interest and concern with the effects and risks of the drug by governments. MDMA or ecstasy use is undoubtedly the target of extensive public anti-drug campaigns by governments that I have observed both in Australia and in Britain. A smaller body of research on the sociology and anthropology of drug use also exists (Beck and Rosenbaum, 1994; Becker 1953; Fachner, 2011; Kelly, 2009; Leneghan, 2010; McElrath and McEvoy, 2002; Measham, Aldridge and Parker 2001; Sanders, 2006). However, there are few studies in any discipline on the interaction between drugs and music, and almost none specifically on MDMA or ecstasy and dancing to music. One neuroscientific study by Feduccia and Duvauchelle (2008) examines the ability of music to enhance or improve the feelings of euphoria that MDMA triggers. This study is a rare examination of positive effects of the drug in the context of a vast field scientific research that focuses on its negative effects. This study observes and records the physiological responses of rats under the influence of MDMA, listening to either music, white noise, or no sound (p. 190). Among the fascinating results gained from this study are the notion that rats are stimulated by white noise while on MDMA, suggesting that 'auditory stimulation' increases the 'rewarding value' of the drug, and spatial environment contributes significantly to the pleasure rats derive from MDMA (p. 193). Furthermore, when music and MDMA are used together, the serotonin and dopamine levels of rats increase to levels that are the same as taking a higher dosage of the drug (pp. 193-5). The combination of MDMA and music trigger what the researchers refer to as 'locomotion' in rats (p. 195). While white noise is said to have 'an equal amount of

energy per frequency band’, music contains more variation, hence MDMA and music together ‘may work on common neural networks involving reward and arousal and most likely influence each other’ (*ibid.*). This study is fascinating but problematic in that in its attempt to resolve the uniquely human, subjective experience of music participation, dancing, and voluntary mind-altering substance use, it measures physiological responses in a highly controlled environment. It assumes that rats possess their own subjectivity, or a sense of ‘reward’ analogous to that experienced by humans, and also that experiences of pleasure can be objectively determined through measurement of these responses. These assumptions are not questioned or addressed in the discussion of the experimental method.¹³⁸ Additionally, I would challenge the validity of an experiment that engages with a question about an experience that is specific and relevant only to humans (rats do not go clubbing). Besides its unquestioning transfer of rat responses to human subjectivity, Feduccia and Duvauchelle also do not address the question of social contact, other than to state that rats were happier on their own than in the company of other rats.

Discussions of MDMA in humanities scholarship can also be problematic. To begin with, accounts of dance music by the cultural scholars and sociologists to which I have referred in this chapter often emphasise drugs as the centre of dance music experience. Others, that I will illustrate below, omit this discussion altogether. I will first, however, provide a brief historical contextualisation of drug use and reactions to it in British clubs. Use of alcohol and drugs in contemporary clubbing scenes are part of a continuum of similar practices in past night club cultures and music scenes. According to Kohn, during the First World War, licensed venues in Britain were obliged by law to close by half past ten, and underground after-hours clubs were spaces in which alcohol and drugs such as opium and cocaine were readily consumed (1997, p. 120). Some of these concerns included that young women were being robbed of their innocence through drug consumption, and could die from overdosing (p. 123). This is significant for contemporary discussions of MDMA and clubbing, as it was the first comparable large-scale, morally-charged press and government campaigns against drugs (p. 120). The focus on young women as victims, and deaths from drug overdoses also continued

¹³⁸ Leneghan (2010 pp. 26-7, 30, 35, 208, 239) and Measham and Moore (2006, p.18) also take issue with scientific methods used to study MDMA use and effects.

in media coverage of dance music events and resulting government policy reactions in the 1990s (see, BBC, 2011a; 2011b; 2011c; 2002; Parliament of NSW, 1995; Push and Silcott, 2000, pp. 82, 84, 86, 177-9).

Similarly, the fear of youth as a distinct group with its own cultures and behaviours surfaced in this early period in Britain (Kohn, 1997, p. 126). Young people, influenced by African American musical and dancing cultures, came to be perceived as segregated from adult society (*ibid.*). Cocaine use occurred in nightclubs throughout the ‘dance craze’ of the 1920s, used by female dancers in order to stay alert, confident and ‘charming’ while dancing for their clients (pp. 124-5). As Kohn highlights, the end of the Second World War gave way to a new drug culture – including cannabis and hallucinogens – that, due to its association with the lifestyle choices of groups with marginal political views, became another manifestation of existing fears of race and sex (p. 129). The link between drugs and musical cultures was reincarnated during the ‘rave’ years of the late 1980s and early 1990s when MDMA began to be used as a dancing drug, and this phenomenon has persisted into the twenty-first century. As Spiers (cited in Push and Silcott, 2000, p. 51) argues, the ‘pattern’ of ecstasy use and culture tends to recur in cycles, with each successive population of young people appropriating it in subtly different ways.

The specific use of mainly MDMA is unique to the electronically produced type of dance music discussed in this thesis, as stressed by Brewster and Broughton (2010, pp. 60-1), Kohn (1997, pp. 119-22) and Lawrence (2003, pp. 24-5). Journalist Decca Aitkenhead (1995) even goes so far as to argue that dance music is ‘a popular culture defined by the drug Ecstasy’. While this is somewhat of an exaggeration, for many participants, the drug is the initial gateway to both exposure to and enjoyment of dance music (Leneghan, 2010, pp. 136, 225). One interviewee in Malbon’s ethnographic study of clubbing practices, estimates that ‘90%’ of the pleasure she derives from clubbing comes from MDMA (1999, p. 195). Statistically speaking, it is among the top three drugs used at dance events, used more commonly in these social contexts than in private homes (Forsyth, 1996, pp. 514-18; Malbon, 1999, p. 117).

The literature on dance music scenes reviewed so far is primarily British. By contrast, writing on dance music from the United States often takes the opposite approach, choosing not to address the consumption of drugs. This could be due to drug use being less common in the American scenes discussed in these works (often specific to a city), or alternatively, could be reflective of a lack of willingness by scholars and authors to discuss the topic for a variety of reasons. According to Sicko (1999) and Detroit producer Juan Atkins (in Sicko, 1999), early Detroit techno did not include a culture of drug use, a phenomenon that only arose with the 'export' of techno to European dance music scenes (pp. 114-16). Atkins and Sicko both emphasise the 'shock' experienced by Detroit techno artists when they learned that people in Europe were dancing to their music while on drugs, arguing that this was not the intention of the techno producers (*ibid.*). Fikentscher (2000) similarly refers to the ways in which drugs are a feature of European dance music culture, in contrast to past New York City underground dance music scenes (p. 113). In Fikentscher's work, drugs are only referred to negatively; the entry of violent criminal elements and crack cocaine into the scene leads to police attention that ultimately leads to the demise of the scene (*ibid.*).

Another example of this absence in dance music literature from the United States is in Butler's (2006) musicological examination of rhythm and meter, the effects of displacement dissonance on the listener, and the perceptual elements of interplaying rhythm patterns. There is no reference to how drug use might possibly affect perception of these elements, with the exception of the possibility that these unique perceptual effects can be compared with the effects of a 'psychedelic' trip (p. 173). Through attributing musical qualities that can be appreciated without drug use, Butler may be bestowing a sense of legitimacy to dance music in a theoretical field dominated by art music. Alternatively, and not unreasonably, this reference to the effects of a 'psychedelic trip' may simply be a metaphor for the unique effects that these rhythmic features can have on a sober listener. Butler's choice not to address this issue could also relate to a possible lack of drugs in the particular scenes on which he focuses. Nonetheless, it is surprising that a music-theoretical work on dance music that incorporates ethnographic methods would choose to not mention the effects of drug use on perceptions of rhythm and meter at all.

The geographical division described above is not altogether consistent. Some authors from the United States provide counter-claims of the prevalence of drugs in their particular research sites or cases. Harry Shapiro, for example, mentions that the Chicago house scene, unlike Detroit techno, was associated with drug use including cannabis, cocaine and LSD (2003, p. 258). More interestingly, according to Ken Spring (2004, pp. 50-1, 57), a local techno scene based in the period 1987 to 1996 in a neighbouring city to Detroit was reliant on the cooperation of drug dealers with club owners, event promoters, DJs, local police and local government. Indeed, Spring maintains that ecstasy use and dealing was an essential facet of the scene (*ibid.*). Given that this scene is stated as beginning in 1987, it would seem unlikely that the city was influenced by the re-importation of techno culture from Europe. Set against claims that Detroit techno culture in the 1980s was drug-free, this is a fascinating case, perhaps demonstrative of how self-contained different scenes in the United States are (or were), compared with those in the United Kingdom and Europe. Nonetheless, the existence of drug use within these American scenes in the late 1980s to mid 1990s is a confirmation that dance music in the United States is not wholly distanced from drug culture.

Drawing upon Fachner's (2011, p. 267) concise summary, I would close this chapter by highlighting that the impact of drug use on musical perception derives from 'interactions between... pharmacological components and their psychological and physiological setting within a specific aesthetic context that frames the production, perception, and cognition of music'. The effects that MDMA has on altering temporal perception, drawing attention to the bodily senses and increasing sociability contribute to its use as an important trigger for dancing in my site of research. When comparing responses of participants in this case study with discussions of dance music culture in literature, a parallel can be drawn between the choice of some participants and authors to avoid conversations about drug use. In humanities and musicological accounts of dance music culture, ecstasy and MDMA is often either a focal point or conspicuously absent. The approaches to its discussion in British humanities literature often overtly emphasises not only its pleasant physical effects but also its potential for social and personal improvement. By contrast, scientific studies overwhelmingly examine negative physical and psychological effects, reflecting the concerns of governments that is perpetuated by negative media coverage. The thousands of scientific studies on MDMA

and ecstasy would suggest that this drug is the most commonly researched area of dance music culture. However, this research on MDMA largely takes place in isolation from dance music settings. Without aiming for an overly celebratory or uncritical tone, the nature of my research question begins to acknowledge the complex social and physical effects of MDMA which can trigger and increase enjoyment of dancing.

Part III: Philosophies of Techno

I have so far outlined the musical and social triggers for dancing that have emerged from research in Edinburgh techno scenes. Yet dancing is not only a form of social bonding over music but an expression of musical and social distinction. I therefore discuss this distinction in Part III, drawing upon the theories of Pierre Bourdieu (1984) and their appropriation by Sarah Thornton (1995). The distinction underlying the dancing triggers is expressed through a series of contradictory ideas or philosophies as I refer to them, divided by chapter. In Chapter 8, I juxtapose the philosophies of the old and the new. These include, for example, the conflict between equating older age with credibility and the pressure to produce music that can be marketed as innovative and cutting edge. Chapter 9 discusses the musical aesthetic terms in which ‘underground’ or ‘commercial’ are understood, and the necessary role of genre in defining their opposition.

In Chapter 10, I consider the simultaneous proposal of individualistic and community-oriented philosophies in techno. For instance, although there is evidence of the intent to promote inclusion without discrimination, educational and gender distinctions are used to reinforce and demarcate the boundaries of this community. Moreover, while this community-oriented philosophy is advocated, the individual voice of the creative, performing artist is also highly valued. In Chapter 11, I explore the tensions between physical restraint and bodily pleasure. Functional dance floor music does not gain the same respect as experimental ‘thinking’ music. However, it is not clear how this is reconciled with the simultaneous celebration of drug-induced recklessness and the primal urge to dance to a regular kick drum. Throughout Part III, I aim not only to illuminate these contradictions but to reflect upon their implications.

Chapter 8 – Old and New

In Part II, I briefly introduced the phenomenon of nostalgia as a trigger for dancing, suggesting that nostalgia is imbued not only with a yearning for the past but also with frustrations with the present. In this chapter, I will expand upon this issue by illustrating how reverence for the old and the new in dance music occur simultaneously. According to participants, techno as a social scene and musical genre possesses a special status. The definition of this status is contingent on which side of this dichotomy is being promoted. The proponent of the exciting nature of scenes gone-by, and the believer in the youthful and naïve immediacy of the scene are not necessarily different people. The same DJ who would never play the same track at two successive gigs and has just bought the latest effects unit to attach to their laptop DJ setup might also feel that the audio quality of vinyl records is unsurpassable. Similarly, the producer who feels the drive to release new music that will provoke interest in her peers and fans according to current listening trends may also believe that there are no better tracks than those produced by Detroit techno and British acid house DJs of the 1980s and 1990s. Thus, this dichotomy does not fit into two opposing camps but rather exists as an internal paradox that permeates the philosophy of techno. Moreover, youth – as both a concept and a group of people – is an assumed basis for numerous studies of popular music culture, and almost all studies of dance music culture. The final section of this chapter will dissect this association through a brief review of scholarly research on youth and its uses within dance music literature.

Many techno clubbers assert their maturity and distinction from younger and newer clubbers through a disdain for the category of *students*, a term that tends to suggest a particular type of younger clubber in Edinburgh in their late teens and early twenties. This sentiment may relate to the attraction of high numbers of students to events that are free or cheap, and their likelihood to attend events with their friends rather than attending genre-focused nights. These students are considered by techno clubbers to be vulgar in their enjoyment of chart music or any music that is considered broadly popular, they are associated with an inability to tolerate alcohol, and they are unwilling to spend money on attending events that promoters would consider to feature music of

high quality. This issue can become apparent at the doors of techno club nights, to which some students arrive, and almost immediately depart once they learn of the entry fee from security staff or promoters. Club night promoters or venues that wish to attract students tend to focus their promotions on alcoholic drinks offers, striking relationships with university unions and physically advertising on campuses. Attendees of techno club nights in Edinburgh span a relatively large age range, and also include a large proportion of technical college and university student attendees. However, even students who attend techno nights use the term 'students' disapprovingly. The tone of this label is therefore derogatory and implies more than its obvious definition. Student techno clubbers perceive themselves as belonging to an entirely different, atypical category of student that consciously does not allow their student status to inform their musical and social choices. Hence, promoters of techno nights do not use the same marketing strategies of those explicitly targeting students, focusing instead on narrower social circles comprised first and foremost of reliable regulars, and secondly of an ideally-expanding group of their friends with specific musical tastes that match those of themselves.

Although these attitudes would not be unusual in cities where high proportions of young people are students, and where the business of clubs is sustained by students, in the case of Edinburgh, prejudices against students effectively blend into the broader sentiments expressed about all younger clubbers. These include, for example, that they cannot manage their drinking or drug-taking properly, that they do not have historical appreciation for the scene or any experience of it, and that they consequently do not understand or appreciate the music. Therefore, if a group of clubbers arrive at the doors of a techno club night and are perceived as being uncharacteristically young for techno attendees, promoters might assume (but would not say) that they are at the wrong club night, having confused their venues. A related assumption is that the clubbers will realise the mismatch to their musical and social tastes when they spend a few minutes inside the club, and will probably then decide to leave. I do not suggest here that promoters do not want all clubbers to enjoy themselves, but that they are concerned that younger clubbers might not socially and musically blend into the crowd. Promoters desire this blending for the purposes of the greater social atmosphere. This is analogous to the way that a choral director might hope to avoid the protrusion of individual voices

that could disrupt the unified choral sound. If a participant cannot socially and musically blend, this can negatively impact upon the overall atmosphere of the event. Importantly, this prejudice is likely to increase manifold in the case of a group of young women in comparison with young men. This is not verbalised to the clubbers themselves but will be commented upon among promoters, DJs and other staff; I have also been guilty of making similar age-related judgements. I will later address related issues of gender in more depth.

The philosophy of the old manifests as powerfully through attachment to venues as it does through the ages of clubbers. As I mentioned earlier, during the period of my research, a number of clubs considered by techno and other genre-focused scenes underwent various forms of upheaval. In one case, a local club considered to be a regular and significant hub for many such nights was bought by a company that owns a number of UK hotels and venues, subsequently closed, and later reopened under new management. Its reopening revealed a new interior design and a renewed focus on appealing to students through mid-week affordable drinks. This led to a strong public outcry from participants of various musical communities including the techno scene. The relationships between most promoters of regular weekly and monthly club nights at the venue thus came to an end. The promoters of a techno club night, *Soundwaves*, for example, were forced to find another venue from which to run their night, along with numerous other promoters of various genres including electro and drum 'n' bass. This was arguably one among a number of factors that led to *Soundwaves* being held as an occasional rather than regular club night. Another club, under lease by a not-for-profit organisation might have been a viable option for these promoters, but was also soon going to be closed and relocated (for the second time in its history), with the existing space redeveloped for University of Edinburgh offices. Around the same time, yet another club that was particularly popular among techno clubbers closed down (not for the first time) due to a number of rumoured scandals including bankruptcy and fraud by the charity that owned it (Macaulay, 2010; Richardson, 2010). Hence, there were only one or two clubs left for techno club night promoters to move to, taking into account the willingness of venue owners to gamble on nights that would not always be financially profitable. These changes occurred within a short period and were perceived

by participants as both contributing to and reflecting the end of a ‘golden era’ of diverse, genre-focused dance music and live music scenes in Edinburgh.

The latter sentiments have also infiltrated the local fringe and mainstream media, and are exemplified by headlines such as ‘Why venue closures are signalling the demise of Edinburgh club culture’ (Ferguson, 2012). This is typical of the perspectives of opinion pieces and editorials which have, during this period of change in Edinburgh’s venues, generally perpetuated and reconstituted nostalgic narratives. The aforementioned Scotsman article quotes various bar and club managers and club night promoters in its summary of a ‘decade of ever-darkening gloom’ (Ferguson, 2012). Paul Robinson, a club night promoter, categorises club venues and echoes the views of almost all participants in Edinburgh techno scenes that I encountered over a two year period:

In a nutshell, there are two types of club venue. There are the flashy-looking chain-owned ones that play the most obvious lowest-common-denominator music as a safe bet in order to get as many people in as possible, and they are run by managers who are responsible to area managers above them, who are chiefly only concerned with bar takings. These places are mainly frequented by people who just want to go out and get drunk with their mates and don’t really care what they dance to as long as they’ve heard it plenty of times before. And then there are the independently run venues who recognise the need to put music first – and these places are the lifeblood of the city’s club scene. (Robinson, quoted in Ferguson, 2012)

Similarly, *The Scotsman* (2007b) reported five years previously that Edinburgh’s club nights were struggling due to venue closures. According to this article, the inability of these venues to survive correlates with an increasing popularity of bars with dance floors, and a lack of door fees. In sum, many participants associate particular venues with their formative clubbing experiences. This type of nostalgic sentiment is brought out in a heightened way when participants hear of the possibility that their favourite venues might close or that there will be changes that could affect their use of these spaces. Thus, the philosophy of the old does not only constitute the ages of people but also of physical environments that help people to form attachments to their scenes.

The techno philosophies that surround social and cultural issues differ profoundly from those that surround music. As I have discussed, the authority of the old is expressed through age-based discrimination and through attachment to venues that are perceived

to support the continuation of the scene through their hosting of events that deliver limited financial returns over time. However, this notion is effectively ignored when discussions of constant production of new material and the importance of newness within the aesthetics of music are entered into. When new participants attempt to engage with the techno scene for the first time they can find it difficult to keep up. This is due to the lack of repeating of most music played at techno nights from one event to another, which in turn relates to DJing conventions that have developed within this scene. Many techno DJs perceive their role as involving the dissemination of music that has just been released, and in doing so, introducing audiences to new sounds, expanding the expectations of clubbers, and propelling the musical aesthetics of dance floors. The difficulty that new techno fans have in becoming fully-fledged participants is also caused by a related challenge – the existence of copious numbers of relatively small-scale producers (probably thousands, conservatively) that are difficult to recognise and name. The result of this is that new participants are unable to engage in conversations about music in the same manner that they might have done for albums and songs in other popular music genres. This enormous body of music is bought and performed by DJs who are themselves overwhelmed by their musical turnover, and hence not always able to call on and refer to artist and title names of tracks that they have chosen to buy and perform.

The inaccessibility caused by the speed and volume at which new tracks are released is not restricted to new participants, although they are the first to articulate it. Even DJs who have been ‘out of the loop’ for a few months – perhaps not having had gigs, or been focused on producing their own music – find it challenging to recover their momentum of following producers, styles and record labels. Within these few months, a producer whose complete repertoire might have previously been owned and performed by the temporarily out-of-touch DJ may have changed her musical aesthetic or started to produce music that belongs to other genres. Alternatively, the DJ’s own tastes may have shifted away from the music of this producer. Nonetheless, the speed of musical output is reflective of another form of distinction – one based on a perpetual forward motion with which even the most engaged participants find it a strain to maintain pace. An example from my ethnographic research that epitomises this is the way in which it is almost impossible for collaborating DJs to keep up with other DJs’ musical purchases. I

am periodically invited by DJs and promoters Kane and Dom to perform a DJ set at *Circus*. It is common practice for us, along with other DJs such as Carl, to share the names of artists and tracks that we perform either during or immediately after a gig, and in these exchanges, it is not unusual that I would hear producers' names and titles of tracks for the first time. When I mention the names of my chosen tracks and producers, Kane, Dom and Carl also occasionally indicate their lack of familiarity with this repertoire. This is maintained, to a certain extent, by the unwritten understanding that we should steer clear of music that another DJ from our own club night has bought and performed. However, if an accidental overlap occurs, no one is particularly concerned other than the DJ who discovers that he was the second person to play.

The fact that techno DJs belonging to the same musical circles and playing at the same gigs do not share a common pool of artists might not only be a symptom of the pace at which techno moves. It could also be an indication that this pace results from processes that are greater than desires to assert distinction. The insistence on the act of sharing and the apparent desire to learn the names of titles and artists that other DJs play is illustrative of this. Sharing music with other DJs may be a means for inspiring the exploration of the music of a particular artist and ultimately buying their music for future gigs. However I would argue that this is not the main motivation for the form of sharing I describe. I do not, for instance, take a written note of the track names that Dom, Kane, or Carl share with me. I also rarely follow up such conversations by searching for the track by an artist that I have heard them play. What is more, this lack of follow-up does not solely relate to the aforementioned etiquette of avoiding playing the same music as other DJs. If this were the case, we would remain secretive rather than disclosing track and producer names. Instead, I argue that this act of sharing is a vital routine of social, collegial bonding that shows appreciation for the energy that other DJs pour into their search for new music, and more specifically, compliments their track choices through an expression of interest. As an example, at the Edinburgh Fringe Festival *Circus* gig in August 2013, Kane asked me about a track that I played during my closing set. The conversation that took place while Kane was packing up the stage after the event proceeded as follows:

Kane: What was that brilliant track you played with that massive bass riff around three-quarters of the way through your set?

Tami: Oh... massive bass riff, that could have been any number of tracks... give me something more to work with here...

Kane: The one that went: (sings bass line).

Tami: Oh! That was Mavericks, 'Fundamentals'.

Kane: It was so good! I've heard you play it before, and I remembered it. It's such a good track. A real banger.

It is apparent in this dialogue that Kane sought an opportunity to express that he liked one of the tracks that I had chosen to play. By contrast, it is not clear whether he paid heed to my response when I provided the 'who' and 'what' of the musical object that he so enjoyed. The response itself could be seen as peripheral or even irrelevant. It is the interaction and the act of sharing that is significant.

As I have shown, the philosophy of the new is perpetuated through DJ performance practice and through the saturation of the market with a substantial quantity of music by a large number of producers. This saturation is aided by production technologies that are time-efficient and used by an increasing number of producers who arrive at this computer-based technology with a high level of literacy. When technology is not an obstacle through being labour-intensive or specialised, output can occur more efficiently. This is a contentious issue for some techno producers whose first experiences have involved use of analogue hardware. That is, some producers feel that these technologies are *too* enabling – allowing almost anyone to be able to produce music. The challenges, accidental discoveries and physical involvement seen to be integral to the process of experimentation with synthesisers and drum machines from the late 1980s are not considered possible while sitting in front of a computer screen and clicking mouse buttons. Similar arguments are made with reference to use of DJing technologies. An experimental musical aesthetic is generally ranked higher by 'serious' techno participants than aesthetics that might lead to broader appeal or that would make

music more danceable. I will later provide large excerpts of participant comments on this topic that illustrate this sentiment.

Techno philosophies of the old and the new are further complicated when participants articulate a concern that new musical aesthetics are not appreciated by young or new clubbers. Cam, an Edinburgh techno DJ and promoter, explicitly links his views on the quality of music to perceived differences between younger and older clubbers:

Tami: Can you... sort of list some specific techniques that you might personally use yourself while DJing, to get people dancing? Let's say, if it's a quiet night, or people aren't getting up...

Cam: Yeh, well I mean there's always, I mean, at the end of the day, you can... it depends on what club you're at. I think it very much depends on where you are and you have to kind of know if the crowd's there for the music, that's one thing. *Scram* can be a hard one to judge because I find at *Scram* that a lot of the time, with the danger of sounding patronising, the kids aren't there for the music, they're there for the cheap booze and stuff and... you know, sometimes, you know, they just go on hardness for the sake of hardness, you know, they want to hear the nastiest record you've got. And it's not... it's not about you know, the kind of, em, the build anymore, it's not about the journey and em, I think it's hard to build a dance floor at places like that.

Cam then discusses the distinction of participants of his club night from the 'kids' that attend *Scram*:

Cam: You know, it depends, like I say... *Prime's* not so hard because we... I think we've got quite a musical crowd because of the artists we book and the music we play, we don't... we definitely don't sound like any other techno club that's in the city. And we pride ourselves on that. We go out of our way to not sound like any other techno club in the city. We don't want to hear anything in the Beatport Top 10, and we don't want to hear anything that, you know, is getting rattled by other DJs around the city. We want to play the more experimental stuff, or, sometimes, just good music, really. Like you know what I mean, I'm not so much into just generic house and techno...

Many of Cam's observations are similar to those that are made about students. *Scram*, held in the middle of the working week, is a club night that attracts a majority of students. Thus, 'the kids' may also be a reference by Cam to young student clubbers. As a promoter, Cam wants the night that he promotes – *Prime* – to be unlike any others. His use of the terms 'experimental' and 'good' are interchangeable.¹³⁹ As in avant-garde classical music philosophy, experimentalism is superior to predictability or familiarity. Yet, the notions of experimental musical aesthetics and newness directly oppose the desire to dance to familiar music, and occur at the same time as powerful feelings of nostalgia evoked by music from the past.

Musical aesthetic discussions take place not only among participants but also in media commentary. In an article from the Wall Street Journal online (Fusilli, 2012), shared with me by other *Circus* DJs, the tastes of younger clubbers are condemned, and taken as a sign of the downfall of global dance music. As could be expected, this commentary incorporates nostalgic references to older music and older figures. It is fitting that the name of the section of the Wall Street Journal in which this article appears is 'Arts and Entertainment', authenticating an acceptance of their division into two distinct forms. Entitled 'The Dumbing Down of Electronic Dance Music', the article argues that '[o]nce almost exclusively an underground movement, electronic dance music (EDM) is now embraced by a mainstream pop audience' (Fusilli, 2012). The author deems the tracks of artists such as David Guetta as 'cliché-riddled, white-bread house'. This is explained further:

... some of the new, radio-friendly music feels meek and calculated, especially when it's spun at high-energy festivals: The complex rhythms and synthesized orchestrations form a variety of sources that gave texture and a sense of adventure to the music now sit equal, if not secondary, to pop and hip-hop vocals. But there's a fear that hitting the mainstream will have a corrupting effect on EDM. (Fusilli, 2012)

Fusilli's overriding objections here are to perceived changes to musical standards since dance music has become popular. It is not only that more people enjoy dance music, but that the wrong types of people – 'a mainstream pop audience' – listen to it. Fusilli

¹³⁹ See Thornton, 1995, p. 97 for a helpful table of these and other value judgements.

refers to the comments of two techno producers and DJs of significant international reputation, Carl Cox and Richie Hawtin, to support his criticisms of the foregrounding of vocal lines over electronic sounds to manufacture chart dance hits. The focus of DJs such as David Guetta and Calvin Harris (both the subjects of Fusilli's disapproval) on vocal lines is, for Fusilli, a corruption of the ethos and aesthetic of older dance music. The article argues that these are examples of tasteless commercialism visible in large-scale festivals such as the Electric Daisy Carnival.

To the list that includes Richie Hawtin and Carl Cox (the techno figures whose words Fusilli draws upon to espouse the philosophy of the old) I would add the techno DJ and producer Jeff Mills. Like Cox and Hawtin, Mills is viewed as credible enough even to be referred to in scholarly work (see Pope, 2011, pp. 31, 38-9; Sicko, 1999, pp. 90-1, 139-141, 143-6, 193, 200-1). One of the greatest figures of techno nostalgia with a continuing career in performing and producing, Mills performed at one of the controversial Edinburgh venues mentioned earlier, as one of its final gigs in 2012. The gig was sold-out, which is a rare occurrence for techno events in Edinburgh. Not surprisingly, I encountered a number of participants from local techno scenes during the course of this gig, including DJ, producer and promoter Michael, who later said that what Mills played was a rare example of 'real techno'. Mills is famous for having been a pioneer of an idiosyncratic aesthetic that is highly recognisable. Further, he is perceived as having never compromised this unique musical style for the purposes of reaching a broader audience. In other words, he has never 'sold out'. The excerpt below provides a well-known example of his identifiable sound:

Audio 91. Jeff Mills - 'The Bells'¹⁴⁰

As an international, touring DJ with a manager in Berlin, Mills performs at large festivals in stadium-sized venues. He has a Facebook page, a Twitter account, a MySpace page, a YouTube channel and a record label that sells not only music but merchandise such as sunglasses and T-shirts. The record label's website (Axis Records, 2013) is highly stylised. Richie Hawtin has a similar brand to Mills in addition to a particularly demanding international touring schedule. Hawtin is an important role model for

¹⁴⁰ Jeff Mills (2013) 'The Bells'. 02.00 – 02.30

techno DJs, producers and participants in Edinburgh. During my period of research, I attended his Glasgow performance in the company of a large number of Edinburgh techno participants including the DJs, partners and families of the *Circus* and *Prime* club nights. In addition to Hawtin's social networking presence, a past controversy adds to his credibility – a ban from performing in the USA in the mid-90s (Hawtin, cited in Guida, 2010). Overall, Mills, Hawtin and Cox are legitimated by the durations of their careers. Their resulting brands have been marketed by the above corporate networks and social media through a striking combination of nostalgia for their past music and their contributions to techno through futuristic philosophies and effective uses of internet marketing. While these techno producers push musical boundaries, they are afforded the privilege to do so because they are symbols of the old. They therefore simultaneously provide impetus to techno fans who wish to argue for a past golden age, while remaining up-to-speed with the contemporary.

In addition to the above tensions between old and new, debates about technology manifest particularly strongly among DJs and producers. Performance practices necessarily change together with technological shifts. The improvising aspect of traditional DJing involves choosing records on the fly, according to the feedback of a dance floor (Cox, quoted in Fusilli, 2012). By contrast, new technologies afford DJs the ability to have a prepared track list pre-loaded on a laptop, although not always with the intention of following it precisely. Laptop DJing also allows for effects to be pre-loaded and applied spontaneously during DJ sets. Some DJs who mix in this way argue that CDJs and turntables are retrospective, obsolete technologies. Edinburgh DJ, producer and promoter Michael uses the term 'weaning' to evoke the difficulty that some DJs have of letting go of out-dated DJing technology. Within the *Circus* techno collective, I am the only DJ who has not yet used a laptop for DJing. This has been an occasional obstacle to sharing DJ sets with others, and has prevented me from being able to participate in spontaneous, collective DJing at *Circus* afterparties, which always involve laptop setups. *Circus* DJ, Bernhard, referred to me as 'old-school' when he initially saw me DJing with CDs and asked me to show him how it worked. He then proceeded to explain the reasons he enjoyed using Traktor, the DJing software. He later shared an online video with me, perhaps to make a point about the backwardness of old DJing technologies. This promotional video for the Native Instruments DJing software

Traktor takes the form of an interview with well-known techno DJs and producers Speedy J and Chris Liebing. I provide a short illustrative excerpt of this interview below. It encompasses the validation of technological progress and departing from traditional modes of DJing:

Video 6. Speedy J & Chris Liebing - Interview¹⁴¹

Chris Liebing and Speedy J believe that new DJing technologies lead to what is effectively a democratisation of the DJ-clubber relationship. In contrast to past practices of beat matching, in which a DJ would have to metrically synchronise two tracks, the automation of this process through computer software allows the DJ ‘time’ and ‘room’ to try other things. For these producers, the original, manual method of beat matching serves the ego of the individual performer as the extra steps are of no benefit to the dancing audience. While this is an appealing argument, I would question whether the affordances of new DJing technologies are directed toward the dance floor. The act of beat matching was historically functional – the only way to blend two records – and this method is no longer necessary. The DJs who hold on to it are more likely attached to the philosophy of the old (and for them, this also means the better) represented by the act, adding to the numerous cross-genre musical performance traditions that are technologically outdated but nonetheless maintained. As a physical act, I would therefore agree that manual beat matching has no benefit to the dance floor. However, it has been replaced by other technology-specific acts that are equally of no benefit to the dance floor. The laptop screen, for instance, is, for a large proportion of a performance, the focus of a DJ’s eyes. This is not in itself anti-social, but becomes such when the DJ uses the screen as a barrier to his dancing audience. In much the same way, beat matching is not a selfish act unless it is done at the expense of audience interaction. Moreover, it seems misguided to use the possibility of error in beat matching as an argument against the whole technique. No one would dare to argue that a violinist who makes an intonation error during a performance is selfish, or that violins should be replaced by an instrument that cannot be played out of tune. Finally, I would challenge the claim that beat matching wastes time – if executed effectively, beat matching causes

¹⁴¹ Gadir, T. (2013) *Speedy J and Chris Liebing Interview*. Excerpted from Traktor (2009) *Speedy J and Chris Liebing discuss why they love Traktor 1.2*. 03.40 – 04.10.

the dancing crowd to only hear a seamless flow of music to which they can dance. Beat matching is only a time-waster for DJs who believe that their role involves more than choosing and playing music that people enjoy dancing to. I have attended laptop DJ sets where the audience is oblivious to the innovative or technically difficult aspects of a DJ performance. At these gigs, even clubbers that do appreciate the creative, technical skills do not necessarily find them conducive to dancing. Hence, it could be argued that this act focuses the attention of the DJ more on his own objects and actions of interest than on playing music that makes people dance.

The pushing of technological boundaries in DJing is considered to be essential by many techno icons. Richie Hawtin, like Chris Liebing and Speedy J, turns to criticisms of those focused on the past, to reinforce his argument. In a provocative gesture in 2011, Hawtin used his Facebook promotional page to post a photo of a DJ pushing a trolley with records in it, along with a commentary of the obsolete nature of this technology. This comment was received very controversially, and after removing the post, he wrote an explanatory message to his fans:

As I walked down the street in Berlin last night a DJ stepped in front of me pulling his records and it sparked off nostalgic thoughts of the past, present & future.

I never imagined the outpouring of emotions and comments from my post. My apologies to the DJ and anyone who took my comments personally - it categorically wasn't my intention to suggest vinyl DJs are in any ways 'lesser' than digital.

It's not a dislike for vinyl that drove my comment, only a love of technological innovation and development. Twenty years ago when I first started DJing I found turntables & vinyl exciting and inspiring (as much as any of you now starting for the first time or those who continue this tradition). Respect to everyone who finds happiness and inspiration in doing anything creative or musical. But for me - personally - I enjoy the challenges that I find in new technologies: technologies that continue to challenge my skills & inspire my creativity.

Everyone has their own ideas in their head & each of us have the freedom to use whatever instrument they feel most comfortable with. For me, as everyone already knows, the turntable has been replaced by the computer & other gadgets that I use today. But as I said, that's just my opinion...

After all, isn't that why we call it Techno? (Hawtin, 2011)

It is interesting that Hawtin here uses the term 'nostalgic' to remind his fans that he was himself a user of this technology and that its associations are personal and sentimental. This is reminiscent of the way in which the notion of nostalgia is used with reference to

production instruments of the past such as the Roland TR-808 and TB-303 (Prior, 2010). The nostalgia for these instruments is so powerful that digital plug-ins ('instruments') are used within computer production software, based on the sounds of these instruments. Nonetheless, the overall tone of Hawtin's message is that retrospective attitudes to technology are conservative and do not fit with the philosophy of techno. Speedy J, Chris Liebing and Richie Hawtin do not articulate that their reasons for using new technology are to facilitate better communication with clubbers. Rather, they state that the purpose of using this software is to allow them to move their focus from beat matching to extended techniques such as sound effects and mixing with more than two tracks simultaneously. These are possible but potentially more difficult with traditional turntable or CDJ setups.

DJ and producer Carl Cox also argues for creativity but does so using philosophies of the old. For instance, Cox feels that the art of DJing would be laughable if performances were reduced to 'pressing a button' (Fusilli, 2012). However, Cox no longer uses turntables to mix vinyl records. In a performance that I attended in Edinburgh, he used three CDJs to play loaded digital files from a USB stick. Cox's performance method can be characterised as a compromise between traditional, tactile beat matching and the software-based alternative. In this eight minute excerpt of a Pioneer DJsounds show, Cox publicises his unique uses of digital technology while simultaneously arguing for the tangibility of old forms and the value of the traditional album:

Video 7. Carl Cox - Interview¹⁴²

It is unclear on what basis these appropriations of new technology are more legitimate than the Deadmau5 form of button-pressing that he criticises. Carl Cox claims that preparing a set in the studio in advance of a gig is contrary to the original ethos of the spontaneous, improvisatory DJ set. Superstar producer and performer Deadmau5, for example, is accused of pre-programming all of his music for a performance in advance, and simply '[pressing] play' on stage (Reynolds, 2012). The perceived problem with this

¹⁴² Gadir, T. (2013) *Carl Cox Interview*. Excerpted from DJsounds (2011) *Carl Cox – DJsounds Show 2011*. 03.25 – 11.25

is that that ‘respond[ing] to the mood of the crowd’ is no longer a component of his set (*ibid.*). However, for DJs who must select only some of their vinyl records to take to gigs, planning is also involved, and a vinyl DJ can also have a plan for their track choices in advance of her performance. Moreover, Deadmau5 is not the only one to prepare his set in advance. Some of my interviewees, such as Carl and Bernhard from *Circus* prepare track lists for their sets before performing, even including details of effects to employ in particular sections of tracks. Bernhard also attempts to recall his programming of effects on DJing hardware through physically marking his equipment for each gig. There is no reason why either the proficient use of these new technologies (or the preparation that their use encourages) should not involve the responsiveness to clubbers as old DJing practices. In his article about the dystopian aesthetics of Detroit techno, Pope (2011) argues that ‘[o]ne only becomes or senses oneself as human, as alive, in the very moment one acknowledges one’s co-imbrication with technology’ (p. 40). For the producer and DJ this may indeed be the case – techno is a label linked by name and philosophy to technology. However for most participants, it is the act of dancing with others that reveals this humanness. The passion with which the above arguments for old or new technologies are articulated overlook an important point: creativity is proportional neither to the oldness or newness of technology, and producers and DJs who have the desire to sound different to others will use whichever technologies are available in creative ways in order to achieve this.¹⁴³

The positive associations of the old extend beyond the people, spaces, music and technology to the historical era perceived to represent dance music culture. Within some techno and other genre-focused scenes it is not unusual to hear participants using phrases also used within media and literature (for example, Reynolds, 2008) to articulate nostalgia for this history. Historical events that have been learned of through secondary sources such as books or documentaries are interwoven into personal accounts. The most extreme example of this occurred in a conversation with a participant who I met not long after first moving to Edinburgh, in a crowded and noisy folk pub. Although my research had not formally started yet, he seemed immediately fascinated by my research topic, and volunteered to divulge his involvement in the local rave scene in the

¹⁴³ This creativity can extend to the construction of original hardware and the programming of custom-made software by DJs and producers.

1990s. The man began his story with nostalgic anecdotes that were unambiguously personal, recounting his excitement, his sense of being overwhelmed by numbers of people and the euphoria associated with his early experiences of taking ecstasy in this environment. He also highlighted that the only interest he now has in techno participation is to attend smaller events that include other 'old ravers' – in other words, people in his age-range who share in his nostalgia. He explained that the scene contrasts too much to his original experiences, and that consequently he can no longer find enjoyment in large-scale dance music events.

After a period of time, it struck me that this participant's anecdotes had moved from his own to direct quotations from books on the cultural history of rave. This was a confusing experience – there was no way for me to ascertain at what point his own history had merged into the words of these secondary sources. Given that this was effectively the first conversation in my research, I was then less surprised when other participants amalgamated their personal experiences with those from secondary sources during their interviews. Thus, perhaps these nostalgic narratives are a partial result of the infiltration of media and popular literature including documentaries into the popular consciousness of participants. Conversely, much of this literature is itself informed by personal accounts and those present in the relevant moments, at the relevant places. Fanzines epitomise this two-way feedback system (Thornton, 1995, p. 140) through their facilitation of participants' sharing and romanticising their objects of obsession. Broughton and Brewster (2009), for example, have published a compilation of such fanzines, *Boy's Own*, exclusively about acid house. As Will Straw (2004) suggests, the discussions exchanged between media and participants on histories of dance music become part of a 'universal system of articulation' (p. 80). While it is rarely clear what the sources of much of this information are, this does not matter; the stories will continue to be told (including in scholarly work such as this) and will continue to influence future accounts – even the personal ones. The repeating of histories of those present, by those who may not have been present, feeds, then, into the perpetuation of these nostalgic narratives, and the glorification of the old.

I finally turn to notions of youth, youthfulness and age in relation to old and new techno philosophies. The perception of youth as an age-related demographic, although

challenged, remains implicit in scholarly work.¹⁴⁴ For example, Malbon (1999) presents youth as a category that serves the purposes of his clubbing study – a group defined by age that participates in clubbing. His challenge to traditional understandings of youth that privilege youth perspectives over theorisation (p. 15) are also supported by Bennett (2001, pp. 152-3; 2000, p. 22) and Tarrant, North and Hargreaves (2002) in their overviews of popular music and youth cultures. Malbon does not explain the link between youth and dance music – readers’ knowledge of these meanings and associations appear to be presumed. However, I argue that to focus on youth in scholarly discussions on niche dance music scenes is only helpful if youth is understood as based on something other than age. Grossberg (1995, pp. 25-6) and Miles (2003, p. 176) note that straightforward definitions of youth are impossible. However, a range of definitions are helpfully provided by authors from the disciplines of youth studies, in addition to popular music studies. According to Grossberg (1995), youth is ‘a body – the individual body and the social body of generations’ that functions within ‘the dominant systems of economic and social relationships’ (p. 34). Similarly, Frith describes youth broadly as ‘a way of being, an established social institution’ (p. 380), while Weinstein argues for a social and cultural understanding of the group that is not age-restricted (1995a, p. 9; 1995b, pp. 67-8). As highlighted by Frith, youth is a ‘flexible’ idea, dependent on social circumstances and political agendas (2005, p. 380), and this can be extended to Roche and Tucker’s notion of youth as ‘process’ rather than ‘a fixed life stage’ (1997, p. 7). Comparably, Stainton Rogers claims that youth is ever-shifting, lying somewhere between the indefinable phases of childhood and adulthood (1997, pp. 180, 182), and Grossberg describes these phases as ‘overlapping’ (1995, p. 26). An element of the amoral and enviable is also present in the definitions of youth proposed by Frith (2005, p. 382) and Grossberg (1995, pp. 36, 42). There is no precise focus for this conflicted sentiment, other than perhaps the vague notion of freedom from the sense of adult duty. Importantly, as Stainton Rogers (1997, p. 14), Tarrant, North and Hargreaves (2002, p. 135) and Weinstein (1995b, pp. 69-70) argue, youth is also a group that participates extensively in musical activities and forms social groups through different types of music. All of these definitions collectively point to an overriding

¹⁴⁴ See Frith, 2007; Garratt, 1997; Garratt, Roche and Tucker, 1997; Griffin, 1997; Grossberg, 1995; Kehily, 2007a; 2007b; Miles, 2003; Montgomery, 2007; Roche and Tucker, 1997; Roberts, 2003; Stainton Rogers, 1997a; 1997b; Thomson, 2007a; 2007b.

notion of youth as *fluid*, providing the first helpful departure point for an examination of relationships of youth to dance music culture.

This fluidity is visible through the ways that youthfulness is embodied by participants of all ages in Edinburgh techno settings. Older participants, including clubbers, DJs, promoters and producers constitute a strong presence at Edinburgh techno events. Participants at these events comprise a small minority of people that take part in the nightlife of the city.¹⁴⁵ I highlight this issue because the types of scenes explored in other works, some of which use youth as a foundation for their analyses, include similarly genre-specific scenes such as house (Bennett, 2000; Fikentscher, 2000; Sommer, 2009), techno (Butler, 2006; Sicko, 1999), jungle and drum 'n' bass (Belle-Fortune, 2004; Hall, 2009; Noys, 1995), hardcore (Reynolds, 2008) and psytrance (St. John, 2001). It is therefore interesting that Malbon (1999), whose interviewees similarly refuse to subscribe to what they perceive as commercial music clubbing (pp. 58-60), points to statistics claiming that the majority of adult clubbers in Britain are under twenty-four (Malbon, 1999, pp. 8-9; Mintel, 2012). I argue that this majority is comprised of contrasting cultures to Malbon's scene of study along with those studied by the aforementioned list of authors, and of my own. The majority of clubbers aged eighteen to twenty-four go to dance events featuring music that is broadcast on commercial radio and television and is promoted through commercial music charts, and maintain a strong focus on alcohol consumption within venues (Mintel, 2012). Thus, the majority of clubbers in the UK may indeed be young (Mintel, 2012; Mintel, cited in Malbon, 1999, pp. 8-9), but this is of little relevance to the types of genre-focused scenes discussed in almost all scholarly writing on dance music.¹⁴⁶

It is not unusual for Edinburgh participants in their mid-30s to have been embedded in the social activities of techno scenes since their late teens. Older clubbers are helpfully described by Jeffrey Arnett as taking part in a culture of 'prolonged adolescence' (2000, p. 473) and by Andrew Ross (1994) as continuing youthful lifestyles that include dancing (p. 13). Thus, while the ages of participants change over time, the activities themselves

¹⁴⁵ These two factors may contribute to the feelings of resentment against the younger majority of clubbers that I described earlier.

¹⁴⁶ See Peterson and Bennett (2004) for an analysis of the distinction between music scenes and the commercial popular music industry (p.3).

(dancing and listening to music) continue to be associated with youth, and as a consequence, the intertwining of various ideas of youth and dance music culture. The following works attribute what I would consider to be undue significance to the combined act of dancing and state of being youthful. Dance music scenes are sometimes compared with the 1960s counterculture (Bennett, 2001, pp. 152-156, 158-9, 161; Ross, 1994, p. 8). This includes such issues as environmentalism and the uptake of 'alternative lifestyles' (Bennett, 2001, p. 161). In addition to the broad countercultural interpretation of dance music, Angela McRobbie further describes it as a 'culture... of childhood, of a pre-sexual, pre-oedipal stage' (1994, p. 168) and Ross refers to its 'infantilist' imagery particularly with reference to its fashions (1994, p. 8). The childlike additions to the often 'hypersexual' outfits worn by women are argued by McRobbie to be shields from misinterpretation, in which the exposed body is indicative of the 'sociability and self-sufficiency' of its bearer rather than constituting sexual invitation (McRobbie, 1994, p. 169). Further arguments include that young people use (or used) music and particularly dance music as a way of 'making sense of everyday life' and in response to issues such as 'rising youth unemployment, the casualization of labour and the resurgence of fascism in countries throughout the world' as well as 'the economic downturn of the late 1980s and early 1990s' (Bennett, 2001, p. 160). For Kehily (2007), the illegal appropriation of spaces of the post-industrial world such as abandoned warehouses signifies subversive 'youthful play' and 'youthful protest' (p. 261). If being youthful implies an opposition to the status quo, this explains how the aspects of dance music culture that are also perceived as such are taken to represent youthful philosophies.¹⁴⁷ For Kehily, 'rave' is itself an enactment of the state of being youthful:

In the context of the wider culture in which youth transitions to adulthood are becoming extended, non-sequential and uncertain, rave may be a way of immersing oneself in the perpetual present of an in-between state. (Kehily, 2007, p. 261)

According to Frith (2005), lifelong consumer habits are established early (p. 382). While participation may decrease in intensity and frequency for practical reasons after a number of years, these habits create a long-term imprint on participants' lives. Naturally this would be in the foreground a great deal more for those whose history of involvement is in production, performance or promotion – roles that demand great

¹⁴⁷ In Chapter 5 I will however dispute the notion that techno in the contexts I have studied is oppositional.

emotional, physical and social investment – than for those who attend as part of a night out with friends. However, aging participants who distinguish themselves from younger participants are an indication that musical participation is more than merely a blip. Social musical participation can influence a lifetime of musical tastes and choices of leisure. This may explain why techno nostalgia, as an example of a social musical scene, is so powerful – it is based on memories of youth. Yet as I have argued, the attendees of techno scenes do not match the impression created by scholarly work of athletic, young bodies dancing energetically every weekend. Although dancing to dance music can be seen as simultaneous expression or ‘letting go’, it is doubtful that this channel for escape from everyday life is unique to one age-group more than another. It *does* however help us to understand the rationale for notions that connect youth to dance music.

In his extensive analysis of the mechanisms of distinction, Bourdieu (1984) identifies youth as a group that uses cultural capital to differentiate itself from other groups (p. 480). However, the techno community partly differentiates itself through a combined glorification of the cultural past and championing of a musical future. Both the cultural past and musical future can include technology, one of the key tensions between philosophies of old and new. In addition to old technologies, the culture of the past includes a respect for established artists and worshipping the first techno and house tracks. Richie Hawtin, Jeff Mills and Carl Cox are the perfect personifications of these dichotomies, comfortably straddling the old and the new. Disparagement of young participants in Edinburgh including students is the norm. Meanwhile, in addition to embracing new DJing and production technologies, techno must remain musically two steps ahead of the commercial music industry, with the exception of retrospective ‘classics’ that remind listeners of their early raving experiences, or of the histories they have read about. The profound fondness that older participants may have of past venues, performers and technologies relates to a memory of involvement with a phenomenon which was once new. It can therefore be concluded that however contradictory they may be, the philosophies of old and new are inseparable.

Chapter 9 – Underground and Commercial

I have thus far contextualised techno as one of many dance music genres. However, the techno participants in scenes that I have researched do not perceive their preferred genre as merely one of many. An essential and assumed component of techno taste is an aesthetic that is understood to be underground. This is posed in opposition to a large number of other genres, which are perceived to be commercial. The terms ‘underground’ and ‘commercial’ can refer to any number of components, from the sounds of music, to DJs, producers and crowds; from venues to entire music scenes. This sense of belonging is more often defined negatively (not commercial) than through specific attributes. It is also used by participants in this research frequently and with reference to some or all of the above elements (such as music and venues). The idea of the underground encapsulates an undercurrent of subversion that is both imposed from outside, such as through media commentary, and to a more limited extent, perpetuated from within.

Although the underground can be framed in legal terms, I am primarily concerned with its cultural and musical aesthetic meanings. As shown in Parts I and II, there are historical reasons for why the form of dance music culture discussed in this thesis is suggestive of the subversive. The underground comprises modes of expression that represent the out-of-the-ordinary, in addition to behaviour that crosses boundaries between legality and illegality. Thornton (1995), for example, argues that underground philosophy is reinforced by its disapproval in the public sphere (pp. 129-37). However, I would contend that contemporary Edinburgh techno participants do not concern themselves with this form of distinction. Ethnographic research has revealed this in two ways. One of these is promoters’ acceptance of local conditions including the physical structure of the city and residential attitudes to night life. Within this, promoters also accept that musical events can more easily take place legally and experience has taught them that attempts to do otherwise are generally not required or are futile. This acceptance also incorporates an understanding of cultural consequences, such as that events held legally attract a diversity of members of the public whose interests are not necessarily oppositional by default. Promoters are pragmatic in their choices of DJ line-

ups and affordable door entry fees, aware that a large proportion of the crowd may simply want an enjoyable night out. In addition, during interviews, participants almost never refer to their involvement as illegitimate, rebellious or disapproved of by mainstream society, focusing instead on their differences from fans of other dance music genres and ‘commercial’ clubbing crowds. Thus, it can be said that in Edinburgh, old attractions to and notions of the underground are no longer at the forefront of techno philosophy. Instead, techno belonging is informed by ideas of distinct musical aesthetic and practices within the wider clubbing community. This attitude is also reinforced by a larger, international techno community of clubbers, well-known DJs and producers, in addition to their promoters. As Thornton (1995) argues, academic writing also helps to perpetuate underground philosophies (pp. 92-8). Moreover, the methods that are used by techno participants to define their underground status are also reinforced by media (see Shapiro, 2003, p. 257). This is significant if the media is understood to be a strong influence on popular tastes.¹⁴⁸

Given that the specifically anti-establishment element of underground belonging is no longer relevant to techno, participants have sought related but subtly new ways to define their preferred music and social scene. As suggested in the last chapter, both participants and the media are critical of the ways in which certain genres of dance music have increasingly infiltrated the popular charts, and have become accessible to a broader demographic through radio, television and large-scale live performances, especially festivals. Two such genres are dubstep, whose audience has been widened by producers such as Skrillex, and electro or electro-house, similarly noticed due to producers such as Deadmau5. Although trance is a genre that has arguably always straddled the ‘mainstream’, it has also been further propelled into ‘pop’ consciousness by the large-scale success of producers such as Tiësto. While points of distinction may have once included the highlighting of differences from guitar-driven rock (see Reynolds, 2008, pp. xx-xxi; Sicko, 1999, p.11) and commercial (not-underground) pop, they now increasingly include an opposition to other types of dance music, and their associated cultures and practices. The popularisation of dance music and of the once-rebellious practice of ‘raving’ that has effectively been commoditised and legitimised by

¹⁴⁸ For example, Reynolds (2012) attributes the dissemination and popularisation of dubstep to the international reach of Radio One’s online radio coverage.

large-scale dance music festivals and stadium events has contributed to these differences.

A simple and important distinction between underground and commercial that is understood by techno participants applies also to other genre-based, niche musical communities – a sense of being part of a ‘scene’ that is separate from and different to the broader commercial music world. As described earlier, a key difference between these scenes and their commercial counterparts is that club nights are run by what could be referred to as ‘specialists’ (promoters) rather than by managers of venues. In many instances this means that both new promoters and those with experience who are rarely able to attract enough participants to cover the costs of running the event will involve friends and people that are willing to work without payment. It is well-known in Edinburgh that local or beginner DJs are often most willing of all ‘employees’ to play for free, in addition to accepting that their role includes word-of-mouth and other types of promotion. By contrast, those with non-musical roles such as photographers are less likely to work unpaid in these contexts, as their roles are perceived as unambiguously professional and potentially in demand elsewhere. It should be noted however that this varies according to the types of relationships established within a scene. By contrast, venues that directly employ DJs, without promoters in between, almost invariably pay DJs a set fee, and take this into account in their calculation of income and costs. It makes financial sense for venue managers who are unconcerned about music and concerned about profiting from alcohol sales to choose a DJ who will play music that is perceived to be the most popular among the largest group of people. To divide the music being performed into genre would simply limit the audience, and thus is not often considered an option, except in cases where a venue manager desires to attract a particular type of crowd. The division between the ways that these club nights are managed is noted by Peterson and Bennett (2004) with reference to popular music more generally. These authors define the concept in terms of a ‘scene’, propelled by ‘small collectives, fans turned entrepreneurs, and volunteer labor’ and distinct from a seemingly monolithic music ‘industry’ (Peterson and Bennett, 2004, pp. 4-5). These practices are fundamentally different to (and the authors imply better than) the ‘corporate model’ through which ‘large firms produce, market, and distribute music’ (*ibid.*).

A series of examples of the techno campaign against commercial music are provided in the commentary of European DJ and producer, Sébastien Léger. Like many artists, Léger talks to his fans on Facebook, for self-promotion. However unlike the average artist, at the time of the writing of this thesis he has over 62,000 Facebook fans, his own record label, and an international touring schedule managed by Paramount Artists, who also manages the prolific DJ Carl Craig. Léger has played at enormous commercial events such as *Sensation* (Sensation, 2012), an event that attracts tens of thousands of people. Léger hosted an international remix competition of his own music which one of the DJs and producers from *Circus*, Dan, entered and won. The main prize for this competition was a release under Léger's record label, in addition to production software given away by corporate sponsors as a form of promotion. As I was following Dan's progress during the remix competition, I was also exposed to a number of public Facebook posts by Léger. I was fascinated by the alternation between promotion of upcoming gigs and commentary on his concern for the demise of quality music in the commercial dance music world. Léger's views might well be coloured by his classical music background, a biographical point which is often used by DJs as a signifier of their musical aptitude and cultural legitimacy. Here, I provide a series of questions and comments posted by Léger to his fans: ¹⁴⁹

Ok intelligent question of the day :)

Don't you think that Beatport should create another Beatport for the more 'underground' / 'smaller labels', so everybody is happy ? Keep the green for the cheese, make the blue for the real music !

Please debate ! (Léger, 2011b)

After a number of comments by fans, some of whom disagreed with the idea, one of the smaller artists on Léger's own label commented as follows:

People, you don't get that a lot of great artists, are getting ZERO money from selling records and tracks now, and that the only money we can get is gigs. Beatport was like a showroom to get gigs. But as it is now getting more and more commercial, new artists are 'fucked'. (Pastor, comment in Léger 2011b)

¹⁴⁹ All of the quotations by Léger included from this point include spelling and grammatical errors in addition to the abbreviations of online communication. I have retained these as they appeared on Léger's Facebook page.

This comment is related not to aesthetics but to the difficulty that most artists have attaining regular gigs or selling their music. Léger then clarifies his views as being based on the superiority of certain genres:

Admit it, it would be nicer to have a top 10 with only some Cocoon, Minus, Mobilee, Cecille etc.. (as an EXEMPLE of the most famous ‘underground’ label) than *all* those terrible louder than ever trance/electro stab tracks :) Then all others less known labels still got a chance anyway, whatever the style (techno, house, tech-house). Some people knows how to find the music, some don't, but still... Anyway, this is just an idea, a debate, it's healthy to talk when something isn't working anymore :) (Léger, 2011b)

Léger defines underground along genre lines – trance and electro are ‘terrible’, while techno, house and tech-house are ‘nicer’. This is very similar to the views of Edinburgh techno DJs and promoter Kane, who implied in an interview that people in Edinburgh have non-discerning taste, as they prefer a constant sonic onslaught to a subtle textural progression. A sonic onslaught, similar to Léger’s above comment, and ‘louder than ever’, implies genres such as dubstep, outside of the categories that Kane and Léger approve of. However the origin of dubstep as a rather ‘dark, moody and meditational’ musical aesthetic for ‘connoisseur[s]’ is undermined by its later associations with ‘chainsaw shearing’ and mid-range, distorted guitar-like sounds (Reynolds, 2012). When I later asked Léger to define his notion of underground, he interpreted my question as support for his point, and responded as follows:¹⁵⁰

@Tami Sounds – that’s what I call a good argument thanks :) Successful doesn’t mean shit, of course, totally agree, I think the main line of such an idea, would be like you well said : aesthetic, ideological more than economic, while of course some labels are more successful than others, and it’s normal, but still they deliver quality. I don’t like all the ‘cool’ labels’s releases, some are actually quite boring or poorly produced to be fair, but at least the spirit is here. You can like Marco Carola and dislike Format:B, or you can love Mistakes and hate Cocoon, BUT they all have in mind, I think, to deliver something artistically different and quality. Always hard to find the line between both world, I admit it, it’s a matter of taste, but I think that there is a BIG VIRUS at the moment call

¹⁵⁰ My Facebook post read as follows: ‘I agree with Jonathan’s question. A dichotomous categorisation between ‘underground’ and ‘commercial’ is problematic. Is ‘underground’ an economic, or an aesthetic, or an ideological, or a genre-based parameter? Are labels like minus and Cocoon still ‘underground’ even though they are commercially quite successful? If so, on what grounds? Because we think the music is better? That is not a good enough reason. There is no simple solution to this problem, which is much bigger than Beatport alone, who are simply going in the direction that suits their bottom line.’

SHIT MUSIC FOR FUCKING ROLLER-COASTER BACKGROUND MUSIC
:) (Léger, 2011b)

While ‘artistically different and quality’ is a subjective notion that is often used to purport the distinction between a track by Jeff Mills and one that would get into the charts, the ‘spirit’ is perhaps the most illuminating concept. This ‘spirit’ is made up of what Léger believes is an objective measure of quality, as well as being suggestive of an ideology that supports the underdog. However, the promotion of smaller artists is now absent from his argument, begging the question of whether it is this or the issue of quality and good taste that are Léger’s central concern. While many fans agreed, a great number also protested against these prejudices and also defended the online music shop Beatport. At a later stage of the debate in which his fans were engaging, Léger became defensive:

OH BY THE WAY, I DON’T HATE BEATPORT, I ACTUALLY LOVE IT ! I SPEND HOURS TO FIND NICE TRACKS THAT NOBODY KNOWS, AND THANKS FULLY BECAUSE OF PEOPLE LIKE ME (OR LIKE YOU MAYBE), SOME TOTALLY UNKNOWN ARTISTS GET TO SEE THE LIGHT FINALLY. THIS IS NOT BEEING PRETENTIOUS TO WRITE THIS, I JUST THINK AS A LABEL OWNDER WHO LIKE TO SIGN SOME SMALLER ACTS TO GET THEN A BIT OF RECOGNITION MORE THAN SOME TERRIBLE MAINSTREAM CHAMPAGNE DOUCHE-BAGS ELECTRO. SO AGAIN, I DO LIKE BEATPORT, SERIOUSLY. --- (sorry for the capital letters, as people seems to not read my previous comments, where guess what I actually take time to answer to my own tread! - :) (Léger, 2011b)

In the same month, Léger commented on the DJ Mag Top 100 results of 2011. The poll is a yearly dance music chart in which people are asked to vote for their favourite DJ in the world. According to ‘10 Things You Should Know About #Top100DJS’ (DJ Mag, 2013), this may not include ‘the most gifted turntablists or DMC champs’. In response to the numerous negative responses to the poll each year from people whose tastes are not represented, this article also makes the following caution:

The dance world as a whole is MASSIVE, so don't be surprised if niche dance scenes or ‘underground’ styles don't get in there. Over 750,000 people voted in the poll this year, from all over the world, and tastes differ drastically from continent to continent, so just because you haven't heard of a few DJs, doesn't mean they are not enormously popular in their own scene or territory. (DJ Mag, 2013)

Many techno participants do not take this poll seriously, including Léger, whose Facebook post following the release of the 2011 DJ Mag Top 100 DJs stated: ‘here are

the TOP 100 DJ mag - if you want to have a good laugh :)’ (Léger, 2011c). Léger then expressed his view that one of the genres most represented in the 2011 poll, trance, is *not* a legitimate form of dance music:

I don’t know 50% of the dj’s in this pool ! lol – many big trance dudes, the olds getting kicked out by the yougers that nobody knows (unless you like trance). It’s pretty fair to say now that, even if we knew it a long time ago, that this is officially a massive joke.

Better to laugh about it than to hate it, it’s now our yearly comedy show !! Can’t wait for the next season ^^ (Léger, 2011c)

In an interview, Léger was explicitly asked about his objections to the results of the poll:

Lady Lex: Let’s go to the DJMag Top 100 poll. I know you work really hard at what you do and you take your music very seriously. But something like DJMag Top 100 doesn’t mean as much to you as it does to others. What are your thoughts on Dave Guetta taking out the DJMag crown?

Léger: One good thing that he brings to dance music: there are many more people interested in dance music today than say, 3 years ago. And that’s a great thing. But now, the thing is, he is so cheesy, that the people who love this music, love the cheesy part of it. Maybe it will open the door for them to other music and lead them to other music. David Guetta is a very clever guy. (Lady Lex, 2011)

If DJs are successful beyond underground scenes they can sometimes be accused of selling out by their contemporaries. Deadmau5 told *The Star* that he feels ‘hemmed in... by the expectations of crowd-pleasing big-room bangers now placed upon him’, even claiming that he has ‘always aspired to be a little more underground. I listen to techno, I listen to the really dubby old stuff and all of your [Richie Hawtin’s] old stuff. And I like it’ (Deadmau5, quoted in Rayner, 2013). Richie Hawtin responded to Deadmau5 by telling him, ‘[y]ou’re probably the No. 1 gatekeeper for electronic music right now... I would say that’s your responsibility, to open up the doors as wide as possible’ (Hawtin, quoted in Rayner, 2013). This has a similar tone to the above comment about David Guetta made by Léger.

The above ways that participants define the underground are supported and reinforced by definitions within dance music literature. According to Fikentscher (2000), underground music is ‘[a] type of music... familiar only to a small number of informed

persons', and, 'in order to have meaning and continuity is kept away, to a large extent, from mainstream society, mass media, and those empowered to enforce prevalent moral and aesthetic codes and values' (p. 5). For Malbon (1999), opposition to commercial culture implies an assertion of social difference and uniqueness (p. 60). These conceptions of the underground are closely in accordance with the reality of Edinburgh techno scenes, although Fikentscher's definition implies some degree of autonomy from dominant societal structures that I do not believe applies either to the local Edinburgh techno scene or the larger international techno community. Nostalgic notions of underground would explicitly include this kind of autonomy from the mainstream as a key defining feature. However, as I have argued, this has been replaced by an attitude of opposition specifically to mainstream dance music culture and other dance music genres. This historical ethos can be represented by the occasional and loose maintenance of left-leaning political ideologies. In Edinburgh, these tend to primarily relate to the problems that techno participants attribute to popular dance music culture and the types of participants that it is perceived to attract (for instance, sexist men) rather than with broader politics. These ideologies are also expressed through other means such as bohemian or eccentric fashions and open drug use. Political expression in the techno scenes that I have researched often reaches its limits at these symbolic levels, and even these outward gestures are taken on by a small minority of participants. Rather than methods of political expression associated with past generations, techno now achieves its status as a marginal or 'sub'-cultural scene through distancing itself from commercially successful dance music; by association this also includes a distance from sexism and alcohol consumption (Bennett, 2000, p. 87).

In light of this, it is interesting that a significant proportion of dance music literature seems to focus on a historical moment – and in many instances, in one geographical context – in which the idea of the underground has broader political significance. The impression gained from works by Fikentscher (2000), McCall (2001), Reynolds (2008), Rietveld (1997) and St. John (2001), for example, is that the act of dancing to certain types of dance music is political. Although I will address the issue of techno politics in more depth later, I address it briefly now because it is also relevant to underground philosophy. Participants have themselves propagated politically-charged notions of the underground within certain scenes, such as the 'second-wave' resurgence of Detroit

techno (Pope, 2011, p. 32). This early 1990s scene included DJ/producers such as Richie Hawtin, Daniel Bell, Jeff Mills and Mad Mike Banks, and was characterised by record labels with overtly oppositional titles such as ‘Underground Resistance’, in addition to similarly-named titles of tracks and lyrics that contained clear anti-corporate messages (Rubin, 2000, pp. 119-20). Techno producers of the period also discussed their music in explicitly political terms – a key means of asserting distance from ‘the masses’:

Black science fiction and Alvin Toffler’s, *The Third Wave*, have very much happened already. *The Third Wave* is here. The technological revolution is here... We are here. The technological revolution, which is a phase after the industrial revolution, has already happened. Once again, we’re in the future. Every second, we’re in the future... The individual is far more intelligent than the masses. (Derrick May, quoted in Shapiro, 2000, pp. 126-7)

It is therefore significant and reflective of the changes that I have described that Richie Hawtin, one of the leaders of this ‘revolution’, is now one of the most effectively marketed underground DJs in the world. This fact is not perceived by Hawtin as a conflict, but rather as an important way to remain relevant. In the below comment, Hawtin criticises what he perceives to be dogmatic, anti-commercialist attitudes among other Detroit techno producers:

People in Detroit say, ‘Oh, we didn’t get the dues that we deserve and we didn’t get this and that’... And then there are people like ostriches, they stick their heads in the ground, they want to be so underground that you’ve got to feel sorry for them. If you go out and work for it, you have to make some concessions to get what you believe in to a bigger stage. Some people don’t understand that. (Hawtin, quoted in Rubin, 2000, p. 123.)

This illustrates that for Hawtin, being ‘too’ underground refers to the lack of willingness of DJs or producers to participate in the competitive music industry, a state that he perceives to be unhelpful for the greater purpose of music dissemination. This necessary compromise appears to be taken for granted by Edinburgh-based techno participants as well as those in the international techno community. The styles of Carl Cox, Jeff Mill and Richie Hawtin’s individual DJ or record label websites (Axis Records, 2013; Carl Cox, 2013; Minus, 2013) reflect these attitudes. They highlight an expertise and comfort with marketing that helps these artists sustain the momentum of their success. Another illustration of an acceptance of marketing as a given part of the ‘underground’ is

Norman Cook, known by his DJ and producer name Fatboy Slim. Unlike Hawtin, Cook conveys a reluctance to take on all commercial opportunities offered to him, arguing that he has resisted offers that would involve him compromising his integrity as a DJ, such as playing for three minutes on the David Letterman Show (Cook, 1999). He has, however felt compelled to accept gigs on the grounds of offers that he has received of excessive fees (*ibid.*). The scale of his own popularity does not deter him from commenting that ‘David Guetta and the others took it out of the underground’ (Fusilli, 2012). Nonetheless, Cook’s age and history lends his credibility an importance that surpasses his popularity, consistent with my earlier argument that age is a criterion that can be difficult for younger artists to match.

Another way that participants conceptualise their involvement in an underground scene is through being educated, both formally (universities or colleges) and informally (on the language of techno). The educational background of clubbers seems to be a stronger determinant of involvement in the techno scene in Edinburgh than factors such as wealth or age. According to Bourdieu, people with basic survival needs will rarely have the time, motivation or energy required to learn the terminology for full participation in these exclusive social circles (1984, p. 54). This is also highlighted in Frith’s (1978) discussion on the association of privilege with participation in musical scenes perceived as the most exclusive, among high school children (pp. 7-8). It may therefore seem logical that university-educated clubbers also come from wealthy backgrounds. However, many Edinburgh techno participants are not wealthy, some even partially supported by welfare benefits. Promoters in Edinburgh recognise this by keeping entry fees relatively low, rarely more than five pounds, and often free of charge on weeknights and in the earlier hours of weekends. Comparable techno club nights in cities such as Zurich, London, Tel Aviv and Sydney are often charge the equivalent of fifteen or twenty pounds, with other nights at forty or fifty. It is interesting, though, that even many of these less-than-wealthy Edinburgh techno participants are in the midst of or have recently completed some form of further or higher education.

Contrastingly, another Edinburgh club night, *Move*, focuses on inviting ‘big-name’ house DJs, and as a consequence, larger-than-average crowds. In order to cover the cost of the relatively expensive Edinburgh venue at which it is held, along with the costs of DJ fees,

flights and accommodation, *Move* charges approximately twenty pounds for a ticket to each event. Those who attend *Move*, a monthly club night, are either more financially comfortable than other Edinburgh techno participants, perhaps due to full employment, or are more willing to spend their money on a higher entry fee and the higher cost of drinks in this venue. This may be possible if *Move* is the sole monthly club night that they have chosen to attend. The participants of *Circus*, however, are often unwilling to attend *Move* due to the costs, in addition to negative perceptions of *Move* participants. *Circus* promoters Kane and Dom have criticised *Move* in a range of ways, including labelling *Move* clubbers as ‘hairdressers’, regarding the venue in which it is held as ‘boring’ and critiquing the promoters’ emphasis on celebrity DJs. Kane, has told me in conversation that he believes in creating a positive and interesting atmosphere, using a good quality sound system, playing good music and making use of interesting décor. Through this, he implies that these elements will attract the right type of attendees, resulting in the ideal club night. On the other hand, the label of ‘hairdressers’ implies a prejudice against a lack of education, with sexist and classist undertones. This may seem a direct contradiction to the anti-student sentiment reflected by techno participants, described in the last chapter. It is, however, a less explicitly-discussed point of distinction that seems to dictate the musical and social choices of techno participants, and indicates perceived differences between the reality (and often poverty) associated with being a student, external and negative perceptions of student *culture*, and negative attitudes to the traditional working classes.

The underground element of techno philosophy around the globe is as strongly tied to a sense of place as are the philosophies of the old and the new. The sense of place ranges from venues to larger geographical locations such as cities and countries. An example of the differing roles of venues in different cities is the contrast between my home city of Sydney and my main site of research, Edinburgh. During the period in which I regularly attended events in Sydney (2006-2010), the events referred to as ‘underground’ were defined according to the type of venue in which they took place, and as a consequence, to the risk of local authorities intervening. Licenced events were clearly differentiated from unlicensed underground events, which required participants to bring their own drinks. Occasionally, drinks could be purchased at these events for small ‘cash donations’. The makeshift venues were often occupied and funded personally by the

organisers. All people involved in organisation and performance were unpaid, and promoters of these types of underground events often provided opportunities for beginner DJs to play their debut gigs – my own first experience of DJing was at one such event. Underground venues in Sydney included squats, abandoned warehouses and outdoor industrial spaces, and private homes. While the line between music played at underground events and similar music played at legal venues could seem unclear, some of the music played at underground events was unlikely to ever be played at clubs. However, the primary distinction remained that the venue did not adhere to the laws of the local government area. It was necessary therefore to hold parties at one-off locations, or to move periodically from venue to venue in order to stay a step ahead of authorities. This level of risk attracted participants who sought distinction from the venues, music and people of legitimate night clubs.

In Edinburgh, by contrast, the underground is less delineated by the licencing status of venues, as most Edinburgh techno participants have few if any opportunities to attend events at unlicensed venues. Nonetheless, as highlighted in the previous chapter, venues that are perceived not to cater to mainstream musical tastes have become places of attachment for participants during the course of my research. The venues in question are known to clubbers as hosting a wide range of niche dance music acts, spanning many genres, in addition to hosting well-known acts from around the world. This type of Edinburgh venue attempts to achieve a balance between covering its costs and promoting lesser-known or local music. Instead, they host promoters who usually invite niche acts and charge little or nothing for attendance, very occasionally attracting larger crowds through the invitation of cult (and older) figures of the underground such as Jeff Mills. However it is noteworthy that before these venues were under public threat of closure, I did not encounter articulations of participants' love for them. I had not been previously aware of the extent to which these venues were considered pivotal to the maintenance of diverse and dynamic music scenes, because promoters frequently complained that certain aspects of management of these venues were unprofessional. Some promoters had previously expressed that they maintained relationships with these venues because they had little choice. However in 2011-12, this changed when a number of Edinburgh venues that were known for hosting underground events either announced their impending closure or closed without warning. Responses to these

closures included tones of both indignation and resignation. On online social networks such as Facebook, participants were asserting that the ‘Edinburgh underground is dead!’. Online petitions and other media such as academic blogs and print media reported it in more nuanced ways (Behr, 2012; *The Scotsman*, 2012), although with similar overall positions. In Glasgow, the Sub Club is an example of a successful legal club that maintains its status as a ‘foremost underground club’, according to Mike Grieve, co-owner (*The Scotsman*, 2007b). The credibility of the Sub Club, according to Grieve, relates to a long history and its ‘pro-music approach to business’ (*ibid.*).¹⁵¹ Grieve is here articulating the important philosophy that seems to also govern the definitions of Edinburgh’s underground venues. Thus, notions of the underground can be informed by relationships to venues, and specifically, to factors such as legal status and role of the venue in boosting a local music scene. I have used the example of Sydney as a contrasting case to Edinburgh, for the purposes of highlighting the degree of specificity with which underground is attributed meaning in different locations.

Physical geography is a critical component of techno identity, and often political expressions within techno scenes are linked to their specific localities. Most dance music genres appear to have geographical associations. There are only a few locations in the world that are consistently brought up by participants or feature in their clubbing consciousness as being effective at fostering an underground dance music scene: Berlin and Detroit are the two key examples for techno. Other genres have equivalent but different hubs. For example, Warren, an ex-psytrance producer and DJ, observes that Melbourne has excellent psytrance producers, but that by contrast, he doesn’t ‘listen to that Israeli rubbish’. Israeli psytrance is among the best known and has featured in the DJMag Top 100 charts (DJ Mag, 2013). Although it is not clear whether Warren began to dislike this music before or after it achieved such popularity, perhaps, as Thornton (1995) notes, the acceptance of music in a particular community often decreases if it achieves wider appeal than its own community (p. 128).

One of the most famous contemporary techno cities is Berlin; almost all of the participants involved in the Edinburgh techno scenes undertook ‘pilgrimages’ to this

¹⁵¹ This appears in the same article referenced in relation to the demise of the Edinburgh club scene compared with other Scottish cities such as Glasgow and Aberdeen.

city during my period of research. Some of them went clubbing for holidays, while some producers moved there to attempt to further their production careers and be immersed in the reputed scene. In addition, Richie Hawtin moved to Berlin from North America in 2003 because its conditions were seen as more conducive to producing and playing techno (Reynolds, 2008, p. 500). According to Sicko (1999) Berlin had by this stage earned a reputation for being the ultimate place for techno fans (p. 181). Australian techno producer Rick Bull also explains one of his motivations to being based in Berlin:

Rick: ... [I am] able to be a little more audacious in Berlin[...] Like, a lot of my production now is quite noisy, like lots of uh, you know, line hum, and crackle, and old machines and that's very much a Berlin sound that's acceptable here[...] whereas, um, you could, perhaps, for example in Australia this more noisy, under-produced sound is bit alien to the listening experience.

London is a significant international centre for dance music, and participants in Edinburgh's techno scenes believe that London offers a more thriving underground scene than their own. It is cited by participants such as Edinburgh-based participant and *Circus* co-organiser Dana, as a location to travel for opportunities to dance for longer than the three o'clock curfew in Edinburgh (five o'clock during Hogmanay or the Edinburgh Festival Fringe):

Dana: To not be limited by time as well means that you can just do it properly, and stumble out of the club at half nine in the morning when it's... when the sun is up in central London and not care, because this facility is there for you to do that. There's nothing in Edinburgh which facilitates dance until ten in the morning.¹⁵²

Not unlike Bennett's (2000) depiction of the Newcastle dance music scene (pp. 73-102), Edinburgh is a city that is considered by its local techno participants to have a majority clubbing population with poor musical tastes. This sentiment was expressed strongly during the aforementioned period of club closures, particularly with reference to the takeover of one popular 'underground' venue by a licensed venue chain in 2011-12.

¹⁵² Dana refers to her experiences at Exit Festival in Serbia in a similar tone – a four-day festival that requires 'stamina' that cannot be compared with club nights in Edinburgh.

The perception among international techno participants that some cities possess more credibility as clubbing cities than others is reinforced not only by participants, but also by scholars. Pope (2011), for example, contends that ‘the dystopian Detroit experience’ is different from Berlin techno, as the latter is imbued with optimism derived from the post-Cold War reunification of Berlin (p. 26), while Detroit has suffered as a city from its loss of industry for decades. It is true that the social and political circumstances which led to the formations of the techno scenes in each city have been different. However, despite Pope’s assessment of this distinction, Berlin producers have been among the most faithful to reproducing the Detroit techno sound and culture (Brewster and Broughton, 1999, pp. 359, 368; Reynolds, 2008, p. 215; Rubin, 2000, p. 111). Moreover, I would argue that the musical aesthetic of Berlin techno does not sound utopian and Detroit techno does not sound dystopian. That is, the ideas of utopia and dystopia are extra-musical concepts that could be ascribed to any music if placed in relevant contexts. While Pope argues for the distinction of Detroit techno from European techno, the participants of European techno scenes reciprocate this sense of distinction from clubbing scenes outside Europe. With the exception of specific American cities such as Detroit, Chicago and New York that have perceived historical links to dance music, non-European scenes often have to work harder in Europe to achieve underground credibility. In reflecting upon his Australian tour, Sébastien Léger determines that Australian clubbing crowds and DJs lack appreciation for the subtleties that he aims to convey in his mixes:

Australia tour is now finished, time to make a conclusion of it:

Have to say, it was quite nice, especially Brisbane, Melbourne and Sydney. Here it’s definitely a different vibe than Europe, can’t go too groovy, need to bang and keep the set interesting tracks after tracks. But that’s ok sometimes :)

Now that said, there was a few, sorry, really bad ‘warm-up’ dj’s who played stuff that even beatport top 10 looks underground next to it. So the question is, what’s the point? I mean are they aware of: a) what am I playing? b) what IS a warm up? – Why banging 129bpm electro cheese, while in the end people CAN appreciate other stuff, from what I could see ! Total mystery...

...Anyway, so big up to the right dj’s who warmed up for me here, sorry I forgot your names but you were in Perth, Brisbane and Melbourne, you know who you are :) – and of course people who came to see me play some little techy grooves, I enjoyed it after all :) (Léger, 2011d)

This assertion is reinforced by comments from those in Australia who attended his gigs during this tour. The following statement about ignorance is used by one participant to show support for Léger:

Doesnt surprise me, the djs out here dont know what techno is. Apart from a select few. (Fan 1, comment in Léger, 2011d)

In addition, the below statement links cheesiness to certain genres, categorising techno and tech-house as legitimate genres:

Sebastien you have hit the nail on the head about the music scene in Sydney. Completely lacking in originality and very cheesy, compounded by poor DJs and promoters. It needs a major tech-house/techno infusion.
(Fan 2, comment in Léger, 2011d)

The following comment in response to Léger highlights clubbers' awareness of the reputations of venues, distinctions between underground and commercial music venues, and the 'mature' or immature crowds that they might attract:

You're probably right Sebastien, unfortunately in Melb you were playing in a venue known in town for being more a top-40 club. A change in venue would've seen a more mature crowd with more response to groovier tracks. That said you had the crowd going, an awesome set. (Fan 3, comment in Léger, 2011d)

The quality and genre of music is also explicitly linked with broader geography, illustrative in the below comment:

wow thats embarrassing,, australian club djs are known for shitty electro cheesball music.. its what the mainstream australia love.. urgh.. glad im moving to london next year. (Fan 4, comment in Léger, 2011d)

Finally, the following comment correlates the quality of music to the quality of participants, also implying that the act of requesting songs is intolerable:¹⁵³

I agree with every single word...I almost can't stand the crowds and the song selection of some warm up DJ's when I head to club gigs now in Oz playing songs you can hear on the radio 24/7 and worse 'fans' requesting songs you can hear on radio 24/7...We need an electronic music revolution I say! (Fan 5, comment in Léger, 2011d)

¹⁵³ For a comprehensive list of what DJs perceive to be other forms of intolerable clubber behaviour, see *Stuff DJs Hate* (2012).

The promotion of engagement with music that is not necessarily accessible to everyone leads to the final point of distinction for participants of genre-focused scenes, and especially of techno: musical aesthetics. When other means of cultural and social distinction fall short, this is often the sole remaining issue that governs arguments about underground legitimacy. Furthermore, when these musical aesthetic arguments are deconstructed, it becomes clear that they are overwhelmingly related to cultural judgements. As I will show here and in the subsequent chapters, the differences between underground and commercial (or, for techno participants, techno and not-techno) musical aesthetics are reinforced through the articulations of participants, academic analyses, and inflammatory media commentary. An example of the latter is Fusilli's (2012) accusation that contemporary commercial dance music is too 'calculated'. This is interesting in light of the promotion of music for thinking over that of music for dancing, in techno philosophy. Moreover, the term 'calculated' implies that purely functional dance music lacks individuality of artistic expression. I will address both of these issues in the subsequent chapters as they present themselves repeatedly in techno scenes. Fusilli's criticism is supported by the 'Guardian pick' response to an online article in *The Guardian* by Reynolds (2012). This member of the public asserts a concern about the lack of 'soul', lack of 'funk', the overall 'cynic[ism]' and 'contrived' nature of popular dance music (Reynolds, 2012). This does not take into account that techniques of dance music production are to a certain extent inherently 'calculated', constructed with electronic hardware and software. Dance music production is not conducive to ideals of traditional composition in which an artist hears and writes music during episodes of inspiration.

In other words, according to Fusilli (2012), dance music becomes 'calculated' or 'contrived' in the context of the wrong musical aesthetics (such as a David Guetta track), yet these labels do not apply in the context of the right musical aesthetics (a Jeff Mills track). The easiest method for determining which versions of formulaic music – those of David Guetta or those of Jeff Mills – are acceptable is through tangible extra-musical issues, such as the way that music is consumed. It is possible, for example, to differentiate between scales of consumption by observing the numbers of people attending live events and calculating how much money is grossed (Reynolds, 2012). It is less easy, however, to articulate and justify musical aesthetic distinctions in precisely

musical terms. For Fusilli (2012), rhythms in underground dance music are ‘complex’, but not so in commercial chart dance music, where their aesthetic value is compromised by prominent ‘pop and hip hop vocals’. However, a large proportion of dance music that is historically categorised as underground including Chicago house, acid house, and contemporary house incorporates vocal samples.

A further musical aesthetic argument put forward by Fusilli (2012) is that popular dance audiences prefer predictability to challenge. I would refute this along similar lines to the role of vocal lines: all dance music is, to a certain extent, predictable. At *Circus*, the only way in which I would play music that is not part of the genres that participants expect to hear would be as a brief, playful gesture. Participants expect a club night to reliably deliver a style or styles of music and DJs can only gently push these style boundaries before participants become disappointed. This kind of musical conservatism is arguably even more the case in genre-focused scenes such as techno than in commercial events. I would argue that clubbers are likely to trust and accept the musical trajectories of their favourite commercially-successful performers regardless of any dramatic genre changes or stylistic shifts. The popularity of Avicii, for example, has not been negatively affected by a move from an unambiguously electronic dance sound to an inclusion of acoustic sounds and stylistic influences of genres such as country music. By contrast, in techno scenes, DJs can only achieve an acceptance of different-to-usual sounds if they already have the trust of the crowd, and if the crowd can understand that these choices are deliberate and brief subversions of the DJ’s usual choices. It is helpful to experiment with unfamiliar or alternative musical aesthetics if people are already dancing, rather than using this as a means of attracting participants to an empty dance floor. However, the greatest success that a DJ will have with presenting a new musical aesthetic to a crowd of clubbers is if the predictable musical aesthetic is ultimately returned to. The type of music that is chosen to subvert techno participants’ expectations will almost never include dance music that is considered commercial, such as by David Guetta or Avicii. All in all, some degree of predictability is sought by all types of dance music participants, whether it is predictably popular, predictably genre-specific, predictably avant-garde or predictably *un*predictable. Jeff Mills has to cater to his audience’s expectations, and to some extent, make predictable musical choices, just as Avicii must, at the very least, play his current hits at his performances. Thus, when musical aesthetic

issues in dance music are stripped to their core, the prejudices that they reveal are, in the end, social and cultural.

As Reynolds (2012) claims, most people are unconcerned whether the music they are enjoying can be considered underground or commercial. However, for participants of the techno scene, this is a key determining factor in their musical and social lives. Interpretations of techno as political are historically emphasised but may have been geographically and scene-specific, and potentially only of relevance in these particular contexts. For example, Fiketnscher (2000) explores a time and place (1980s and 1990s New York City) in which dance music was a conscious and explicit form of political expression for African American gay clubbers. As such, the position of this scene as underground was both imposed by society at large and embraced by its participants. In acknowledging that the underground nature of these scenes was non-commercial at the time, and that some of the earliest techno producers saw their own work and associated culture as political, I would also highlight that dance music communities have grown and branched into the popular realm. Participants in Edinburgh and international techno communities have had to redefine what it means to be part of an underground dance music scene, including depoliticising the philosophies of techno. Instead, participants have turned to an almost exclusive embrace of the types of traditional distinctions used for art and popular music governed by musical aesthetics and cultural practices.

Chapter 10 – Community and the Individual

In this chapter, I explore the contradictory techno philosophies of community and the individual. Firstly, I discuss how the idea of community manifests through genre, and secondly examine the gender issues that contribute to notions of community. In this analysis, I examine the notion that techno and other underground-branded scenes provide favourable alternatives to the open sexism of commercial scenes. I thirdly and finally argue that a clash exists between philosophies of community and togetherness promoted by techno participants and the high value of individual artistry. In techno communities, the ability of an artist to show the extent to which they can display their individuality and difference from others is often a proof of musical worth and is therefore equated with the overall validation of a producer.

Community and togetherness in the underground techno cultures of Edinburgh and of other cities are established through forms of cultural elitism. This reflects the elitism observed by Bourdieu (1984) in his extensive study of the relationships between cultural attitudes and class in France. Although Bourdieu refers to many cultural forms and techno music did not exist during his research, his discussions of taste are strikingly applicable to techno culture, with implications on the tensions between community-mindedness and individualism. Techno music that is considered by participants to be legitimately underground does not achieve commercial, Top 40 chart status, or even television or radio exposure. To adopt Bourdieu's terms, 'the aesthetic disposition' of techno is achieved by a hard-to-penetrate community whose members can show that they have an extensive understanding of subtle variations within the genre, and of the differences between it and other, less-favoured genres (Bourdieu, 1984, pp. 51-2). The prerequisite for this knowledge and the consequent right to judge the value of a cultural form includes, as Bourdieu argues, long-term involvement in the right social circles, and knowledge of how, when and where to exercise these judgements:

... the specifically aesthetic perception of a work of art (in which there are of course degrees of accomplishment) is armed with a pertinence principle which is socially constituted and acquired. (Bourdieu 1984, p. 50)

In techno communities, the acquisition of this ‘pertinence principle’ (*ibid.*) for the purposes of displaying aesthetic appreciation derives from the right balance of musical exposure and communication of this exposure to other participants. This communication is dialogic, and hence knowledge and opinions are shared among participants through the processes of debating, defending, encouraging and agreeing. In the Edinburgh techno community that I have researched, displays of agreeability and friendliness overall are critical for the maintenance of a positive atmosphere within the community. The fragility of this atmosphere is occasionally highlighted in moments of verbal or physical conflict. At the *Circus* club night, for instance, these rare moments are a source of great concern for promoters Kane and Dom, who frequently express that one of their aims is to foster an environment where physical fighting is explicitly frowned upon. They have also, however, expressed a view that this particular community of techno clubbers, is generally speaking, ‘above’ this kind of behaviour. Participants understand their own roles in the upkeep of this positive ‘vibe’, and any conversations about musical opinions in these contexts tend to involve concurrence. For example, when a clubber with whom I am not acquainted points out a musical moment that she particularly likes while I am dancing or DJing, it is easier for me to indicate my agreement with her than to engage in a dialogue on why I might not feel the same way as her about this track, breakdown or vocal line. In this moment, for the purposes of the social interaction, I may have even convinced myself that I do, in fact, agree with her. This is reminiscent of Theodore Redpath’s interaction with Wittgenstein (quoted in Poole, 2010) in which Wittgenstein asks whether Redpath’s recently purchased records are ‘any good’ (p. 10). Redpath asks Wittgenstein what he means by ‘good’, and Wittgenstein responds ‘I mean what *you* mean’ (*ibid.*). The sense of community is therefore also created through bonding over shared standards, and this contributes to the further development of shared tastes.

I have shown in previous chapters that genre is one of the most powerful demarcations of cultural territory in techno communities. A genre by its definition cannot exist for only one individual, and hence it can be said that the context of genre must necessarily be a community. Genre demarcations help to foster a sense of community through recurring social encounters and shared understandings of music and culture that allow for communication and bonding. It is also ultimately based on the inclusion of some at

the expense of others. Despite this, some of the same participants claim that the appeal of dance music is common to all humans:

Cam: The universal ‘electronic dance music’ for want of a better expression, is in and around about that kind of, you know, exercising heart rate, it’s up there with 120, 125, it’s just... it just seems natural...

I think it’s just a universal thing. I think that’s why electronic music transcends... you know people say they don’t like electronic music, ‘oh I don’t listen to dance music’, you put them in a certain situation, they will love it, and more often I see that now... people that are ‘oh I don’t really listen to it’ and then you take them to the right night, and they change their tune.

This can be compared with the views of Warren, ex-psytrance producer, and Rick, techno producer, who attribute the triggering of particular dance music elements with particular body parts. According to this philosophy, it is natural to respond to this music through dance, and it should follow that genre classifications are irrelevant. However, Cam, Warren and Rick have explicit genre biases that are explained through the musical aesthetic standards within their respective genre-based musical communities. As previously demonstrated through the views of DJ and producer Sébastien Léger, members of the global techno community are particularly vocal about their critique of other dance music communities. In his article on the dystopian aesthetics of Detroit techno, Pope (2011) observes that well-known techno producers criticise ‘trance and popular music generally’ as being musically trite, helping them to ‘affirm their particular taste cultures and identities’ (p. 36). It is significant here that there is a classification of techno against not-techno. The act of grouping trance with ‘popular music generally’ disregards the possibility of equivalent nuance and diversity within other genres, understood only by the social communities centred upon dancing to this music.

Given that techno participants emphasise history and longevity, the perception that techno is superior may stem from its early origins relative to genres such as drum ‘n’ bass, trance, dubstep, and most significantly, popular dance music such as by Avicii, David Guetta and Deadmau5. In addition to this, techno music is still relatively marginal in the context of the popular music world, isolated from commercial charts and from

commercial radio play. By contrast, genres such as ‘electro-house’, the term often used for popular dance music produced by the latter celebrities, are frequently played on commercial radio stations such as Capital FM in the United Kingdom. Similarly, the mass appeal and commercial success of trance producers and DJs such as Tiësto has not been matched by even the most successful, ‘classic’ techno producers and DJs such as Richie Hawtin and Jeff Mills. Yet, what could be perceived as a lack of success is interpreted as an indication of the preservation of integrity, artistic imagination and higher taste. This is reinforced by considering commercial success as an indication of a lack of musical value.

Thus, techno philosophy promotes its sense of community and inclusiveness negatively – through the belief that commercial dance music culture is inferior. At the same time, participants of Edinburgh and global techno scenes accuse commercial dance music culture of its lack of a comparable environment, in which togetherness and a community spirit are encouraged. This criticism includes a belief that techno participants deal differently with issues of gender to participants in commercial dance music scenes. This idea extends to other genre-focused scenes; one of my female respondents from Australia, for example, highlighted her feelings of safety and empowerment as a participant in Sydney’s drum ‘n’ bass ‘free party’ scene. Participants in the United Kingdom-based clubbing community that Thornton (1995) has researched make similar claims (p. 109). Thornton argues that these claims are problematic because participants who speak of this *other* – mainstream dance music culture – have rarely if ever having attended commercial club nights themselves (*ibid.*). Some Edinburgh techno participants have attended commercial club nights and later entered the techno community through friends or partners, such as Zoe, the *Circus* VJ. Others such as *Circus* DJ and promoter Dom have entered the techno community as their first immersive experiences of dance music from involvement in other genres of live popular music such as rock. However, Thornton’s criticism can be said to apply in some cases. As a participant in Edinburgh’s techno community, for example, I am relatively unexposed to commercial dance music scenes. The notions that I have formed are based on anecdotes from clubbers of commercial dance music and techno participants, on media accounts and on my own fleeting experiences on initially arriving in Edinburgh. I wish to therefore analyse these sources in more detail in order to determine whether there is

justification for the passing of critical judgements on gender relations in the commercial scene.

The brand of sexism that Thornton accuses underground dance music participants of is based on the tastes of certain types of women rather than blatant references to gender. One such example is the derogatory reference to ‘Sharon and Tracy... danc[ing] around their handbags’ (Thornton, 1995, pp. 87, 99-101, 109). In the below quote, Dom inadvertently illustrates that these terms are also used in Edinburgh techno scenes:

Dom: Somewhere like [*venue*] when you get an influx of girls on a hen night they don’t dance the same way... even though they’re listening to the same music... so they, you know, normally would maybe not... listening to dance music, maybe more sort of R ‘n’ b or chart orientated so you know you get more of the sort of the girly dancing like that... whereas, you know, you see girls who are... and... guys... well... if we’re talking about girls and hen nights, you know, girls who are sort of are in with the electronic music crew, sort of dance the same way as the guys do, you know, it’s all sort of, whereas, you know, with the sort of chart R ‘n’ b I think it’s all... I don’t know... I don’t... you know people [are] sort of a bit more... more reserved maybe... and... maybe in Scotland, I don’t know about the rest of the world.

Contemporary R ‘n’ B, as distinct from older understandings of rhythm and blues, is a genre of music whose associated dancing style is often explicitly sexual. Hence, both its music and dancing is frowned upon by many techno clubbers, and is used by Dom as an illustration of how particular styles of dancing that occur on hen nights do not culturally fit with styles of dancing that occur at techno events. In the above quote, Dom argues that girls who are out on a hen night either do not understand techno or do not often dance to it. For him, this explains why their dancing style is incongruous with female techno participants who are ‘in with the electronic music crew’. The perception that regular female attendees dance in a similar manner to males validates their participation as genuine. To further highlight the pervasiveness of discriminatory gender language in Edinburgh techno scenes, I wish to once more draw attention to an excerpt from an interview with Cam. I have referred to this twice so far, once with reference to the femininity of vocal lines and once with regard to the old and the new:

Cam: And I think... I think you can al... there's always the old tricks like playing a... you know... a record that's got like a... a cheeky vocal in it or something. Get girls dancing generally you'll get boys dancing... that's a good rule to follow... em... and it's not something that I particularly like using because I don't really try to kind of categorise my records as being you know, oh that's one a bit more for the ladies, you know, I don't really like records like that, I like just good electronic music, but there will be records where you know this one might get a few girls up dancing, and if you can get a... like a wee troop of girls up, you know, five girls up there that are on their own night out, then generally they will be followed by a pack of lads, and once you're onto kind of like ten or fifteen people on the dance floor, it's much easier to build a dance floor. You know, one or two people, you've got to kind of like, pull out the stops.

Although Cam does not explicitly link femininity here to a lack of understanding of 'good electronic music', he strongly implies that there is a particular type of music for 'girls' that includes vocal lines. The understanding that women begin the process of dancing is not unique to contemporary club cultures, significantly pre-dating the 'rave' phenomenon, as demonstrated for example in Frith's 1978 study of youth and music (1978, p. 11). However, this issue particularly protrudes in the context of a dance music scene that claims to be more gender-liberated than commercial clubbing communities.

Most of my interviewees dissociate themselves with mainstream or commercial music emphatically, the majority of whom belong to techno scenes. This result is similar to the United Kingdom-based ethnographic research of both Malbon (1999, pp. 58-60) and of Thornton (1995), throughout her book, *Club Cultures*. However, the few participants whom I have heard unreservedly speaking of the music they enjoy or perform as 'commercial' are female. This includes the clubbers Gabi and Fran, quoted in Part II, and three female DJs: Trendy Wendy (Edinburgh) and two Sydney DJs, Hannah and Sarah. According to an article in *The Scotsman*, Wendy is well-known in the Edinburgh clubbing circuit for her long-running club night, *Tackno*, that she openly brands as 'cheese'. It is suggested that there is a humorous or ironic overtone to the title of the club night as well as the music (*The Scotsman*, 2006). Using words such as 'nonsense' to describe her party, Wendy's humorous approach could be seen as a means of validating

her integrity as a DJ while playing ‘the very worst of Kylie Minogue, Hot Chocolate and Tom Jones’ (*The Scotsman*, 2006). Her legitimacy is further assisted by her account of the party’s conception:

I was really messing around a bit with mixing, just on record players in my student flat, and then I was asked if I wanted to DJ at one night at the student union.

I didn’t have enough records, though, really just a few, and so I had to borrow my mum’s stuff, all this tacky Seventies rubbish, and so I ended up putting on a really cheesy night. (Trendy Wendy, quoted in *The Scotsman*, 2006)

Additionally, associations of commercialism with femininity extend beyond Edinburgh to global dance music scenes. For this, I am able to draw upon my experiences in Sydney, Australia. Two highly successful female DJs, Hannah and Sarah, have referred to their sets as commercially-oriented.¹⁵⁴ Hannah explicitly labels her music as such as part of her marketing. Her Facebook promotional page labels her musical choices as ‘an exciting fusion of electro and techno with some popular vocals and a hit or two thrown in the mix’. She is now releasing music produced collaboratively and her widespread popularity across Australia has led to bookings across the Asia-Pacific region including supporting international DJ Tiësto. The second of the two DJs, Sarah, referred to her commercial leanings only in private conversations with me. In these conversations, Sarah would partly attribute her rapid success to the wide range of gigs and consequently large audience that the performance of relatively well-known music has afforded her. She has capitalised on this fact through marketing that includes a refusal in principle to be boxed into one or another type of dance music genre. For instance, on her promotional Facebook page, the category entitled ‘Genre’ is followed with the word ‘party’. Her marketing, in stark contrast to Hannah’s, is based on what participants commonly understand to appeal to fans of indie (independent) music. She is also known for her remixes and originally produced music. Many of her musical choices are played on independent community stations and public broadcasters marketed as ‘alternative’. Sarah’s embrace of multiple genres and eras has combined with her proficient technical skills to attract a large national audience. For Hannah, Sarah and their fans, large-scale popularity is a source of pride and considered to be a testament to their skills.

¹⁵⁴ I will not provide links to the sources to which I refer here, as although they are in the public domain, these participants were not part of my case study and I have not sought their permission to be personally identified.

While not its sole source, Hannah and Sarah's contrasting brands of femininity are intertwined with their success and the responses of their fans. Hannah's DJing career has included multiple photo-shoots and modelling, and her visual aesthetic is a significant component of her performance persona. Sarah's career began in a similar manner, but she has developed her image in a different direction to that of Hannah. Instead of revealing clothing, Sarah wears 'baggy' t-shirts and fashionable clothing that is less gender-specific. Both Hannah and Sarah can be said to fit Western notions of feminine, youthful attractiveness, and male fans on social networks frequently combine compliments on their talents with comments about their beauty, such as, on Sarah's page, 'Can I crowd surf', continued in a separate comment 'in your bed'. In other instances the sexual appeal of these women is expressed without any reference to their technical, musical or creative skills. A frequent comment that appears on both of their fan pages includes 'marry me', 'you're hot' and 'I love you'. Another example concerns a fan's response to a poster promoting Hannah's Tiësto tour with a solitary photo portrait of Tiësto as its primary visual object. This fan argued that 'they would sell more tickets with you [*sic*] hot face instead of Tiesto [*sic*], not taking anything away from that Dutch Legend.' This style of fandom would not be considered acceptable in Edinburgh techno circles, and is not the focus of fans of internationally successful female techno DJs, although comments on their success sometimes include references to their gender. It is significant that Carl, Edinburgh-based *Circus* DJ and organiser, reacted despairingly to a promotional video excerpt featuring a performance by Hannah that I shared with the *Circus* crew. This response was fuelled by two main issues: first, that the soundtrack to the video was Avicii's chart hit 'Levels', popular, commercial dance music that is frowned upon within techno scenes. Secondly, Hannah's DJing performance appeared to him to be highly sexualised through her dancing and revealing outfit. This supports Thornton's observations (1995, pp. 99-105) that the association of femininity with commercialism and masculinity with anti-commercial philosophies pervade dance music communities in complex ways.

Critically, both Sarah and Hannah project a sense of confidence and empowerment. The image of empowerment in the case of Hannah and Sarah is fostered through the explicit or subtle use of heterosexual femininity by these women and their managers. The

heterosexual image is of particular significance in the case of Hannah, whose DJing career began during her first long-term relationship with a woman, and her earliest performances took place at gay and lesbian club nights. Hannah periodically makes statements about gay rights on her fan page, and about women's rights more broadly. It is interesting, then, that her aesthetic, both visually and in her bodily performances caters unambiguously to dominant heterosexual male culture, and that she is an object of desire for many of her male fans. Sarah, interestingly, takes advantage of her position as an admired DJ and producer, using humour to object to gender discrimination on her fan page. When a male fan omitted the apostrophe in 'you're hot', writing it instead as 'youre hot' Sarah made her point simply by correcting him rather than referring to the content of his comment. On the same Facebook fan page, Sarah posts the most obscene sexual commentary that she receives at gigs, attempting to highlight gender discrimination. Yet, within these public images of empowerment for Hannah and Sarah lie inherent philosophical contradictions: that is, the willing use of sex and sexuality, even if subtly, to broaden their marketability and in doing so, making assumptions about essential components of female success. This contradiction is further illustrated by a conversation that Sarah had with me during her early career as a DJ, and during the extended period in which I was unsuccessful in my own search for gigs. Her advice to me included firstly, that I would be more marketable if I played music that was better-known because commercial clubs desire women DJs for promotional purposes, and secondly, that I should dress with the men in my audience in mind. Sarah specified this effort as comprising a combination of make-up, clothing and flirtation with promoters. She articulated some discomfort with this method, yet conceded that this was simply necessary. Both Hannah and Sarah seem to relate their images of desirable femininity with empowerment. Yet I argue that female DJs do not become empowered through perpetuating the same modes of femininity that are used as excuses for discriminatory or exploitative behaviour against women. Female DJs are empowered, just as male DJs, by displays of appreciation of their skills by dancing crowds. The empowerment that I often feel as a DJ dissipates the moment that I step onto the dance floor, when I am confronted with the prejudices from which I was temporarily shielded in the DJ booth. I will therefore now present a brief critique of Pini's arguments in *Club Cultures and Female Subjectivity* (2001) in relation to the gender issues I have raised in this discussion.

Pini (2001) attempts to rectify Thornton's (1995) hasty dismissal of feminist interpretations of clubbing experience and lack of acknowledgement of female clubbers' perspectives (Pini, 2001, pp. 32-7, 40-5), drawing upon the work of Angela McRobbie, who optimistically argues that rave makes 'working-class boys lose their 'aggro' and become 'new men'... through the use of Ecstasy' (1994, p. 168). Along similar lines, Pini's female interviewees argue that they feel empowered on rave dance floors due to a variety of factors. These include an unprecedented acceptance that women will go clubbing on their own without intending to pick up sexual partners, the freedom to take drugs without judgement (traditionally perceived as a male domain) and the ability to openly express forms of pleasure that are not necessarily about the sexual or heterosexual (pp. 121-2). Wearing fashions that are considered highly sexualised outside rave scenes is argued by Pini to 'signify' in a manner other than its original meaning (*ibid.*). The articulation of the sense of empowerment by these women attributes an uplifting and hopeful significance to the act of dancing to dance music (Pini, 2001, pp. 40-5). Yet Pini's interviewees have to 'work' to achieve the sense of safety and pleasure that they describe, and they must perform a 'management' and 'monitoring' of their behaviour while on drugs (pp. 176-87). Even while they use feminist ideas to argue that their attraction to the scene stems from its distinction from commercial scenes, their sense that they must rely upon techniques to help them to safeguard these freedoms is a testament to a rather different reality. The exercising of this form of self-policing is, without a doubt, gender-specific and is suggestive of the possibility that women in the rave scene are not perceived or treated as equal to men. For Pini, the dance floor is promising in that it is representative of the broader changes in gender relations occurring in society (pp. 40-5, 190-5). By contrast, I observe gender discrimination such as verbal harassment occurring regularly even in an ostensibly liberated music community such as the Edinburgh techno scene, and relatively liberated societies such as in the United Kingdom and Australia.

Although I do not agree with the notion that underground dance music communities are genuinely gender equal, my observations in the field also lead me to question Thornton's (1995) argument that there are no grounds for clubbers of underground scenes to accuse clubbers in commercial scenes of sexism. Although one of my earlier research aims included that I would attend a range of chart music nights in order to

broaden the results of my enquiry into danceability, the forms of promotion I have since encountered have deterred me from fulfilling this goal. One such example is the encouragement of women to dress revealingly in return for free or cheaper entry for which a particular venue and promoter in Edinburgh have been heavily criticised (see Deal, 2011). According to clubbers who have attended commercial club nights in Edinburgh, both men and women set out to attract temporary sexual partners on each visit to such events. The latter forms of sexist promotion has led to negative coverage in print and online media (*ibid.*) and provided additional fuel for members of techno and other genre-focused scenes to reiterate their distinction from the commercial scene represented by this scandalised promoter and associated venue. Specifically, techno participants such as Zoe argue that gender discrimination is a problem for which organisers and venues associated with this commercial music scene are accountable. By contrast, the Edinburgh techno promoters who have participated in my research do not use gender-related tactics of any kind to attract potential clubbers. Kane, one of the *Circus* promoters has actively intervened during moments in which I have been physically harassed during his club night. What is more, my gender has been irrelevant to my collaboration with *Circus*. My work as a DJ and researcher has been respected by Kane and Dan, in addition to the other *Circus* DJs, Carl, Bernhard and Shawn, VJ Zoe and co-organiser Dana.

As I have argued, the techno philosophy of community is promoted in part through its claim to an environment free from gender discrimination. For some techno participants, the sound of commercial dance music acquires an irredeemable status associated with blatant gender discrimination, yet the sound of techno occurs in conjunction with subtler forms of discrimination. However I would argue that techno participants tend to display more progressive attitudes toward women than the commercial scenes that they criticise. The reputation of commercial clubs is not without some justification, particularly for its cynical perpetuation and encouragement of discriminatory behaviour. Techno and other genre-focused participants could be defended in their opposition to the explicit endorsement of sexism within the culture of commercial club night promotion. As Thornton herself says, the handbag is 'associated with womanhood or pretending to be grown-up' and is 'a symbol of the social and financial shackles of the housewife' (Thornton, 1995, p. 101). Perhaps, therefore, it is not Sharon and Tracy

(Thornton, 1995, pp. 87, 99-101, 109) for whom the techno fan holds the most disdain, but for the fact that they feel compelled to dance with female-only friends in closed circles that act as protective barriers against male predators. The handbag and the act of dancing around can be said to represent the reality of inequality and associations of femininity with domesticity, as Thornton highlights. I find it also oddly reminiscent of the figure of Thatcher with her infamous handbag, her reputation for vocal anti-feminism and her objections to dancing to repetitive beats through the *Criminal Justice and Public Order Act 1994*.

Philosophies of community are contrasted by the strong yet unwitting promotion of individualistic philosophies by producers. A 'good' underground techno track requires some expression of an original, creative voice, while also having characteristics that lead to a clear understanding that it is techno. This can be contrasted, in some senses, with the ethos and practices of techno in the 1980s and early 1990s. Technology in dance music during this period was practically linked to accessibility; it would enable what Reynolds (2008) suggests is kind of a democratisation of music production – the emergence of 'bedroom' producers (pp. 97-8). The accessibility of programmable electronic instruments that allowed some degree of automation for musical aesthetic outcomes seemed to be an alternative model of music-making to the traditional composer as creative auteur. Yet early Detroit techno producers also perceived their mission as using this technology to promote new and challenging musical aesthetics (Sicko, 1999, pp. 57-8). This has been carried into the techno cultures of Europe and the United Kingdom; while ideas of access and democratisation through availability of technology persist, it is also not acceptable to take the easy route as a producer. Technological know-how and the goal of challenging the listener are key indicators of the value of techno music. The following extended excerpt of an interview with the producer and DJ Deepchild (Rick Bull) is illustrative of this complex expectation:

Rick: I'm getting a lot of promo where the production is super bright, super loud, there's no extraneous noise or reverb. Um, and this can work quite well, functionally, but I find it can be quite fatiguing for me to listen to for hours. So... and also, I guess I... I... I... I... I just like the idea of... of noise. Like, it feels somehow human to me. And I like the idea of atonality... um... I guess I... I like to

feel like I'm listening to a machine that's breathing, that has a heartbeat, or that is coughing or farting occasionally. Um... but yeh, I... I... I've seen others can be challenging in some... in some circumstances, like my... my particular mixes can occasionally sound a bit muffled... um... what was the original question? (Laughs)

Tami: The question was, um, how do these, like... what sort of tone colour techniques would you use specifically for dance floor manipulation, like to get people into the mood, or...? Or do you think your tone colour aesthetic *is* more about your personal taste than the dance floor?

Rick: For me it... it... it generally is. Um, like I have pretty specific aesthetic... and it definitely changes over time, and alcohol consumption, um... but I... I steer away from the more... more clean sound. Um... I guess, yeh, I... I... I sort of like... I like it when there's something that's a little bit [un]predictable or out of time or distorting about a track. Like, I'm hear, I hear so much... every week I'm getting hundreds of tracks on promo, um, from labels basically, and um, so much of it sounds really... really safe. There's no personal fingerprints on the screen, the record. And, um. And, you know, I think there's definitely a place for really produced, really clean music. Um, but I find myself, man, it's weird, sometimes I find myself even getting angry listening to some of this stuff, I feel like 'oh come on! You... you've been given these wonderful tools to say what you want and you're just hiding behind... you know, hiding behind presets, and... and grrrr'. Which is a totally unfair judgement, I mean, I think the exciting thing about the ubiquity and availability of electronic music... uh... production tools is that everyone can [have a] go, which is great. But, I... you know, this was the music that was so compelling to me when I was in... I feel like it really kind of helped rescue me in my teens, and so... I feel like I want the conversation to continue. And, and then sometimes I hear production techniques that they just feel very conservative to me but without... without justification. (Laughs)

Tami: Right. So... so you don't think that maybe these people are... are using conservative production techniques... um... as a kind of insurance that this is a functional dance floor track, and if I experiment with other things, it mightn't be anymore?

Rick: Yeh, I think that's... that's often a big part of the reason why they do. Um, I guess, from some of my travels overseas... I won't name specific places, like I've met some really wonderful producers also producing very conservative dance music. Um, and I think this is because, um, they've... they haven't yet got a sense of personal ownership of the music. So, they... they've... they've... they feel like... for example if I was um, if I was just learning to play violin, and I was, uh, you know, seven years old, then I wouldn't necessarily start doing my own inflections on a piece of music, or start swinging it, or, you know. Or for example, another analogy, and I've had this, because like I'm really... I'm... I'm into yoga, but I don't really subscribe... um... to dogma for the sake of it. So I've been in some yoga classes where I'll do a variation on a move that is not part of the sequence, and the response will be very negative, and the teacher will be like, 'why did you do this?' and I'll just feel like saying, 'well, it's *my* body, you know, like, this is *my* yoga, this is what the yoga has taught me is a good response now. I'm not trying to be patronising or take away from your practice... but...' (sighs). You know, you can't... to play... to play a piece of music is more than learning scales. Learning the scales is so fundamental. Anyway... I... I... I... I guess I've found a lot of younger producers who are really excited to make dance music but don't necessarily feel the sense of confidence or ownership to... to try techniques that might be a bit more risky. Um, I think there's often a fear of judgement, or a fear of... um... they're actually trying to have a conversation with the music that will never be there, that is somehow external to them, they can only hope to emulate.

Tami: Mmmm. So they've not found their voice yet?

Rick: Yeh!

Tami: Or maybe they're afraid to find their voice?

Rick: Yeh, yeh. Um, and again, and you know, dance music... club music has been around for so many years now, that it is, just in a lot of ways it can be seen as the new pop music, and there are some codes you don't dare break. And if you do you're actually somehow dissing that. You know, you can see this very strongly in Hip Hop, with this whole notion of 'keeping it real'. It's... it's... it's such a diversion in a lot of ways...

Tami: Whatever that [keeping it real] is...

Rick: Yeh, whatever that is! You know, like it's such a diversion from when some dude picked up two old copies of a record and used his home stereo and starting cutting up funk records. You know, like, he wasn't cutting up Hip Hop, he was fucking with someone else's music to make something new... like... erm... and all of a sudden, Hip Hop has become assessed by what constitutes Hip Hop.

Tami: Yeh, well, so has dance music I think.

Rick: Yeh, that's what I'm saying, yeh, I think it's really strong parallels. But a lot of people have these assumptions, these purist assumptions, that actually, maybe don't... they're just another way of just protecting themselves... and... and... and... and... yeh. But it's conversation. Um, I always... my my biggest musical idols are people like um... Keith Jarrett, eh... erm, piano player... erm, you know, Miles Davis, like all these guys... eh, King Tubby. Like basically people that were given a form, and then, eh, somehow subverted it a lot, had the courage to take the conversation in a particular direction, even to... eh... that came out of quite strong traditions, and then just... showed some vulnerability.

Rick's comments are demonstrative of aesthetic philosophies that are upheld by European techno producers, DJs and the most involved fans. According to Rick, having too clean a sound can be 'fatiguing', and a certain degree of noise is required. Here, the legitimacy of the music is justified through an adverse reaction to art that adheres to standardised forms. As Adorno argues in his treatise 'On Popular Music' (1941), standardisation, as a 'fundamental characteristic of popular music' (p. 17), allows no room for genuine newness (p. 18). Similarly, for Rick and many other producers, originality is a goal with moral undertones. The sounds, made by machines to sound explicitly machine-like, are connected, conceptually, with human, visceral bodily sounds and functions. Edinburgh clubber and VJ Zoe even uses the term 'organic' as a metaphor for the musical atmosphere that makes her want to dance. In the above excerpt, Rick is concerned with the tracks he receives from new producers having no 'personal fingerprints', not being 'self-expressive' and making 'conservative music'. Yet, these views are strikingly different to his account for why he fell in love with electronic music:

Rick: It seemed so faceless, and so free from uh... like... the rock n' roll mythology that... that I was encountering through, you know, mainstream radio, and uh, the stuff that all my friends were into, you know, it was music of a machine, that anyone could make, that didn't have to have a face to it. It was just so incredibly other...

... and I remember the things that really really excited me was the way that I could get some... like old drum machine and an old synthesiser and hook them up via MIDI, and they would play each others' notes, like, autonomously...

... So I'd just hook this stuff up, [add in] some effects, and kind of press play, and sit back, and be like 'wow... this is, like, automatic music, I've got nothing to do with it!' So I was really impressed with the discovery... like a... like a secret code that the machines knew and it was just my job to find out what it was, or to witness it. It was... it was very exciting! So different from... um... you know, learning to shred, on guitar, which I also did, but (laughs) you know, there was something more captivating about [...] like you were discovering it... like a secret language.

Here, Rick simultaneously expresses the liberating aspect of electronic music production as opposed to live instrumental performance, and a belief in musical sophistication. Within this notion, humanness is somehow to be found within the un-human, and music made by machines is afforded its human element through the unique musical aesthetic of the solo artist. However, the characteristics of music that are considered by Rick to fulfil musical sophistication reflect the 'rock n roll mythology' that Rick critiques – the placing of an individual stamp on a piece of music.¹⁵⁵

In this chapter, I have discussed a range of issues that relate to the overarching dichotomy of the community and the individual in techno scenes. I have drawn upon a larger set of examples than my Edinburgh-based case study to illustrate the ways in which this dichotomy is applicable both locally and globally. Genre, it seems, helps to

¹⁵⁵ For critical references to the comparisons between contemporary dance music culture and rock culture, see the article by Reynolds (2012) in *The Guardian* about recent increases in the popularity of dance music in the United States.

reinforce community while conflicting with claims that dance music has universal appeal through its repetitive pulse. I have also observed that women have been my only participants to label their tastes as clubbers or repertoire as DJs and producers as commercial. I have emphasised and complicated the place of gender in community-oriented techno philosophy, and explored the ways in which femininity is embodied and interpreted as empowerment. Techno participants dissociate themselves from commercial scenes partly through criticising the women that they perceive to represent bad music and bad culture. Finally, in the techno community, a producer's ability to show his individual artistic voice through his tracks and remixes can be a strong determinant for whether he is noticed or ultimately signed by a techno label. This may be partly attributed to the fact that a large proportion of label owners and managers in the global techno community are themselves producers. Marketability is ultimately specific to a listenership that demands a balance between danceability and listening 'challenge' which can be difficult to achieve. This tension is characterised, on one hand, by the need for a familiar set of musical aesthetics that would be noticed by, embraced and bonded over by the techno community collectively. Yet there is also an expectation of fostering musical originality through a recognisable individual voice.

Chapter 11 – Mind and Body

The nature of techno as music for dancing conflicts fundamentally with the philosophies of techno that emphasise cerebral music appreciation. In this chapter, I break this tension down into a number of components, beginning with promotion of musical experimentalism juxtaposed with functional music for the dance floor. Producers and DJs of techno and tech-house are most frequently the upholders of experimental philosophies.¹⁵⁶ However, there appears to also be a significant number of dance music fans with an online presence who have a greater interest in listening (more than dancing) to experimental music albums. Although participants with these views are often particularly vocal about this ideology, my DJing and clubbing practices suggest that the same participants also respond enthusiastically to more conventional techno that makes them dance. In addition, some techno participants believe that musical techniques designed to make people dance are predictable, rendering these techniques inferior to music that makes people think. This contradicts the view that techno is primal and has an intuitive link to dancing, which in turn disregards the astute genre-consciousness that is discussed with reference to anything that is not techno. The tension between ideas of cerebral and corporeal musical appreciation is also visible on the dance floor through contrasts between restrained and extroverted dancing styles. The number of people dancing, the levels of intoxication and the build up of musical intensity are among the factors that affect the level of restraint or extroversion in dancing, in addition to the presence of friends. I consider other issues such as the influence of traditional gender roles upon individual experiences of dancing in contemporary techno club nights, the link between alcohol and frowned-upon forms of extroversion and the idea that only DJs are permitted to embody the music as performers. The final aspect of the philosophical conflict that this chapter will examine is the negative perceptions and positive collective responses to instant musical gratification. As part of this, I will also address the extent to which Bourdieu's (1984) notions of high and low art practices are applicable to techno scenes.

¹⁵⁶ In this case I discuss techno and tech-house as 'one' category as they are often played side by side at the club nights *Circus*, *Wave* and *Prime*, and are often indistinguishable.

A recurring discursive theme at the core of the opposition between mind and body are the ways in which experimentation and danceability are presented as contrasting forces. In Eshun's (2000) brief cultural history of house music, these terms are used to describe the coming together of these two categories to form an ideal style of electronic dance music:

It's widely agreed that the first acid-era wave of house from 1986 to 1989 reached a creative peak at the point where dancefloor appeal and extreme experimentation converged. But the upheavals of mid- to late-nineties house have gone unnoticed, overshadowed by the breakthroughs of jungle and drum and bass on one side and by techno/electronica's self-image of conceptual breakthrough on the other. (Eshun, 2000, p. 77)

According to Eshun, house of the late nineties successfully combines these forces, as 'catchiness converges with confusion, immediacy feeds into extremism, and pop coincides with futurism' (Eshun, 2000, p. 87). This division between experimental music and dance floor music is also discussed by many producers, DJs and the media, who often categorise new releases as either one or the other. Although there may be middle points between highly experimental and purely danceable music, the ways in which these two are discussed as mutually exclusive suggests a preference in techno for distinct positions of artists and audiences, in contrast to the idea that dance music and DJ cultures have unhinged these traditional divisions. This reversion is highlighted by the query of Sébastien Léger's query to his Facebook fans:

Ok I have now a SERIOUS question for you :

Would you prefer from me, an album kind of eclectic (tracks, electronica, various bpm and mood) or radically dancefloor orientated (dj track, fuck the home listening music) ? Because i can't make up my mind for at least 12 months now :)

So ? (Léger, 2011a)

The responses of Léger's fans are evenly divided in their votes for one or the other form of music, and some participants vote for 'both', indicating a belief that one does not have to be chosen at the expense of the other. Yet by asking this question, Léger is posing these forms against each other, and the comments that support the experimental type of album equate experimentalism with higher value. I have selected the most explicit of these assertions to illustrate this:

Léger Fan A: How about an experiment and showcase of how you can push the envelope and make something ‘out of the box’ which is experimental/unconventional/contemporary, yet Futuristic :)

Léger Fan B: Eclectic would be more interesting, its always very cool to listen to different sounds and understand where your influences come from. Dancefloor oriented is almost what every label does... So personally less interesting ;)

Léger Fan C: I think a real album is more challenging and better for home listening. If you just want to make club-bangers then that’s great but then just realise them on Beatport for DJs and club-heads to buy.

The cool thing about releasing something more eclectic is that you can make something more personal and interesting and then, have a million remix club-bangers made outta them later!

Léger Fan D: An album for earphones listening while walking in metropolis... Sunday late evening... would be great :)

Léger Fan E: Eclectic! experimentation is the key to progression

Léger Fan F: create art. send the world a message with your music.

Léger Fan G: ... an actual album that deserves the name should always carry the maximum amount of personality and creative freedom. You just don’t want to be bound to anything. Tell your story, share your feelings, experiment. That’s what albums are good for. You’re blessed with a huge fanbase that will actually listen to your musical expressions – so go for it! :)

A variation of this view is held by many of my interviewees both from Edinburgh and other scenes – that genres with more dance floor functionality become clichéd, and thus of inferior value. Charlie, the host of a Sydney-based radio show on an independent, community radio station and a DJ since the 1990s, espouses this view:

Charlie: I kind of hate the big build up thing, personally, I don’t play Prog or Trance particularly. Well I don’t play any trance. So I guess the most obvious thing

would be the breakdown and, yeh. Oh like, so, after the end of the breakdown the beat comes back – and everyone puts their hands in air (laughs). It depends who you're playing for, because if they're like a crowd that's quite switched on, you can just play a track, and then... like, half the crowd will hear the first recognisable bar and the crowd will go 'woohoo'. You know, it doesn't have to be a specific thing, it can just be a specific record. But I think that other stuff is quite... you know, is pretty cheesy...

... And a lot of crap, sort of, electro music is like... is like that, it's like, 30 second intros, followed by a drop, which you pretty much can't mix through, and then onto the next one and it's just... um... I... I... you know, I don't know how you actually get any, kind of, light and shade into that because it's so kind of constant. (demonstrates electro sound with voice)... appreciation for the long mixes is almost non-existent.

According to Charlie, big breakdowns are dramatic and obvious, and therefore in poor taste. Big breakdowns make it easier to dance, do not musically challenge participants, and most importantly, are used in commercial dance music that offends the tastes of Charlie and other techno participants. Big breakdowns are what Charlie calls 'typical techniques' that pull dance music down to the status of pop, which Charlie feels is predictable and uninteresting. The phrase 'light and shade' evokes Monet and Renoir paintings and highlights the importance of the ideas of subtlety, nuance and restraint within techno philosophy. These ideas can be traced back to attitudes held by early Detroit techno producers. For example, when 'booty' – a commercially-oriented style known for its explicitly sexual lyrics – surpassed techno in popularity in Detroit, Juan Atkins was publicly critical of it, saying, 'it's too silly... All that hoopin' and hollerin' and whoopin' 'It's your birthday!' – it's too corny' (Atkins, quoted in Rubin, 2000, p. 123).

The assumption that the 'typical technique' of the breakdown provokes bodily responses and is inherently danceable relies on an understanding, on the part of the clubber, of the function of the breakdown. As Michael, one half of Edinburgh-based production duo The Setup perceptively notes and as I highlighted in Chapter 3, breakdowns are enjoyed by fans of particular genres, while in other genres, they are not used at all:

Michael: I think different musical genres have different techniques. Um, a lot of more, eh, deeper four-four music will be more continuous with its... um... with its rhythm, but the likes of dubstep and drum 'n' bass will have... um... big breakdowns, which are... you know... you would lose the rhythmic elements in the track for a short period before being returned with full effect, and generally with... um... a subby bass line, that would... em... you know, it would... it's quite dramatic and it gets... it'd get the crowd's attention.

Tami: Mm. So you think the big breakdowns don't work as well in... um... in four-to-the-floor stuff?

Michael: I think that...

Tami: Or is it just a convention that gets followed? I mean, how much of that is [genre] convention and how much is actual aesthetic [preference of clubbers]?

Michael: It can do... Well, it does. I'm thinking more like minimal techno. You often have a nine minute track with essentially at least one drum component playing for the entire time. Whereas, uh... with a dubstep track that'd be... be almost inconceivable... be twice as long and... eh some of the more experimental dubstep, and some of the more... eh... rolling or techy drum 'n' bass will minimise the breakdown element. But it is more a stylistic thing.

This suggests that bodily responses to musical features are particular to different groups rather than being universal. Kane similarly highlights the way in which genre is a helpful frame of reference when trying to determine the triggers for dancing in a crowd:

Kane: I guess, you know, a lot of time, you know, I play at *Scram* and *Time Out*, and I, I tend to play, like, sort of, house music more. Because people respond well to vocals very much I find... Em... vocals, and kind of like, funkier bass lines, you know. I guess music that sounds less... em... you know, a lot of techno which is my preferred music, you know, a lot of minimal tech is very sparse. It's very much... em... about depth of the sound as opposed to the... the amount of sound that's

there. I mean that's the fundamental basis for minimal techno really. Good minimal tech anyway.

... In answer to your question, people dance to... house music more than techno, you know. There's not that... I tend to find, if you're talking the Edinburgh crowd, em... they're a lot more likely to react to I guess, more of a... more of a musical assault, you know. That's why I, I think dubstep's so big here. 'Cause... um... 'cause... 'cause people just want the music to like... to... to be like... completely exciting to them. And exciting in a way that they... they, you know, they don't have to invest anything into it.¹⁵⁷

Kane views his role in quite a functional way – to perform music that people enjoy and want to dance to. However, he does not share the love of 'musical assault' with 'the Edinburgh crowd' to whom he refers, and he criticises this crowd's lack of 'investment'. He admits that he can occasionally be 'rigid', choosing his music selection based on his preferences. In these instances, he may continue to use this music even if it is not drawing a crowd onto the dance floor. Throughout the interview, Kane seems to be torn between maintaining a principled approach to music choice (based on music he simply believes is 'better'), and maintaining a lively dance floor, making people want to move:

Kane: I've had quite a few bad gigs where I've tried to play music that people don't respond to, and then they just leave. You know, I've cleared dance floors. Yeh, I think... I think it's just part of trying to learn how to DJ. You have to clear a few dance floors and just be like ok, that didn't work.

By contrast, Charlie does not take a lack of dancing as a negative response to his DJing. Instead, he highlights his perceived distinctions from dubstep or electro by interpreting their danceable features unequivocally negatively:

Charlie: I don't normally play at dubstep events, but I've played at a couple, and it's quite clear... um... what they're kinda after I guess, in terms of sound and so it's fairly obvious when they get it, they react. You know, like, jumping up and down.

¹⁵⁷ The first part of this quote by Kane was also used in Part II, with reference to the danceable nature of vocal lines.

... I think, within that sound, I think the kids tend to want the really growly kind of wobble... but I guess it's the... you can say the same for techno, where there's an awful lot of different types of music you could call techno, but a lot of techno parties, you know, you have to be playing *slamming* techno...

For Charlie, the idea of clubbers 'jumping up and down' is an insult rather than a compliment, as it would be for a DJ whose goal it is to make people as excited and energetic as possible through music. Charlie is an example of the way in which techno as a genre is associated with a higher degree of restraint than music performed in comparable contexts, particularly in relation to its physical embodiment on the dance floor. This restraint fundamentally conflicts with the goal of reckless physicality that is often promoted as a universal element of dance music, and which is often amplified by MDMA use. This mind-over-body techno philosophy is a recognisable aesthetic unto itself, manifesting through music, dancing and socialising.

The promotion of restraint is interesting in light of two related issues – firstly, an understanding of the body as an essential means through which music is interpreted, and secondly, the tendency of participants to associate the sensations of moving to music with feelings of pleasure. While we assume that the body's movements are driven by our interpretations of musical rhythms, music psychologists Phillips-Silver and Trainor (2005) also argue that the reverse process occurs – physical movements of the body affect our perceptions of the rhythms that we hear (p. 1430). One example is in the case of musical meter: where there are no dominant paths of metric interpretation such as strong accents on the first of every four beats, the body can help us to *feel* one or another type of meter (*ibid.*). Yet emphatic and accented gestures such as 'punching' the air do not only denote understandings of beat and accents – they are also suggestive of and contribute to feelings of musical pleasure. Although occasionally clubbers may attend to and admire the technical aspects of a DJ set by pausing from dancing in order to observe details, the cessation or reduction of bodily movement is rarely a display of increased enjoyment. Given this link between dancing and pleasure, when participants answer the question, 'what makes you dance?', or in the case of DJs or producers, 'what do you think makes people dance?', responses are almost always about music that

interviewees *like*. It seems that respondents automatically translate the question, ‘what makes you dance?’ into ‘what music do you like, and therefore like to dance to?’ The following examples of the types of responses that assumed this link are provided by Rick and Dan, producers, and Victor, a clubber:

Rick: Um, I guess one of the things that *I* like about dance music is that in a sense you can reduce it to... um... a set of... sort of prerequisite fundamentals, that really feel genetically hardwired...

Dan: For me personally, I just like that kind of tribal feel, that sort of constant... (taps on the table)... I don’t know, beat. It depends... on how good I think the music is... It’s almost like you’re not even really in control of your body when you hear something you like, it’s an almost involuntary thing, you just can’t help it.

Victor: I don’t really know what it is for me, to be honest, but... if I enjoy the music, that helps a lot.

Here, Rick once again leans towards the appeal of dance music as universal, suggesting that the ‘fundamentals... feel genetically hardwired’. For Dan, the idea of a trigger that is not within his control emerges once more as an important theme for why the ‘tribal feel’ is attractive to him. Additionally, Victor explains that dancing is a response to music that he enjoys. Many other participants also allude to the relationship between enjoyment of music and dancing to music, but do so less directly than Rick, Dan and Victor. These perspectives suggest that motivations for holding back bodily movements are ideological rather than ‘natural’.

Participants do not only link musical enjoyment to dancing but also note the ways in which their relationships to other participants affect their embodiment of music. This is exemplified by Gabi, Fran and Harry’s responses to what makes them dance, discussed in Part II. These participants’ motivations for dancing – being with their friends – are at least as powerful as musical triggers. However it is worth noting that Gabi and Fran are fans of commercial dance music in Edinburgh and Harry is a trance clubber in Sydney. Unlike these participants, few of my techno respondents emphasise socialising as their main trigger for dancing. This might be due to a perceived lack of relationship between

the display of objective, critical detachment (that I will discuss in more depth later) and enjoyment of music with friends. Nonetheless, these social triggers are powerful; Fran dances to conform even if she does not like the music, and Gemma, a techno clubber, also feels the need to prove her musical knowledge to others. Social triggers in this form also become social pressures that are embodied on the dance floor. All in all, it can be said that participants in my study equate dancing with some form of musical pleasure, which is also linked with social pleasure.

I will now present some video footage recorded at two *Circus* club nights in April and October, 2012 and excerpts from my ethnographic notes at a Glasgow club night in March, 2011 to explore the above points in further detail. In particular, I wish to draw attention to the movements of individual participants and the overall energy of the dance floor in these videos. As I have previously demonstrated, factors such as tempo, consistent, dominating kick drum beats, non-pitched percussive parts, occasional and minimal melodic lines, slow development of musical form and muted timbres all affect the ways in which techno is embodied within dancing spaces. Repetitive foot movements tend to punctuate the kick drum, and similarly repetitive head movements often reflect the kick drum, snare and hi-hat. One of the ways in which the music is characteristically embodied by clubbers is through its interpretation as an understated musical style. In other words, some techno clubbers might sway while shuffling their feet and gently nodding their head in time to the beat, while their arms hardly move. As the night progresses and a build-up of tempo, volume, texture and intensity in a DJ set is achieved, this is reflected in dancing, in which the range and variety of movements increase. The nature of responses to the build-up of tension during DJ sets varies significantly according to genre and place – the above description applies specifically to techno nights in Edinburgh. The below video shows clubbers at the start of *Circus*, at approximately eleven o'clock at night (the start of the event) in which some clubbers are simply talking and drinking, while others are already dancing. Dancing constitutes fairly subtle body movements at this early point in a techno night, and there are as many people talking as dancing. This clip shows one section of the dance floor from the elevated stage:

Video 8. *Circus* - April 2012¹⁵⁸

In the below videos, filmed one and two hours later respectively, a rise in the overall energy of the dance floor can be observed through the bodily movements of clubbers that reflect musical activity. The first of the below videos is also a view of the dance floor from the stage. In the second, some clubbers have moved onto the stage due to the lack of remaining space on the dance floor:

Video 9. *Circus* - April 2012¹⁵⁹

Video 10. *Circus* - April 2012¹⁶⁰

The following three clips were filmed toward the end of the club night. If viewed in succession, the changes to which I would draw attention include the growth in the size of the crowd, as well as the audience focus being more directed towards the stage. Additionally, I would highlight that the alternation between talking and dancing transforms into mostly dancing (and significantly less talking). The first of these videos depicts a view of the DJ playing on his laptop and dancing on the stage. The second initially presents a view of the stage (filled with clubbers) and from 0.36, a view of the dance floor with the VJ's laptop occasionally appearing in the bottom left hand corner of the screen. The third video shows the dance floor from the vantage point of the stage until 0.49 when the camera pans to the DJs and VJ on the stage:

Video 11. *Circus* - April 2012¹⁶¹

Video 12. *Circus* - April 2012¹⁶²

Video 13. *Circus* - April 2012¹⁶³

¹⁵⁸ Gadir, T. (2012) Fieldwork footage, Clip #i, *Circus*, 12 April 2012. 08.00 – 09.00

¹⁵⁹ Gadir, T. (2012) Fieldwork footage, Clip #vi, *Circus*, 12 April 2012. 07.45 – 08.45

¹⁶⁰ Gadir, T. (2012) Fieldwork footage, Clip #xiii, *Circus*, 12 April 2012. 00.10 – 00.30

¹⁶¹ Gadir, T. (2012) Fieldwork footage, Clip #xv, *Circus*, 12 April 2012. 00.00 – 00.30

¹⁶² Gadir, T. (2012) Fieldwork footage, Clip #xvi, *Circus*, 12 April 2012. 02.55 – 03.55

¹⁶³ Gadir, T. (2012) Fieldwork footage, Clip #xvi, *Circus*, 12 April 2012. 05.36 – 06.36

While the progression of the music undoubtedly impacts upon the energy of clubbers, this is an effective demonstration of the way in which participants receive encouragement from each other to fuel their energy levels, confidence, and willingness to move to music. Thus, the act of friends relating to one another can be seen as a social trigger for dancing, although this is not discussed by most techno participants in interviews.

Above, I described a relative lack of arm movements as characteristic of restrained techno dancing. However, it is clear that by the latter stages of the night, there is a substantial increase in arm movements, most commonly in the form of ‘punching’ the air in time to the kick drum or hi-hat parts. An example of this is in the below clip of my DJ performance at a *Circus* gig, October 2012, in which the extension of clubbers’ arms is a uniform signal of recognition of musical tension. This video shows the stage from the vantage point of the sound, lighting and DJ booth at a different venue to the footage in the previous videos. It also shows an overview of the dance floor from behind, only capturing the tops of the tallest heads on the dance floor. This provides a different perspective to the footage filmed in April, as clubbers’ arms are the only parts of their bodies that are clearly visible as they are raised. The people on the stage include myself, other *Circus* DJs and promoters, their partners and some other clubbers who have spontaneously moved from the dance floor onto the stage:

Video 14. *Circus* - October 2012¹⁶⁴

In addition, Video 15 shows the fluid arm movements of one clubber standing on a raised platform (higher than the stage) at the *Circus* event in April, 2012. The laptops of both the DJ (left) and VJ (right) are also in view. This is an example of a relatively active techno dancing style through upper body movement including the head, shoulders and arms:¹⁶⁵

¹⁶⁴ Gadir, T. (2012) Fieldwork footage, Clip #xi, *Circus*, 26 October 2012. 27.00 – 28.00

¹⁶⁵ The limitations of this footage means that clubbers’ feet are not visible. However, I have observed that feet movements are often the starting points of techno dancing.

Video 15. *Circus* - April 2012¹⁶⁶

The arms in Videos 14 and 15 belong to the techno participants who are not especially concerned with restraining their visible enjoyment of dancing to music. They embody the thrill of techno, in most cases, with added enthusiasm brought on by drug effects. By contrast, the *Circus* VJ, Zoe, one of the first clubbers whose movements I observed closely, epitomises the display of musical appreciation through minimising her movements and avoiding interaction with others. Below is a short excerpt from my field notes taken at a gig in Glasgow's Sub Club, on 18 March 2011. A number of *Circus* participants attended this event for leisure rather than for work, and it took place the same day that I interviewed Zoe. In it, I attempt to describe what I see when watching Zoe dance:

I watch her dance to this minimal techno music, which is almost all percussion and no melody, and see what she meant by not being in the club for the interaction – she's practically ignoring us and stands with her other friends but hardly says a word to them. She dances very minimally, like the music, small movements, mostly head, shoulders, some feet, and when she's really into it, her hands which normally sit limp by her sides start to flop about as if she's doing a doggy paddle or sweeping away an unpleasant smell.

At this event, my attention shifts from Zoe to the dancing of other clubbers. The below excerpt includes a description of what I perceived at the time to be atypical and typical styles of techno dancing. I begin by writing about the dancing style of a woman that can be likened to that of the man in Video 15, and then comment on the bodily responses of the whole dance floor:

I see one woman dancing in a very fluid way, with all her body, as if she were a mermaid under water, her arms and legs are all an extension of the rest of her body, and move like a 'Mexican wave'. This is unusual in this room, as it's a bit like Berlin here, most people are moving in a very contained fashion, some hardly even moving their feet, others shuffling their feet about side to side- that's almost universal in this club, the side stepping movements in time to the beat. Another really common stylistic element is the shoulder shrugging as well as head nodding of moving back and forth, pigeon style. Most people are moving their bodies vertically up and down, with very little movement along the X axis. A lot of people chop the air with their hands, either with fists or karate style, with flat hands... Another is the general kind of bounce that many people are doing. It's an up on the downbeat movement, which I've realised almost everyone in the room is following – myself included. This also makes me wonder whether this word

¹⁶⁶ Gadir, T. (2012) Fieldwork footage, Clip #xiv, *Circus*, 12 April 2012. 02.20 – 03.00

downbeat is appropriate to describe the crotchet beat, the sound of the most dominant beat. Perhaps it should be called the upbeat, because almost every body in the room moves 'up' when it sounds. When the first breakdown I've heard tonight comes in, about 30 minutes into the dancing – that's a long time to hear a constant kick drum without relenting – everyone else seems to notice it too, people whistle, cheer, clap and their hands chop the air more, or higher up than before, with most heads looking straight or up. The break is pretty short, and then the unbelievably strong bass and kick return so powerfully that I have to re-adjust my earplugs, only to find that there's no farther that they can go. It's that loud. When the kick and bass return, people's heads go back down and some of their bouncing becomes a bit less contained. Some people – one of them who I know to be a DJ – play the 'air piano' with one of the only melodic elements we've been privy to in this minimal night so far.

I wish to draw attention to two themes that emerge from the above passages in addition to the video excerpts, the first of which is dance floor conformity. In techno settings, conformity does not occur in the form of choreographed dancing; instead, movements are produced spontaneously, displaying the immediate effect of music on the body. DeNora's discussion of the aerobics class (2000, pp. 90-102) offers an interesting parallel to the understanding that the music should do something *to* you. Specifically, this 'something' arises from a shared cultural understanding of the norms of this setting and a recognition or what DeNora calls 'self-perception' of particular bodily sensations afforded by music (pp. 98-9). The embodiment of music through dance is personal – clubbers such as Zoe return habitually to repertoires of style and movement that they have developed over time. Under some circumstances, these styles can become recognisable and individualised enough that they can even assist clubbers to locate their friends in dark, crowded clubs or amidst sprawling outdoor festival settings.¹⁶⁷ However, these individual styles must exist within a limited range of movements that are recognisable as techno dancing. The end result of this is the impression of uniformity across a dance floor, such as that described in my above field notes from the Sub Club. The second theme, portrayed in particular by the opening of the above excerpt of my Sub Club field notes, is my consciousness of gender and its influence on my interpretation of dance movement.

¹⁶⁷ Some dancing styles are also associated with specific cities, such as the Melbourne Shuffle, a dancing form that corresponds primarily with the dance music genre known as hardstyle. Another example is the Manchester ecstasy dance, which according to Tony Wilson, former owner of the Hacienda, is inspired by Shaun Ryder of Happy Mondays (Push and Silcott, 2000, p.65).

Gender is not always definitively performed in techno dancing, yet as I demonstrated earlier, gendered ideas can and do inform behaviour on and around the dance floor, and my own biases are laid bare in the above excerpt. The divide between the celebration of the dancing body and its containment is also perceived to be a gender division. The fluid movement of the whole body, for instance, is identifiably feminine (such as that of the woman who dances like a mermaid, in the Sub Club), and the playing of air instruments with the hands while dancing primarily with the feet and head, is acceptably masculine. Men who dance in an extroverted manner are generally either assumed to be strongly under the influence of drugs or are perceived to embody a 'hippy' or 'crusty' subculture that is often mocked by techno participants. Interestingly however, this standard is not imposed in the other direction – it is acceptable for women to dance to techno in the same manner as men. In sum, gender is among other factors that contribute in complex ways to the distinctions between restraint and extroversion.

Thus, as Bourdieu (1984) argues, the presentation of the body, its movements, its proximity to other bodies and its 'muscular patterns and automatisms' are integral to the way social positioning is communicated (p. 476). These bodily movements also exhibit 'a relationship to the world' that incorporates sex, ethnicity, age and social class (pp. 476-7). For participants of Edinburgh techno scenes, the distinction from mass culture (also highlighted by Thornton, 1995, pp. 98-9) includes an embodiment of this distinction on the dance floor. This can occur in the form of restraint, as I have mentioned, but also through forms of dancing that outwardly express emotional responses to music. These displays of emotion not only include the kinds of fluid interpretations (considered feminine) such as the woman dancing like a 'mermaid' in the Sub Club, but also serrated movements that emphasise rhythmic syncopation. In Video 16 for instance, a clubber in a white t-shirt dances with articulated, rectilinear movements, punching the air with his fist. Although his legs are not visible on camera, his knee-bends are clearly punctuated by his head, neck and shoulder movements:

Video 16. *Circus* - April 2012¹⁶⁸

¹⁶⁸ Gadir, T. (2012) Fieldwork footage, Clip #ix, *Circus*, 12 April 2012. 00.20 – 01.05

As Video 16 and Videos 11-13 show, these more expressive forms of dancing are considerably more acceptable in the latter hours of club nights, and those who adhere to this etiquette contribute to the reinforcement of such boundaries on the techno dance floor. Subtler elements that constitute techno conformity include the direction that clubbers face while they dance. Techno clubbers often face the DJ, although it is occasionally acceptable to face friends. One of the reasons why clubbers accustomed to dancing at commercial music club nights are frowned upon by experienced techno clubbers is that they often face each other rather than the DJ. This is often compounded with other modes of unacceptable behaviour associated with commercial clubbing such as demonstrative sexual behaviour and the display of drunkenness. The latter standard is imposed despite the strong presence of drugs and alcohol at techno events and the contribution of intoxication to the increasingly energetic and loose dancing presented in my above field notes and the footage from *Circus*. At *Traffic*, a techno event in September 2012, I invited friends who had come to Edinburgh from various international cities to attend a gig. Most of them had not been to tech-house or techno events. Of this group, only one participant from London, Helen, and another from Beirut, David, had been relatively regular clubbers in their cities of origin. On arrival to the club, Helen and David told me that they were embarrassed by the behaviour of the others in the group. When I asked them to be more specific, Helen said that she felt that these participants clearly did not ‘understand how to do it properly’ as they were ‘getting drunk’ and ‘making out with each other on the dance floor’. David said that he did not understand why they were dancing in a circle, being drunk and disorderly and hence ‘making fools of themselves’. He also added, ‘they ruined my vibe, I just couldn’t be around them’. It was clear to me that the main ways that Helen and David made these distinctions was in the observation that the international participants were dancing *more* than other clubbers in the room. Moreover, this was happening earlier in the night than would generally occur at techno and house nights. The discomfort felt by other clubbers with regard to these differences is indicative of the ways in which conformity is enacted by techno clubbers, and the potentially negative social consequences of straying from these conventional behaviours. It also highlights that bodily restraint is a critical component of techno conformity and that extroversion in dancing is only considered acceptable in the correct style and at the correct time.

In my exploration of the techno philosophies of mind versus body as they manifest through restraint and extroversion I have also attended to my own conformity of these norms. My dancing is affected by my immediate responses to musical sounds, the energy levels in the club, the number of people on the dance floor and whether my friends are present. Some dance floor settings are more conducive to outward physical expression than others, and as I reflect in my audio essay 'Techno Intersections' (2013), I embody a different 'self' according to the environment in which I find myself. In accordance with Goffman's (1969) examinations of behaviour in everyday social life, I am not composed of a singular identity (pp. 42-3) that can be expressed or encompassed on the dance floor. Rather, every context demands a slight adjustment of 'performance' to suit it (*ibid.*). In either the extroverted or restrained dancing forms, I occupy a state of periodically losing and regaining self-consciousness (Gadir, 2013; Malbon, 1999, pp. xii; 98-100). The return of self-consciousness can be triggered by communication with another clubber, by marked contrasts in music or by the onset of bodily discomfort from repetitious movement. The presence of others affects this dancing experience, and in spaces where bodily contact with others is inevitable it is challenging to become absorbed in the music and to cease noticing others. For example, clubbers such as the man in Video 15 can be said to be making a visible effort to mentally 'disappear', emphasised by the closing of his eyes. Alternatively, he may have chosen his elevated platform in order to be more visible to others, and to perform his loss of self-consciousness.

The restrained dancing of many techno clubbers can also be interpreted as a performance of the internalisation of music. In these types of performance, rationality and reflective listening is prioritised over immediate emotional response. The more restrained techno clubber avoids clearly exhibiting emotion through her body such as through facial expressions and emphatic bodily movements. She rarely puts her arms in the air in response to breakdowns and is unlikely to cheer or vocalise her enjoyment. It can be difficult to determine whether clubbers dancing in this manner are enjoying themselves, as the detachment can even appear to outsiders to be indifference or boredom. A participant wishing to practice this degree of restraint in their dancing movements might only express the minimum beat-keeping elements through side stepping or heel-tapping, head nodding. They might, additionally, add some minor knee

bending and small hand or shoulder movements. The below short excerpts of a very early stage in the *Circus* night of April 2012 shows the silhouettes of this style of dancing on the dance floor in Video 17 and on the stage in Video 18:

Video 17. *Circus* - April 2012¹⁶⁹

Video 18. *Circus* - April 2012¹⁷⁰

As Videos 11, 12, 13 and 14 showed, at the peak of the night, the loud, sharply punctuated and texturally rich music relaxes some clubbers into freer limb and hip movements. Overall however, movements remain contained when compared with dancing to other dance music genres including dubstep, drum ‘n’ bass and electro.¹⁷¹ The philosophy behind dancing in a restrained fashion involves a resistance to ‘immediately accessible pleasure’, and instead, an embrace of ‘a trained, sustained tension... the very opposite of primary, primate aesthesis’ to use Bourdieu’s terms (1984, p. 492). Restraint can mean that the kick drum and bass line have a softer dynamic in the overall mix of sounds than the techno tracks that clubbers are accustomed to. At the other extreme, the lack of a breakdown can deny the clubbers an opportunity for the release of tension that is described by my interviewees and is visible at events, including in Video 13. This denial, a manifestation of Bourdieu’s ‘deferred pleasures of legitimate art’ (1984, p. 488), lends more legitimacy to a track, an artist or a performance for the participants who perceive techno as having a cerebral value. In many cases, the greater the increase of these subtle and challenging features for the clubber, the further techno moves from the dance floor. The legitimacy of techno for the most restrained participants requires a removal of music’s dancing appeal in order to avoid categorisations that are ascribed to Avicii, Deadmau5 and David Guetta. The notions raised by Bourdieu’s subjects when they describe what they perceive as ‘low’ culture are brought to mind here, including ‘culturally ‘undemanding’, ‘shallow’ and ‘cheap’ (Bourdieu, 1984, p. 488). Even more appropriately, oral taste-based analogies such as ‘sugary’, which allude in another way to the embodiment of taste (*ibid.*), are expressed by

¹⁶⁹ Gadir, T. (2012) Fieldwork footage, Clip #i, *Circus*, 12 April 2012. 01.30 – 01.40

¹⁷⁰ Gadir, T. (2012) Fieldwork footage, Clip #v *Circus*, 12 April 2012. 01.10 – 01.20

¹⁷¹ Unfortunately, I do not have any original video footage for the purposes of comparison as I only had this form of access to the *Circus* club night which would never include dubstep.

the *Circus* DJ and promoter Dom. In this interview excerpt, Dom asserts that the most effective use of melody is when it is used sparingly:

Dom: And em, and, and, I think the, the thing I like most about techno in, in its use of that is its restraint in using it, and that's why, that's why I think it has so much more impact when it comes, when it's not been there. And you know, like, you could have, you could do it... that's why trance for me doesn't work because it's just that, it's just that, and, and by the... it's like... it's like... em, Richie Hawtin once described it as like being like a cake with too much marzipan (*absolutely*), and I think that's exactly right (*yeah*). And, em, you know, it's... you know... it's, I like marzipan, but I like it, you know, as a sort of accompaniment to my sponge (both laugh).

The restraint described by Dom in music is reflected on the dance floor and also by DJs themselves, although Dom is among the most extroverted of *Circus* DJs. The nonchalance and stiffness of well-known DJs such as Jeff Mills and Richie Hawtin is simultaneously mocked and mirrored by local techno participants such as Kane, Dom and Carl. Zoe, as I have already described rarely shows emotion through either her face or her body while she dances or performs as a VJ. This detached attitude becomes associated with a music that aims above the animated displays of enthusiasm through putting hands in the air and jumping up and down.

The contradictory philosophies of mind and body in techno include the display of non-concern for the judgements of others. In this context, performing must be so subtle as not to resemble performing. The goal of techno dancing is not to impress others, attract potential sexual partners, or show finesse, practiced skills or agility – all attributes associated with more commercial music scenes. The goal is to provide pleasure to the clubber that must not be disrupted or inhibited by those with the former inclinations. Although this phenomenon influences techno communities across the globe, it pertains primarily to Europe. Fikentscher (2000) for example, illustrates that in the closest associated underground musical scenes in New York City, style and skills are important to clubbers (p. 64). In addition, repertoires of athletic or impressive dance moves are often displayed by clubbers in Sydney. As Leneghan (2010) suggests in his Sydney-based exploration of ecstasy experiences, this competitiveness may also extend to the length of

time that clubbers can stay on the dance floor, and how hard they can dance for this period of time (p. 162). By contrast, Edinburgh techno participants do not appear to focus on dancing skills. The only occasions on which I have heard a concern for dancing skills is when I have heard American postgraduate students declare that ‘British people can’t dance’.

I have not observed any distinct displays of individual showmanship or explicit competition on dance floors at Edinburgh techno nights. At one *Circus* event, a group of clubbers tied their cardigans together to form a communal skipping rope. However, this was performed for their own amusement at the early stages of the night while the dance floor was relatively empty. By contrast, any individual attempts to be competitive on the dance floor, even in jest, can be perceived as provocative gestures by other clubbers and security staff. In order to observe how people might respond to this rare type of display, I have made a single attempt to ‘perform’ a virtuosic style of dance during the course of my research – a rudimentary impression of the Melbourne Shuffle.¹⁷² To my surprise, there seemed to be no response at all. It is difficult to ascertain whether this was due to other clubbers’ absorption in their own dancing, or due to a pointed lack of regard for this form of performance.

Although the lack of ‘dance-offs’ on the techno dance floor could be used as evidence for an ethos that discourages competition and encourages people of all skills to feel included, it is also a symptom of a hierarchy in which DJs are in unquestioned positions of power compared with clubbers. That is, the DJ is seen as the only legitimate performer in these contexts, though even the DJ cannot exceed the parameters of bodily movement that are set by other techno DJs. This structure is reflected in what can be delicate relationships between DJs and clubbers which manifest through interactions ranging from amiable to contemptuous. Communication between DJs and clubbers are often contingent upon the willingness of a DJ to engage with clubbers during and around a performance, which in turn depends on whether she is able to divide her attention between mixing music and communication. The extent of this willingness and ability varies significantly between DJs – some expect and are happy to

¹⁷² Tomazen, Donovan and Mundell (2002) and the DVD, *Melbourne Shuffler* (2005) provide helpful information about this style of dance.

actively interact with others during their sets, while other DJs feel the need for uninterrupted focus and feel frustrated when clubbers attempt to talk to them while they are mixing.¹⁷³ Other relationships, such as those between promoter and DJ, bar staff and promoter, and security and clubbers add to this system. This may differ according to the relationships between specific promoters, venue managers and DJs. Similarly, those socially connected to a DJ often hold a higher position than other clubbers through their access to the stage, backstage, or sound booth areas that are typically separated out as professional spaces. The perception of techno dance floors as potentially liberating can therefore be countered with an interpretation of club night relationships as concentrated, exaggerated versions of a socially asymmetrical world.

The philosophy of mind over body is demonstrated through the de-emphasis that some Edinburgh DJs place upon their roles of making people dance. Instead they view DJing as an opportunity to share what the techno clubber Pat refers to as ‘quality music’. Edinburgh-based DJs Bernhard, Kane and Mick include within this task the sharing of music with crowds that are not necessarily keen on the slow progression of sets or holding back of breakdowns. In these cases, DJing becomes a form of evangelising, or attempting to expose a crowd to ‘good’ music. Mick uses the word ‘educate’ to describe the process of playing lesser-known music to participants in and amongst tracks that are well-known and guaranteed to fill a dance floor. The latter types of tracks are known by many dance music participants as ‘anthems’, an appropriate word given that people sing along to them, and the highly emotive responses they can provoke in participants. Phil, an ex-producer and DJ (fifty years old at the time of our interview), is an example of a DJ whose language suggests less of an interest in types of dance music that provide instant gratification.¹⁷⁴ Phil states that as a DJ, he consciously caters his techniques to the degree of discernment that he perceives a crowd to possess. For a less ‘discerning’ crowd, he would ‘layer up all the percussion really quickly’ and ‘give away ideas early on’. He argues that ‘a slow burner... [is] not the kind of thing you get people onto the dance floor with’, but that ‘they [sophisticated crowds] want to hear that development, they want to hear that evolution, it’s really important that they... they know how it’s all come

¹⁷³ See *Stuff DJs Hate* (2012) for examples of insights into the antagonism that many DJs feel towards clubbers who interact with them while they are playing.

¹⁷⁴ Phil is between ten and thirty years older than most of the DJs and producers interviewed for this thesis.

about so they understand the different layers... ah... yeh, it's a taste thing.' This implies that the gradual progression and longer duration of techno is aimed at 'sophisticated crowds', while music that contains sudden contrasts and is shorter in duration is aimed at everyone else. Additionally, *Cirrus* DJ and promoter Dom objects to providing instant dancing gratification in the context of his past role as a DJ in a cocktail bar. In principle, he would refuse to play 'light party tunes or cheese' if requested to do so by customers at 9 p.m., explaining his choice in light of the goal of musical development. There are parallels here to Cam's notion of a musical 'journey':

Dom: If I just do that now, then where do I go then? ... What's the point? I might as well be a jukebox!

Instant gratification is identified here as unequivocally negative. This view is analogous to Adorno's (1941) notion of how aesthetic value in music should be understood. In this philosophy, instant gratification and corporeal pleasure are immoralities of popular, repetitive music, a form that does nothing other than provide 'relief from both boredom and effort' and act as a 'stimulant' (pp. 38-9). For Dom and other techno participants, chart hits, or in Dom's terms, 'light party tunes or cheese' fall into this category, perceived as being shallow and unchallenging, and discouraging an appreciation for subtlety, restraint and considered listening.

This emphasis on the cerebral in techno philosophy parallels the high art principles promoted by Adorno (1941) and critiqued by Bourdieu (1984). As Bourdieu argues, the embodiment of these principles occurs through displays of detachment from the art work (1984, pp. 72-3, 476). Yet paradoxically, the exercise of taste judgement is in itself a corporeal act – never purely intellectual, never removed from reactive and 'bodily experiences' (p. 73). In techno, this contradiction extends even beyond this: the elements that most stimulate movement provoke physical reactions of distaste. These can manifest through socially displayed bodily responses such as cringing, or in some cases the cessation of dancing altogether. Although techno appeals in its philosophy and practice to bodily movement, it is simultaneously defined against other genres through a critique of these very appeals. Dubstep, for instance, contains noisy sound effects, dramatic breakdowns, sub-bass frequencies and characteristic rhythmic patterns that

almost invariably provoke vigorous dancing. In this sense, dubstep provides opportunities for emphatic physical expression that adheres to philosophies of release, liberation and the embodiment of pleasure through dancing to music. For techno fans, this philosophy is seemingly corrupted by a genre that takes the danceable elements too far – to a point that lies beyond the possibility of restraint or detached observation.

Moreover, the philosophical tension between techno and dancing complicates potential applications of Bourdieu's argument to this particular world. That is, dancing is a form of socialising is a form of populist leisure, and is believed by high art proponents to be one of the most vulgar forms of entertainment, propelled by 'natural enjoyment' (Bourdieu 1984, pp. xxix-xxx, 26, 470, 476-7, 488-93). In reality, however, the privilege and cultural credibility of the restrained techno connoisseur over the extroverted techno dancer is always overwhelmed by the function of the music: to make people dance. The success of most DJs is, above all, measured by the numbers of people that will dance to their music, approve of it and talk about it on social networks. This is a testament to the power of this goal despite all of the attempts to remain distant from this function. The dancing function of techno cannot be overridden unless fundamental changes are made to social contexts of events. For instance, if the primary spaces for techno events were to move from nightclubs to seated spaces such as concert halls or theatres, this would be an indication of a functional shift, and of a genuine triumph of the cerebral over the bodily. Additionally, the fact that drugs enhance bodily awareness, subjectivity and the sense of closeness to others through a heightening of the senses is at fundamental odds with the goal of objectivity, or as Bourdieu calls it, 'aesthetic distancing' (pp. 26-7). Nonetheless, Bourdieu's (1984) scheme and Thornton's (1995) expansion of it into the broader contemporary clubbing world both effectively describe the dynamics of distinction in the techno scenes.

This chapter has been an examination of some of the many ways that techno philosophy is embodied through dancing and the language of participants.¹⁷⁵ I have argued that the stylisation of dancing is a critical, non-verbal method of expressing the philosophy of techno. Moreover, this involves the balancing of dancing and thinking

¹⁷⁵ Another way that techno is embodied is through ethnicity, judged through language and skin colour – a valuable topic for future research. This is briefly addressed by Thornton (1995, pp. 72-6), in relation to what she observes as a largely white clubbing community.

that my research suggests are philosophically at odds. Yet, as Bourdieu notes (1984), the discernment in itself involves the body for its judgement (pp. 73, 476-7), and this clash is compounded by the fact that techno is a form produced for dancing. Although the language of participants and the visible efforts to restrain performance and movement emphasise reflective, interpretative listening, I maintain that the social and spatial settings of techno show that techno is perceived above all as music for dancing.

Part IV: Closing

Chapter 12 – Techno Politics

The philosophies explored in the previous chapters lead me to lastly examine the question of techno's meanings, and more specifically, its radical or political potential. This has been an undercurrent, sometimes even an explicit component of its marketing, since its beginnings as a recognised genre. I will therefore question whether it is feasible for a musical aesthetic to reflect a political position in line with the philosophies of Theodor Adorno (1941), and whether techno is a contemporary example of a musical form that possesses intrinsically radical qualities as Richard Pope (2011) argues. For Andrew Ross (1994), who explores the relationships between different types of music and youth cultures, the opposite is true: dance music has 'the spirit of avoidance as its chief organising principle' (p. 10). I will propose a middle ground between the two sides of this debate.

Due to the history and nature of the development of dance music, dance music culture is certainly not entirely devoid of politics. Dancing to house or techno was and may still be a form of radical activism for African American and gay communities in the United States where it developed. Therefore, as a cautionary note, the arguments in this chapter cannot apply to the United States, as my only sources of information for American scenes are secondary. By contrast, the techno scenes in all of my sites of study are largely white and heterosexual, are mainly focused on recreation and pleasure and do not have specific political objectives with the exception of their self-preservation. For clubbers, issues of focus pertain largely to the music and the clubbing scene. As a result, techno culture and music is 'political' in the limited sense that hierarchies and power relations are played out in these small communities. However, wider-reaching political associations or implications are ascribed to techno from the outside.

The politics of techno are expressed most explicitly by scholarly works that focus on techno as a social and cultural phenomenon, and yet the language of participants, particularly of producers and DJs, refers often much more directly to musical aesthetics.

This has been illustrated through many of the interview responses that I have included through Parts II and III of this thesis. I will now therefore critique scholarly work that deals with musical aesthetics. According to Max Paddison (1982), Adorno regards popular music to be tasteless because its musical form does not challenge the status quo, instead passively reflecting it (p. 202). The object of music is ideological, and popular music is ‘antagonistic to the ideal of individuality’ (Adorno, 1941, p. 22). As Frith (1996) highlights, although assertions of the boundaries of superiority and inferiority have been applied to the avant-garde world, they are now redefined and used in contemporary popular music (p. 20). Paddison (1982) himself demonstrates this perspective in his discussion of Adorno and popular music, claiming that low art has become increasingly ‘higher’ (pp. 211-12), and that since the 1960s, some popular music has undergone ‘self-examination’ (p. 215). The type of music that Paddison idealises occupies a ‘knife-edge position’ that constitutes ‘tension’ between the radical and the popular, never quite achieving either status (pp. 216-17). Similarly, Frith (1996) argues that for popular music to ‘challenge’ it has to a certain extent to be ‘difficult’ and ‘*unpopular*’ (p. 20, italics in original). At the same time, Pope (2011) makes arguments for the political nature of techno through being ‘[autonomous] from society’, simultaneously ‘socially embedded... and thus, intellectually important’ and through ‘expressing... the contradictions in society’ (p. 36). Although for Adorno, confrontation and subversion cannot be expressed by any popular musical forms, Paddison and Pope promote the view that some popular musical forms are capable of challenging while others are not.

It is unclear in Paddison (1982, p. 215) what precisely occurs in the process of musical ‘self-examination’. This may be achieved through form; Pope (2011) claims, for example, that techno takes the ‘fragment’ and incorporates it into the ‘whole’ (p. 39). More broadly, perhaps Paddison imagines this occurring through Adorno’s goal, in which musical forms ‘develop and rationalise the tendencies... and contradictions... from within so that they turn back in on themselves’ (Paddison, 1982, p. 213). On one hand, techno can be said to achieve this through its abandonment of the primacy of harmony and melody, and through its rejection of celebrity artist identities and spectatorship (audience-performer divides). In this sense, techno is one among many experimental or subversive musical forms whose impact on participants who dance and share it is as profound as other musical forms that incorporate other forms of

experimentation. However as Garcia also argues (2005) in his discussion of repetition and pleasure in dance music, this musical subversion is not sufficient to impact the greater social world (par. 2.15). To attribute a political significance to techno beyond itself is, as Frith (1996) would argue, to make an ‘academic assumption that popular cultural goods must signify something’ (p. 12). Nevertheless, decades after Adorno argued that musical form inevitably challenges or reinforces societal structures, authors such as Paddison (1982) and Pope (2011) continue to maintain that the quality of art should be judged partly on the basis of its challenge to mass culture.

Paddison rightly contends that it is not the musical aesthetic alone but its consumption that determines whether it is interpreted as art or ‘commodity’ (1982, p. 217). Thus, in accordance with Frith (1996, p. 13), the principles and values of techno are ultimately contained within the act of consuming techno. It could certainly be argued that musical aesthetics have little bearing on the status of techno as art or commodity, considering the enormous range of musical styles that commercially successful popular music has encompassed since the mass consumption of recorded music. Techno producers rarely choose to forego marketing and set out to make music only for themselves. More often, as I demonstrated in Part III, producers use ‘[i]ncreasingly sophisticated mechanisms of marketing and distribution’ (Frith, 1996, p. 13). For instance, Sébastien Léger and Richie Hawtin broadcast their positions on their social networking sites not only to highlight their cultural capital but as a subtle method of self-promotion. The avant-garde, as Paddison concludes, cannot ‘escape this fate [of marketing]’ either (1982, p. 218). Yet the passage below by Pope (2011) suggests that techno is special, and constitutes a form that can be set apart from commercial dance music:

But techno was not (like ‘electronica’) a form devised by music industry insiders to sell a pseudo-individualized product to consuming and distracted masses; it was, and remains, a radically differentiated and largely unpopular form that expresses a wholly different sensibility than its many admitted influences. (Pope, 2011, p. 41)

On the contrary, techno is a product that includes both music and the philosophies discussed throughout Part III. It is sold through assertions of precisely the basis of the above claim, which constitutes perfect marketing for artists, labels, sponsors and retailers. This brings to mind the study of youth perspectives on consumerism by Miles’ (2003), in which it is argued that consuming governs contemporary lifestyles and is

unquestioningly accepted (pp. 172-3). In this idea, marketing aims to provide a sense of empowerment through an embrace of choice and its 'democratic, freedom-inducing and positive' impacts (p. 173). This is perpetuated not only by those who want their products consumed but by consumers themselves (Miles, 2003, pp.172, 175; Roberts, 2003, p. 24).

Pope alludes to the existence of this very same attitude within the optimistic rave culture of the United Kingdom and Europe (2011, pp. 26-8). The political angle of techno philosophy that Pope embraces is a rejection of this utopian or 'hopeful affect' associated with rave culture (*ibid.*). As Rubin (2000) claims in his piece on the futuristic outlook of techno culture, '[techno] wasn't a report of what was going on around them, but rather an open-ended prophecy of what might yet be' (pp. 121-2). Yet, as Pope argues, utopian expression does precisely the opposite, perpetuating capitalist philosophy through its lack of active criticism and inaction (2011, pp. 26-8). For Pope, capitalism demands an 'optimism of the will' from individuals (p. 27). It encourages complacency and contentment with mere potential whether fulfilled or not, and a belief that agency and the power for self-transformation are entirely in the hands of individuals. According to Pope (2011), through its unique geographical and social conditions, Detroit techno displays a dystopian philosophy that embraces technology as much as fearing it, and reflects the 'way things are' rather than relying on fashion and drug use to make cultural statements (p. 29).¹⁷⁶ Detroit techno culture is argued to be a dystopian, self-conscious reflection and criticism of the societal circumstances in which it was created (*ibid.*). This contrasts the partial 'sense of modernity's triumphant realization with the fall of the Berlin Wall and the reuniting of Europe' in the European dance music scene (p. 42).

Pope draws on Adorno (1941) to argue that Detroit techno is self-contained and unique and that it is not fair to attribute Detroit techno's 'subcultural production' to their 'Europhile fantasies' as this would be to '[force] identity across divergent phenomena, reducing different languages and events to the same currency' (Pope, 2011, p. 34).

¹⁷⁶ This implies *not* Berlin or European techno, which, according to Pope, are guilty of the superficial 'hopeful' subversion described as reinforcing rather than challenging capitalist illusions (2011, p. 26).

Techno, for Pope, does not conform to the '[reaffirmation]' of 'modernity's ethos and spirit' through utopianism but instead '[accepts] the end of history and [moves] on to consider the dystopian, retrofitted reality which is its consequence' (p. 35). Yet it is not made clear how Detroit techno does this in a way that other genres do not. Technology on its own cannot be the answer, as most popular music genres use current technologies to make music. Furthermore, assertions about techno's unique aesthetic are never explained. The above description of non-conformity by Pope simply restates a political reading of the form, and is also applicable to other scenes and in other cities. Many contemporary dance music cultures, for instance, subvert the traditional roles of audiences as spectators into integrated participants of the whole event (see Reynolds, 2012). Thus, despite the attempts to highlight the distinctiveness and radical nature of techno, I cannot see evidence for the meaning of these apparently utopian / dystopian moments beyond the ephemera of the techno or dance music experience.

The ethnographic research I presented in Parts II and III demonstrate that participants are inclined to make value-judgements on specific musical attributes of techno. By contrast, the scholarly works mentioned above tend to focus on techno as an idea, a culturally meaningful form. Musicologists Mark Butler (2006; 2001) and Luis-Manuel Garcia (2005) are among the few scholars who directly discuss musical aspects of techno, drawing, to a greater extent than I have done in these pages, on the discipline of musicology. Among other elements, Butler (2001) explores the notion of 'metrical dissonance'. Within this argument, Butler mentions that a 'layered approach to metrical construction' (par. 13) and that use of metrical ambiguity 'encourages multiple perspectives on rhythmic and metrical structure' (par. 37), providing the listener with perceptual options. In this process, the focus of the listener can shift from one part or layer to another (par. 4). Through the example of Steve Reich's music, Butler highlights the parallels with the way in which minimalist art music deliberately creates rhythmic ambiguity in order to stimulate interest within a regular meter (Reich, quoted in Butler, 2001, par. 15). This analysis emphasises the agency of listeners afforded by the production choices of techno. Butler's broader statements about interactivity within dance music and its practices are highly convincing. One of these is the discussion of

the ways in which DJs can appropriate and alter the metrical and rhythmic structures through their blending of more than one track (2001, par. 14). Additionally, Butler notes that unlike other forms of composition, dance music producers make music that can be used flexibly by a DJ and a dance floor (2006, p. 256). As he so effectively summarises:

This interaction occurs in minds and through bodies; it is both individual and social. On the dance floor, a communal space, each person responds to the music differently, while also reacting to the behavior of others. One person, the DJ, is largely responsible for shaping what is heard, but his or her choices are directed to a significant extent by the audience's responses. (Butler, 2006, p. 256)

However, he continues:

In the disorienting, decentralized environment of the club, a plethora of senses are stimulated simultaneously from multiple directions, requiring participants to seek out aspects of the experience on which they will focus. (Butler, 2006, p. 256)

Therefore, for Butler, both the music and the way it is listened to affords the clubber the opportunity for 'experiential and interpretive possibility' (p. 257). Garcia (2005) supports this argument, stating that '[a] persistently-looping, dense collection of riffs provides a dense layering of textures without pre-determining the listener's path of focus' (par. 5.2).

I have three main objections to these musicological observations. First, I do not believe that different layers in techno are perceived by listeners as evenly balanced. I contend that in instances where I hear layers as having equal dynamics, a range of biases affect my way of listening and prevent the fulfilment of perceptual freedom of choice. Single layers perceptually dominate the texture due to Western biases towards higher registers and moving parts, and due to the varied effects of different timbres. For example, a highly punctuated part would often be noticed more than a sustained sound whose attack is gentle and decay is long. I would extend this to argue that clubbers are not necessarily autonomous in their listening experiences, as there is an element of submission involved in listening. This submission relates both to the musical choices of the producer and to culturally-produced hierarchies of music. As well as being entrained into hearing high registers as primary material and low registers as supporting material, I also hear moving parts more than relatively static parts. As such, I do not believe that

each listener creates a 'unique sonic pathway' (Garcia, 2005, par. 5.2) as there is no aesthetic experience untainted by the influence of culture.

Secondly, although I do not rule out the possibility that the kinds of shift of perceptual focus onto different sounds can and do occur, I would reiterate that there are other musical features that command the appeal and attention of participants more so, particularly in the context of the dance floor. None of my interviewees express an awareness of these kinds of perceptual shifts or of the notion that they have options to follow one layer or another during dancing. It may be simply that my interviewees do not possess the vocabulary to articulate this effect, or that it is not considered during the short period of response to questions. However, many DJs and producers possess a rich musical and technical vocabulary and still do not raise this musical feature. The dominance of particular responses to the question, 'what makes you dance?' implies that the musical elements to which they refer such as beat, 'funky' bass lines, 'catchy' riffs, melody, vocals, breakdowns, bass drops, are the primary sources of musical interest for most participants on the dance floor. Certainly, it is possible that the aspects which make a riff catchy and a bass line 'funky' might well relate to the ways in which it interweaves with other layers. However, this is not my experience on the dance floor, and without a mention from participants, I cannot assume it to be theirs.

Thirdly and finally, the notion that individuals have control over their listening experiences is for me reminiscent of a particular philosophical standpoint. My reading of the analyses led me to perceive a link between musical features and the agency and freedom of the individual. Butler and Garcia's analyses promote the notion that choice is a desirable outcome of the unique aesthetics of dance music. I see this as a de-emphasis of sociability, community and togetherness to pleasure derived from individualised experiences. It lends itself to an understanding of clubbing as inward-looking, perhaps even solitary, with less interest in the aim of synchronising one's movements with other dancers. Given that Garcia's blog (2012) deals very closely with dance floor dynamics and social issues, and that the latter section of Butler's book (2006, pp. 202-254) is about the social act of composing DJ sets, this works against the explicit intentions of the respective authors. Moreover, one of Butler's rationales for conducting such close musical analysis is to avoid precisely such inferences being made

(Butler, 2006, p.18), and I certainly do not see Garcia as pushing a libertarian agenda given his contention with political interpretations of dance music (Garcia, 2005, par. 2.15). Yet, these analyses can be seen to echo some of the general themes of the non-music-focused literature, such as the evaluation of 'raving' aesthetics as a celebration of 'freedom'. Specifically, it seems to perpetuate the type of choice narrative that, as Miles notes (2003, pp. 172-3), more broadly serves consumerist culture.

The most pessimistic conclusion that could be drawn from Parts III and IV is that techno is a mere product of consumption, marketed on the philosophies of old and new, underground and commercial, community and the individual and mind and body. However one of the overarching issues to emerge in my ethnographic research is that techno, like many other musical forms, is highly meaningful in the musical, social and cultural lives of participants. The intense individual and collective energies channelled into producing, DJing, promoting and clubbing without any external motivations is a testament to this. Neither musical aesthetics nor drugs signify external political meaning, but this does not render the form valueless. In the past, the politics of techno were directed outwardly and involved conscious yet subtle gestures of defiance. Since then, the music and social scene has evolved, and the legacy of this political past remains in a fragmented form within the paradoxical philosophies that help to market techno: cutting edge, yet credible because of its past; underground, yet savvy with corporate marketing tools; community-minded, yet safeguarding the individualism of creative artistry; a means for physical release, yet valuing music for the mind. These philosophies are the parts that comprise a greater whole: an internal politics of techno that is at once self-contained and reflective of the world in which has developed.

Chapter 13 – Conclusion

In this thesis, my main point of enquiry has been an exploration of the triggers for dancing in Edinburgh techno settings. I originally came to this question with a belief in the uniquely danceable properties of techno. Yet my subsequent conversations with participants demonstrated that dance music is a large social and cultural phenomenon of which music is but one component. I presented the study of techno in Edinburgh within the structures of a greater local and global dance music community. In Part II, I focused on the description and analysis of the triggers for dancing that I categorised primarily as either musical or social. The musical triggers that participant observation and interviews revealed include low frequencies, repetition, contrasts, timbre, melodies and vocal lines. I explored triggers that are visibly influenced by social factors such as genre, familiarity and nostalgia, in addition to the drug MDMA – an aid to triggering dancing that differs in nature to musical and social triggers due to its effects on the mind and body. Given the nature of participants' responses to what makes them dance, perhaps some elements of danceability described in this case study could also be applied to other styles of popular music – not only those that are electronically produced for club dance floors. The application of the notion of dancing triggers to other genres might constitute a valuable avenue for future research.

The techno philosophies that underpin the dancing triggers I researched are broadly based on popularly held notions of the origins of techno in 1980s Detroit, intended by its producers to sound distinct in its electronic and innovative character. The futuristic, technology-focused and oppositional political ethos of techno historically incorporated ideas of aesthetic distinction from other musical genres. House also started out politically, but its focus was more social – specifically providing a liberated and safe space for African American and gay communities to come together for dance, socialising and entertainment. Although political goals are not the key reasons that contemporary Edinburgh-based techno participants produce, DJ or dance, the original ethos of techno and house from Detroit, New York and Chicago infiltrates ideas of aesthetics and manifests in the interactions of participants through the philosophies that I described in Part III. In this final part, I discussed the contradictory nature of the

philosophies of old and new, underground and commercial, community and individual, and bodily and cerebral. These philosophies are embodied through elements of dance, production and performance of music – sometimes explicitly, and at other times subtly. They are also expressed in spoken and written language of participants, the media and scholarly work. Given that the political undertones of early techno scenes are often implied within these ideas, my final chapter questioned the extent to which techno is political beyond its own social and musical bounds. While one of my key goals has been not to ascribe a political agenda to a form of socialising based primarily on entertainment and shared tastes, I also ask whether the social and musical enrichment gained through participation is not a sufficient reward.

My analysis contrasts with both utopian and dystopian suggestions of the political and social radicalism of techno. These claims are problematic in that they are set against the counter-productive form of aesthetic and consequently social and cultural elitism illustrated in Part III. I do not view dancing or verbally articulated philosophies as political acts; this would constitute an avoidance of self-critique which should be the starting point for genuine change. Although the type of socialising that occurs on dance floors is in some senses unique, it is neither exclusive to dance music worlds nor restricted to the dance floor – the boundaries between behaviour considered acceptable on the dance floor and attitudes from the outside world often blur. For the most regular participants, there is essentially no difference between the dance floor and the everyday – one forms a part of the other. Thus, the practices of social bonding on one hand and social exclusion on the other, occurring in the spaces where people spend their leisure time, can be seen as legitimisations of these attitudes in the wider world. The contradictory philosophies I have addressed can therefore be interpreted as symptoms of broader societal conservatism to which techno scenes are supposed to offer an alternative.

My methodological approach not only served my research question but was integral to my broader aim of contribution to a changing field of musicology. Increasingly, scholars are reflecting upon the relevance of established musicological methods, and as a consequence of this process, opening up to the perspectives of listeners. I have aimed for a holistic approach that takes into account all musical participants – in my case

clubbers, producers and DJs. By using the term holistic, I mean to suggest that analysis of music can include more dimensions than the standard elements of focus in musicology (melody, harmony, rhythm and meter, instrumentation, form, texture, etcetera). Holistic analysis can incorporate an attempt to unpick the nature of sounds including when we are not able to identify their source. In addition, it can include the social significance of these sounds and our responses to them. This type of analysis calls for alternative forms of representation to the purely visual, reflecting the notion that music exists for us to listen to. In this thesis, I experimented with representations of music in the recorded form, inspired by the instant access that Mark Butler's excerpts in *Unlocking The Groove* (2006) provided to the object of his discussion. My attempts at musical description led me to feel that on its own, verbal detail falls short of helping a reader to gain an impression of sounds. I would therefore suggest that the more effective method for analysing any genre of popular music, especially those comprising recorded sounds that do not have a standardised system of labelling, includes providing readers with written descriptions complemented with a taste of the sounds themselves.

My experimentation with musicological representation in this thesis also included the capturing of events through video recording. My use of video excerpts promotes alternative practices of musical analysis that occur in and include analyses of performance spaces themselves. Observing the ways that music happens in the world rather than how it exists in its abstract, conceptual form might lead a great deal more to be discovered about the music. In Carolyn Abbate's article, 'Music – Drastic or Gnostic?' (2004), the method of analysis that treats music as a 'work' rather than an event in a time and a place to be experienced by people and produced by the 'labor' (p. 505) of performing is fundamentally queried:

Music is ineffable in allowing multiple potential meanings and demanding none in particular, above all in its material form as real music, the social event that has carnal effects. The state engendered by real music, the drastic state, is unintellectual and common, familiar in performers and music lovers and annoying nonmusicologists, and it has value. When we cannot stare such embarrassing possibilities in the face and find some sympathy for them, when we deny that certain events or states are impenetrable to gnostic habits, hence make them invisible and inaudible, we are vulnerable. (Abbate, 2004, p. 534)

Just as an orchestral piece comes to life only when a written score is played by many instrumentalists, electronically produced music also exists in an enclosed, albeit slightly different form, as a mere object – a record or a digital file. Indeed, Abbate (2004) asks whether non-liveness – that is, listening to a recorded piece or a recording of a past live event – loses something of the ‘alchemy’ of live performance and promotes the kind of ‘distance and reflection’ (p. 534) that a score can. This is made more complex in light of the interchangeability of the performed and recorded forms of dance music; although admittedly there are multiple factors in a night club DJ set which fundamentally alter the experience of music normally heard privately in a set of headphones. Nonetheless, I would agree with Abbate that the temporally and spatially bound social situation is critical to the experience of music, whose function in this case is dancing. Therefore, it is this ephemeral nature of music that I aimed to come to terms with in my descriptions of events, my audio-focused analyses of dance music and my video excerpts of events. An exploration that treats neither music nor its context as the sole object of study ideally provides the richest results.

While the elements that cause people to dance with others can be described as a form of pleasure-seeking, the techno philosophies that form their basis are first and foremost about distinction. In all the manifestations I have described, this distinction can lead to relatively harmless results such as debates about the aesthetic merits of genres, to more ethically troubling interactions such as the numerous forms of social discrimination to which I have referred throughout this thesis – sex, education, culture, and age. I have hardly touched upon race, addressed by Kai Fikentscher (2000) and sexuality, explored by Fiona Buckland in her study of queer club cultures (2001). Both race and sexuality are explored by dance scholar Joanna Hall in her doctoral dissertation on UK drum ‘n’ bass culture (2009) and Tim Lawrence in *Love Saves The Day* (2003). Race, gender and sexuality continue to be relevant issues in a 21st century electronic dance music culture derived in large part from disco, and thus deserve continued investigation.

This research took place in the context of dance music’s acceptance into the global popular music industry. Dance music in the early twenty-first century has widened its reach, blending into pop music and providing its backing tracks. As the celebrity DJ Avicii asserts, ‘Dance music is like a virus, it has affected so many different genres’

(quoted in Renshaw, 2013). The sounds of pop have moved closer to the sounds of house. In addition, cultural practices from the wider popular music world that influenced the philosophies and practices of techno participants in the scenes I studied are in turn now feeding back into the dance music of the popular charts. Some of these practices include DJ reverence (akin to rock stardom) and gender imbalances in production and performance. The issue of gender in dance music in particular is gaining momentum as an issue outside academia. For example, Tricia Romano in the *New York Times* (2013) draws attention to the fact that almost all celebrity pop DJs are men, reaffirming the notion that it is unusual for women who use technology to make or perform music.

The overriding philosophy of distinction that permeates techno characterises the ways that many genres of popular music distinguish their ‘*unpopular popular*’ (Frith, 1996, p. 20, italics in original) from popular popular incarnations. At the very least, the practice of these philosophies serve as reminders for participants of the aesthetic, cultural and not-necessarily-economic worth of the musical and social community in which they as individuals invest their energy, time and often money. Although these philosophies manifest in some unique ways due to the specifics of the history and context of techno, they are somewhat representative of the ways that small popular music scenes across genre boundaries justify the continuation of their commitment to their specific musical and social practices. As Thornton aptly puts it:

Subcultural ideologies are a means by which youth imagine their own and other social groups, assert their distinctive character and affirm that they are not anonymous members of an undifferentiated mass. (Thornton, 1995, p.10)

Yet oddly, the same types of distinction, including notions of creativity and individual artistry I highlighted earlier, are also found within the language of celebrity DJs like Avicii:

Originality is definitely missing from EDM... I feel it's so big now it is just getting milked. House music is losing all its melody as it becomes more about how dirty the drop is and how energetic it is. It loses touch with what music really is. It's gotten to a point where everything sounds the same. There is no longevity in what's happening at the moment. (Avicii, quoted in Renshaw, 2013)

This, and my own analysis leads me to ask three related questions. First, does the use of the same terms by commercially successful DJs call into question the above justification that these philosophies are the means by which marginal music communities distinguish themselves? Secondly, do these philosophies constitute the only way that meaning can be gained from involvement in small popular music scenes? Finally, do alternatives to these modes of self-definition exist within the competitive and usually economically unrewarding world of music-making and performing?

I do not highlight the contradictions inherent in techno philosophy and the lack of engagement in external political issues in order to undermine the worth of participation in techno or any music. On the contrary, my search for the elements that help people to enjoy dancing suggests that there is something worthy in the experience. My research has proposed some of the many ways in which the combination of music and socialising can provide pleasure. By highlighting the shortcomings of the philosophies that I have previously embraced as a participant I hope to provide a balanced and honest account of the setting. Future research about dance music could benefit from this kind of reflexivity, as this is the only way that the integrity of fan-scholarship in popular music studies can be properly realised.

Appendix A: technical notes

All audio files with the exception of the E flat minor scale and chord are excerpts of tracks in audio CD, MP3 or AIFF file formats. I imported all files into Audacity, and then used the program to crop the files and to apply 'Fade In' and 'Fade Out' effects for more comfortable listening. All those that were not in MP3 format were converted into MP3 format by exporting them as MP3 files, using Audacity software. I played the E flat natural minor scale and chord on a Yamaha Clavinova CLP 320 and recorded it on a Zoom H2 Digital Recorder.

The video files were filmed at two club nights – 12 April, 2012 and 26 October, 2012, using a Sony Hard Drive DCR-SR55 Camcorder. In the April session, I filmed with a handheld technique and in the October session, the camera was mounted onto a tripod. The video files were uploaded to an HP personal computer hard drive, copied to a data DVD and given to Andrew Cowan and Brian Hamilton for assistance with various aspects of editing. Andrew worked on a 2008 Macbook, running Mac OSX Snow Leopard, used Quicktime for editing videos and converted them to the MOV format for uploading to YouTube. Brian worked on a Lenovo T420 laptop running Linux. He extracted the video frames and audio using FFMPEG, edited the images using Imagemagik and rebuilt the videos using Mencoder. Subsequently, Firefox was used to upload AVI files to YouTube and YouTube-DL was used to download them in MP4 format.

Appendix B: list of interviewees¹⁷⁷

Ben (DJ)
Bernhard (DJ, clubber)
Cam (Promoter, DJ, producer, clubber)
Charlie (DJ)
Dan (Producer, DJ)
Dana (Co-promoter)
Danielle (Clubber)
Dom (Promoter, DJ, producer, clubber)
Elliot (Clubber)
Fleur (Clubber)
Fran (Clubber)
Frank (Promoter, DJ, producer, clubber)
Gabi (Clubber)
Gemma (Clubber)
Gordon (Clubber)
Harry (Clubber)
Heather (Clubber)
Isaac (Producer, DJ, promoter)
Kane (Promoter, DJ, producer, clubber)
Kylie (Clubber)
Mark (Clubber, venue staff)
Michael (Producer, DJ, promoter, clubber)
Mick (Producer, DJ, clubber)
Pat (Clubber)
Phil (Producer, ex-DJ)
Rachel (Clubber)
Rick (Producer, DJ)
Rob (Clubber, radio DJ)
Rod (Clubber)
Ron (Clubber)
Ronda (Clubber)
Sam (Producer)
Sarah (Clubber)
The Setup (Producers)
Victor (Clubber, producer, DJ)
Warren (Producer, ex-DJ)
Zoe (VJ, co-promoter, clubber)

¹⁷⁷ All names are pseudonyms except in cases where participants requested use of their real or stage names.

Other participants named

Carl (DJ, producer, clubber)

David (Clubber)

Helen (Clubber)

Bibliography

- Abbate, C. (2004) 'Music—Drastic or Gnostic?', *Critical Inquiry*, 30(3), pp. 504-536.
- Ableton (1999-2010) *Session Drums*. Available at: <http://www.ableton.com/session-drums> (Accessed: 12 December 2010).
- Adams, B. (2008) *Bryan Adams – Heaven – Acoustic Live*. Available at: http://www.youtube.com/watch?v=Z7b37l_B4vI (Accessed: 20 December 2010).
- Adams, B. (2008) *Bryan Adams – Heaven – Live at Slane Castle, Ireland*. Available at: <http://www.youtube.com/watch?v=p4ELdp8lOKQ> (Accessed: 20 December 2010).
- Adler, S. (2002) *The Study of Orchestration*. New York and London: W.W. Norton & Company.
- Adorno, T. (1941) 'On Popular Music', *Studies in Philosophy and Social Science*, 9(1), pp. 17-48.
- Advisory Council on the Misuse of Drugs (2008) *MDMA ('ecstasy'): A Review of its Harms and Classification Under the Misuse of Drugs Act 1971*. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/119088/mdma-report.pdf (Accessed: 20 January 2013).
- Aitkenhead, D. (1995) 'The revolution is happening, and it's down at Raquel's', *The Independent*, 19 November. Available at: <http://www.independent.co.uk/voices/the-revolution-is-happening-and-its-down-at-raquels-1582686.html> (Accessed: 9 January 2013).
- Albiez, S. (2012) 'Post-Soul Futurama: African American Cultural Politics and Early Detroit Techno', in Butler, M. J. (ed.) *Electronica, Dance and Club Music*. Surry and Burlington: Ashgate, pp. 445-467.
- Alluri, V. and Toiviaien, P. (2010) 'Exploring Perceptual and Acoustical Correlates of Polyphonic Timbre', *Music Perception: An Interdisciplinary Journal*, 27(3), pp. 223-242.
- Alston, B. (2010) 'Warning over illegal Bank Holiday raves', *Farmers Guardian*, 17 August. Available at: <http://www.farmersguardian.com/home/rural-life/country-view/warning-over-illegal-bank-holiday-raves/33732.article> (Accessed: 14 July 2012).
- Anderson, L. L. (2008) 'The Musical Gesture: Does the Field Of Musical Semiotics Describe Our Phenomenal Experience With Music?', Martinelli, D. (ed.) *Music Senses Body: Proceedings from the 9th International Congress on Musical Signification Roma, 19 - 23/09/2006*. Imatra: International Semiotics Institute, Umweb Publications.
- Arnett, J. J. (2000) 'Emerging Adulthood: A Theory of Development From the Late Teens Through the Twenties', *American Psychologist*, 55(5), pp. 469-480.

- Axis Records (2013) *Axis Records*. Available at: <http://www.axisrecords.com> (Accessed: 15 August, 2012).
- Barreiro, D. (2010) 'Sonic Image and Acousmatic Listening', *Organised Sound*, 15(1), pp. 35-42.
- BBC Home: On This Day (1995) 'Ecstasy pill puts party girl in coma', 13 November. Available at: http://news.bbc.co.uk/onthisday/hi/dates/stories/november/13/newsid_2516000/2516593.stm (Accessed: 14 July 2012).
- BBC News (2002) 'Parents' anguish for 'ecstasy' Jade', 16 July. Available at: <http://news.bbc.co.uk/1/hi/england/2131583.stm> (Accessed: 14 July 2012).
- BBC News Glasgow & West Scotland (2011) 'Super-strength ecstasy warning after Ayrshire deaths', 3 July 2011. Available at: <http://www.bbc.co.uk/news/uk-scotland-glasgow-west-14006489> (Accessed: 14 July 2012).
- BBC News Kent (2011) 'Kent Police drug alert over Folkestone 'rockstar' pills', 27 October. Available at: <http://www.bbc.co.uk/news/uk-england-kent-15476758> (Accessed: 14 July 2012).
- BBC News London (2011) 'London hospitals alerted over 'rogue ecstasy' deaths', 28 November. Available at: <http://www.bbc.co.uk/news/uk-england-london-15923484> (Accessed: 14 July 2012).
- Beck, J. and Rosenbaum, M. (1994) *Pursuit of Ecstasy: the MDMA Experience*. , Albany: State University of New York Press.
- Becker, H.S. (1982) *Art Worlds*. London: University of California Press.
- Becker, H.S. (1953) 'Becoming a Marijuana User', *The American Journal of Sociology*, 59(3), pp. 235-242.
- Behr, A. (2013) 'Drumming out the Bongo... Edinburgh's evaporating alternative venues', *Live Music Exchange*, 21 February. Available at: <http://livemusicexchange.org/blog/drumming-out-the-bongo-edinburghs-evaporating-alternative-venue> (Accessed: 30/02/2012).
- Belle-Fortune, B. (2004) *All Crews: Journeys through Jungle / Drum & Bass Culture*. London: Vision Publishing.
- Bennett, A. (2006) 'Subcultures or Neotribes?: Rethinking the Relationship between Youth, Style and Musical Taste', in Bennett, A., Shank, B. and Toynbee, J. (eds) *The Popular Music Studies Reader*. London and New York: Routledge, pp. 106-113.
- Bennett, A. (2002) 'Researching youth culture and popular music: a methodological critique', *British Journal of Sociology*, 53(3), pp. 451-466.

- Bennett, A. (2001) *Cultures of Popular Music*. Berkshire and New York: Open University Press.
- Bennett, A. (2000) *Popular Music and Youth Culture: Music, Identity and Place*, London: MacMillan.
- Blacking, J. (1979) 'The Study of Man as Music-Maker', in Blacking, J. and Kealiinohomoku, J.W. (eds) *The Performing Arts: Music and Dance*, The Hague, Paris and New York: Mouton, pp. 3-15.
- Boomkat (2002-2011) *Downloads: Recommendations*. Available at: <http://boomkat.com/downloads/recommendations> (Accessed: 9 February 2011).
- Bourdieu, P. (1984) *Distinction: a social critique of the judgement of taste*. Translated by Nice, R. London: Routledge.
- Brabazon, T. (2000-2012), 'How to fail a PhD', *Sonic lab*. Available at: <http://www.brabazon.net/soniclab> (Accessed: 14 November 2012).
- Bradby, B. (1993) 'Sampling Sexuality: gender, technology and the body in dance music', *Popular Music*, 12(2), pp. 155-76.
- Brewster, B. and Broughton, F. (2010) *The Record Players: DJ Revolutionaries*. London: DJhistory.com.
- Brewster, B. and Broughton, F. (1999) *Last Night a DJ Saved My Life: the history of the disc jockey*. New York: Grove Press.
- Brooks, W. (1982) 'On Being Tasteless', *Popular Music*, 2, pp. 9-18.
- Broughton, F. and Brewster, B. (eds) *Boy's Own: The Complete Fanzines, 1986-92*. Bedford: DJhistory.com.
- Brown, A. (1997) 'Let's All Have a Disco? Football, Pop Music and Democratization', in Redhead, S. (ed.) *The Clubcultures Reader: Readings in Popular Cultural Studies*. Oxford: Blackwell, pp. 61-83.
- Burkholder, J.P., Grout, D.J. and Palisca, C.V. (2006) *A History of Western Music*. 7th edn. New York: W.W. Norton & Company.
- Butler, M.J. (2006) *Unlocking the Groove: rhythm and metre and musical design in electronic dance music*. Bloomington and Indianapolis: Indiana University Press.
- Butler, M.J. (2001) 'Turning the Beat Around: Reinterpretation, Metrical Dissonance, and Asymmetry in Electronic Dance Music', *Music Theory Online*, 7(6).
- Carissa (2012) 'The 9th National Harm Reduction Conference: From Public Health to Social Justice', *DanceSafe*, 10 October 2012. Available at:

<http://www.dancesafe.org/blogs/9th-national-harm-reduction-conference-public-health-social-justice-0> (Accessed: 5 January 2013).

Carl Cox (2013) *Carl Cox: The Revolution*. Available at: <http://www.carlcox.com/> (Accessed: 16 January 2013).

Carrington, B. and Wilson, B. (2004) 'Dance Nations: Rethinking Youth Subcultural Theory', in Bennett, A. and Kahn-Harris, K. (eds) *After Subculture: Critical Studies in Contemporary Youth Culture*. Basingstoke: Palgrave Macmillan.

Clarke, E.F. (2005) 'Music, Motion, and Subjectivity', in *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning*. New York: Oxford University Press, pp. 64-90.

Clifford, J. and Marcus, G.E. (2004) 'Writing Culture: the poetics and politics of ethnography', in Seale, C. (ed.) *Social Research Methods: A Reader*. London: Routledge, pp. 384-388.

Coe, A. (2005) 'Sasha'. Interview with Alexander Coe (Sasha). Interviewed by Bill Brewster and Frank Broughton for *DJhistory.com*, 26 July. Available at: www.djhistory.com/interviews/sasha (Accessed: 16 February 2011).

Connell, J. and Gibson, C. (2003) *Sound Tracks: Popular music, identity and place*. New York: Routledge.

Cook, N. (1999) 'Norman Cook'. Interview with Norman Cook. Interviewed by Bill Brewster and Frank Broughton for *DJhistory.com*, 9 March. Available at: <http://www.djhistory.com/interviews/norman-cook> (Accessed: 16 February 2011).

Cook, N. (1998) *Music: A Very Short Introduction*. Oxford: Oxford University Press.

Criminal Justice and Public Order Act 1994, c. 33, Part V. Available at: <http://www.legislation.gov.uk/ukpga/1994/33/part/V/crossheading/powers-in-relation-to-raves> (Accessed: 16 February 2011).

CzarMewa (2007) *Henry Rollins on rave and modern rock music*. Available at: <http://www.youtube.com/watch?v=AyRDDOpKaLM> (Accessed: 10 July 2011).

Dahlhaus, C. (1982) *Esthetics of Music*. Cambridge: Cambridge University Press.

DanceSafe (no date) *DanceSafe*. Available at: <http://www.dancesafe.org> (Accessed: 5 January 2013).

Deal, S. (2011) '“Sluttiest dressed bird” promo causes outrage', *The Metro*, 20 July, 2011, p. 15.

DeNora, T. (2000) 'Music and the body', in *Music in Everyday Life*. Cambridge: Cambridge University Press, pp. 75-108.

- Dibben, N. (2002) 'Gender identity and music', in MacDonald, R., Hargreaves, D. and Miell, D. (eds) *Musical Identities*. New York: Oxford University Press, pp. 117-133.
- Discogs (2012) *The Discogs Style Guide*. Available at: http://wiki.discogs.com/index.php/Style_Guide-Genre-Electronic (Accessed: 29 March 2012).
- DJ Mag (2013) *DJ Mag Top 100 DJs*. Available at: <https://www.djmag.com/top-100-djs> (Accessed: 25 October 2013).
- DJ Mag (2010) 'GT (Remixes), Planetary Assault Systems, Mote Evolver.' Review of *GT (Remixes)* by Planetary Assault Systems. *DJ Mag Music*. Available at: <http://djmag.com/node/13612>. (Accessed 30 February 2011).
- The Edinburgh Literary Pub Tour (2012) *If you want to learn about Scotch, there's only one place to go*. Available at: <http://www.edinburghliterarypubtour.co.uk/if-you-want-learn-about-scotch-theres-only-one-place-go> (Accessed: 5 October 2012).
- Eerola, T. (2011) 'Are the Emotions Expressed in Music Genre-Specific? An Audio-based Evaluation of Datasets Spanning Classical, Film, Pop and Mixed Genres', *Journal of New Music Research*, 40(4), pp. 349-366.
- Erowid (2013) *Freedom & Law*. Available at: <http://www.erowid.org/freedom/freedom.shtml> (Accessed: 5 January, 2013).
- Erowid (2007) *MDMA References Database*. Available at: <http://www.erowid.org/references/refs.php?C=MDMA> (Accessed: 5 January 2013).
- Eshun, K. (2000) 'House: The Reinvention of House', in Shapiro, P. (ed.) *Modulations: A History of Electronic Music*. New York: Caipirinha Productions, pp. 72-87.
- Fabbri, F. and Chambers, I. (1982) 'What kind of Music?', *Popular Music*, 2, pp. 131-43.
- Fabbri, F. (1981) 'A Theory of Musical Genres: Two Applications', in Horn, D. and Tagg, P. (eds) *Popular Music Perspectives*, Göteborg and Exeter: International Association for the Study of Popular Music, pp. 52-81. Available at: <http://www.tagg.org/xpdfs/ffabbri81a.pdf> (Accessed: 1 March 2012).
- Fachner, J. (2011) 'Drugs, altered states, and musical consciousness: reframing time and space', in Clarke, E. and Clarke, D. (eds) *Music and Consciousness*. Oxford: Oxford University Press, pp. 263-280.
- Feducia, A. A. and Duvauchelle, C. L. (2008) 'Auditory stimuli enhance MDMA-conditioned reward and MDMA-induced nucleus accumbens dopamine, serotonin and locomotor responses', *Brain Research Bulletin*, 77, pp. 189-196.

Ferguson, B. (2012) 'Why venue closures are signalling the demise of Edinburgh club culture', *The Scotsman*, 11 February. Available at: <http://www.scotsman.com/the-scotsman/scotland/why-venue-closures-are-signalling-the-demise-of-edinburgh-club-culture-1-2110170> (Accessed: 6 April 2012).

Fikentscher, K. (2000) *You Better Work! A Study of Underground Dance Music in New York City*. Hanover: Wesleyan University Press.

Fletcher, M. (2011) 'The Effect of Spatial Treatment of Music on Listener's Emotional Arousal', *Journal on the Art of Record Production*, 5 (Conference Papers). Available at: <http://arpjournal.com/832/the-effect-of-spatial-treatment-of-music-on-listener%E2%80%99s-emotional-arousal> (Accessed: 2 September 2011).

Forsyth, A.J.M., Barnard, M. and McKeganey, N.P. (1997) 'Musical Preference as an indicator of adolescent drug use', *Addiction*, 92(10), pp. 1317-1325.

Forsyth, A.J.M. (1996) 'Places and patterns of drug use in the Scottish dance scene', *Addiction*, 91(4), pp. 511-521.

Frith, S. (2010) Conversation with Tami Gadir, 20 October.

Frith, S. (2005) 'Youth', in Bennett, T., Grossberg, L. and Morris, M. (eds) *New Keywords: A Revised Vocabulary of Culture and Society*. Malden and Oxford: Blackwell, pp. 380-2.

Frith, S. (1996) *Performing Rites: on the Value of Popular Music*. Cambridge: Harvard University Press.

Frith, S. (1981a), 'Youth', in *Sound Effects: Youth, Leisure and the Politics of Rock 'n' Roll*, Pantheon Books, New York, pp. 181-201.

Frith, S. (1981b), 'Youth and Music', in *Sound Effects: Youth, Leisure and the Politics of Rock 'n' Roll*, Pantheon Books, New York, pp. 202-34.

Frith, S. (1978) 'Youth and Music', in Frith, S. (2007) *Taking Popular Music Seriously*. Aldershot and Burlington: Ashgate, pp. 1-30.

Fritz, T., Jentschke, S., Gosselin, N., Sammier, D., Peretz, I., Turner, R., Friederici, A. D. and Koelsch, S. (2009) 'Universal Recognition of Three Basic Emotions in Music', *Current Biology*, 19, pp. 573-576.

Funny Face (1956) Directed by Stanley Donen [DVD]. Los Angeles: Paramount Pictures.

Fusilli, J. (2012) 'The Dumbing Down of Electronic Dance Music', *Wall Street Journal*, 6 June. Available at:

<http://online.wsj.com/article/SB10001424052702303830204577446842134707610.html> (Accessed: 15 June 2012).

Gadir, T. (2013) *Carl Cox Interview*. Available at: <http://www.youtube.com/watch?v=p2bSKhota4Q> (Accessed: 26 October 2013). Excerpted from DJsounds (2011) *Carl Cox – DJsounds Show 2011*. Available at: <http://www.youtube.com/watch?v=zfYNPnHha9U> (Accessed: 5 September 2013).

Gadir, T. (2013) *Speedy J and Chris Liebing Interview*. Available at: <http://www.youtube.com/watch?v=vKfH56vyKHg> (Accessed: 16 April 2013). Excerpted from Traktor (2009) *Speedy J and Chris Liebing discuss why they love Traktor 1.2*. Available at: <https://www.facebook.com/photo.php?v=158880177380> (Accessed: 4 January 2013).

Gadir, T. (2013) 'Techno Intersections: An Aural Account of Research in Edinburgh', *Dancecult*, 5(1). Available at: <https://dj.dancecult.net/index.php/dancecult/article/view/358/363> (Accessed: 18 March 2013).

Gadir, T. (2012) Fieldwork footage, 12 April 2012.

Gadir, T. (2012) Fieldwork footage, 26 October 2012.

Garcia, L-M. (2013) 'Doing Nightlife and EDMC Fieldwork: Guest Editor's Introduction', *Dancecult*, (5)1, pp. 3-17.

Garcia, L-M. (2012) 'Doing Nightlife Fieldwork', *LMGM blog*, 25 January. Available at: <http://lmgmblog.wordpress.com/2012/01/25/doing-nightlife-fieldwork> (Accessed: 2 October 2012).

Garcia, L-M. (2005) 'On and On: Repetition as Process and Pleasure in Electronic Dance Music', *Music Theory Online*, 11(4). Available at: <http://www.mtosmt.org/issues/mto.05.11.4/mto.05.11.4.garcia.html> (Accessed: 7 May 2011).

Garratt, D. (1997) 'Youth Cultures and Sub-Cultures', in Roche, J. and Tucker, S. (eds) *Youth in Society: Contemporary Theory, Policy and Practice*. London: Sage, pp. 143-150.

Garratt, D., Roche, J. and Tucker, S. (1997) *Changing Experiences of Youth*. London: Sage.

Gilbert, J. and Pearson, E. (1999) *Discographies: dance music, culture, and the politics of sound*. London: Routledge.

Gjerdingen, R.O. and Perrott, D. (2008) 'Scanning the Dial: The Rapid Recognition of Music Genres', *Journal of New Music Research*, 37(2), pp. 93-100.

- Godøy, R. I. (2011) 'Sound-Action Chunks in Music', in Solis, J. and Ng, K. (eds), *Musical Robots and Interactive Multimodal Systems*. Berlin: Springer, pp. 13-26.
- Godøy, R. I. (2010) 'Images of Sonic Objects', *Organised Sound*, 15(1), pp. 54-62.
- Goffman, E. (1972) *Interaction Ritual: Essays on face-to-face behaviour*. Harmondsworth: Allen Lane The Penguin Press.
- Goffman, E. (1969) *The Presentation of Self in Everyday Life*. London: Allen Lane The Penguin Press.
- Goodman, S (2010) *Sonic Warfare: Sound, Affect, and the Ecology of Fear*. Cambridge and London: The MIT Press.
- Grewe, O., Kopiez, R. and Altenmüller, E. (2009) 'The Chill Parameter: goose bumps and shivers as promising measures in emotion research', *Music Perception*, 27(1), pp. 61-74.
- Griffin, C. (1997) 'Representations of the Young', in Roche, J. and Tucker, S. (eds) *Youth in Society: Contemporary Theory, Policy and Practice*. London: Sage, pp. 17-25.
- Grossberg, L. (1995) 'The Political Status of Youth and Youth Culture', in Epstein, J.S. (ed.) *Adolescents and their Music: If It's Too Loud, You're Too Old*. New York and London: Garland, pp. 25-46.
- Gurney, J.N. (1985) 'Not One of the Guys: The Female Researcher in a Male-Dominated Setting', *Qualitative Sociology*, 8(1), pp. 42-62.
- Hall, J. (2009) *Heterocorporealities: popular dance and cultural hybridity in UK drum 'n' bass culture*. PhD Thesis. University of Surrey.
- Hall, J. (2008) 'Mapping the Multifarious: the Gentrification of Dance Music Club Cultures', in Landsdale, J. (ed.) *Decentring Dancing Texts: The Challenge of Interpreting Dances*. Basingstoke: Palgrave Macmillan, pp. 177-193.
- Hamilton, A. (2007) *Aesthetics and Music*. London and New York: Continuum.
- Hanna, J.L. (1979) 'Toward a Cross-Cultural Conceptualization of Dance and Some Correlate Considerations', in Blacking, J. and Kealiinohomoku, J.W. (eds) *The Performing Arts: Music and Dance*. The Hague, Paris and New York: Mouton, pp. 17-45.
- Hargreaves, D.J., Miell, D. and Macdonald, R.A.R. (2002) 'What Are Musical Identities, and Why Are They Important?', in MacDonald, R., Hargreaves, D. and Miell, D. (eds) *Musical Identities*. New York: Oxford University Press, pp. 1-20.
- Haslam, D. (1997) 'DJ Culture', in Redhead, S. (ed.) *The Clubcultures Reader: Readings in Popular Cultural Studies*. Oxford: Blackwell, pp. 150-61.

- Hatten, R. S. (2010) 'Aesthetically Warranted Emotion and Composed Expressive Trajectories in Music', *Music Analysis*, 29(1-3), pp. 83-101.
- Hawkins, S. (2003) 'Feel the beat come down: house music as rhetoric', in Moore, A. (ed.) *Analyzing Popular Music*. Cambridge: Cambridge University Press, pp. 80-102.
- Hawkins, S. (2001) 'Musicological Quagmires in Popular Music: Seeds of Detailed Conflict', *Popular Musicology Online*, (1). Available at: <http://www.popular-musicology-online.com/issues/01/hawkins.html> (Accessed: 22 July 2013).
- Hawtin, R. (2010) 'Uncovering the Man behind Plastikman'. Interview with Richie Hawtin (Plastikman). Interviewed by Humberto Guida for *Clubplanet.com*, 5 October. Available at: <http://www.clubplanet.com/Articles/6320/Uncovering-the-Man-Behind-Plastikman> (Accessed: 1 October 2012).
- Henry, P. (2000) 'Interview: Pierre Henry'. Interview with Pierre Henry, Shapiro, P. (ed.) *Modulations – A History of Electronic Music: Throbbing Words on Sound*. New York: Caipirinha Productions, pp. 22-3.
- Hogwood, C. (2010) 'Musical identity', in Walker, G. and Leedham-Green, E. (eds) *Identity*. New York: Cambridge University Press, pp. 157-183.
- Hollywood Scores Go Electronic* (2012) CBC Radio, 14 September. Available at: <http://www.cbc.ca/day6/blog/2012/09/14/hollywood-scores-go-electronic/> (Accessed: 19 September 2012).
- IMDb (2012) *Blade Runner*. Available at: <http://www.imdb.com/title/tt0083658/> (Accessed: 11 July 2011).
- Ishkur (2012) *Ishkur's Guide to Electronic Music*. Available at: <http://techno.org/electronic-music-guide> (Accessed: 29 March 2012).
- Jankowsky, R.C. (2007) 'Music, Spirit Possession and the In-Between: Ethnomusicological Inquiry and the Challenge of Trance', *Ethnomusicology Forum*, 16(2), pp. 185-208.
- Keelay, G. (2007) 'Sun sets on Ibiza clubs that party after dawn', *The Telegraph*, 14 October. Available at: <http://www.telegraph.co.uk/news/worldnews/1566157/Sun-sets-on-Ibiza-clubs-that-party-after-dawn.html> (Accessed: 27 February 2012).
- Kehily, M.J. (2007) 'Playing', in Kehily, M.J. (ed.) *Understanding youth: perspectives, identities and practices*. London: Sage, pp. 249-81.
- Kelly, B. C. (2009) 'Mediating MDMA-Related Harm: Preloading and Post-loading Among Ecstasy-Using Youth', *Journal of Psychoactive Drugs*, 41(1), pp. 19-26.
- Kennedy, M. (2004) 'Melody', in *Oxford Dictionary of Music*. 4th edn. Oxford: Oxford University Press.

- Kerr, P. (2012) Email to Tami Gadir from City of Edinburgh Council, 14 November.
- Kim, S-J (2010) 'Imaginal Listening: a quaternary framework for listening to electroacoustic music and phenomena of sound-images', *Organised Sound*, 15(1), pp. 45-53.
- Kohn, M. (1997) 'Cocaine Girls' in Redhead, S. (ed.) *The Clubcultures Reader: Readings in Popular Cultural Studies*, Oxford: Blackwell, pp. 119-129.
- Kühn, J-M. (2013) 'Making A Living In the Berlin House and Techno Scenes', *DJ TechTools*. Available at: www.djtechttools.com/2013/05/28/making-a-living-in-the-berlin-house-and-techno-scenes (Accessed: 9 June 2013).
- Lady Lex (2011) 'Sébastien Léger: it's natural', *Future Entertainment*. Available at: <http://www.futureentertainment.com.au/music/interviews/1209-sebastien-leger-its-natural>. (Accessed: 15 November, 2011).
- Lammin, H. (2011) Conversation with Tami Gadir at *Bodies In Movement* Conference, 28 May.
- Langlois, T. (1992) 'Can You Feel It? DJs and House Music Culture in the UK', *Popular Music*, 11(2), pp. 229-38.
- Lawrence, T. (2009) 'Beyond the Hustle: 1970s Discotheque Culture, and the Emergence of the Contemporary Club Dancer', in Malign, J. (ed.) *Ballroom, Boogie, Shimmy Sham, Shake: A Social and Popular Dance Reader*. Chicago: University of Illinois Press, pp. 199-214.
- Lawrence, T. (2003) *Love Saves the Day: a history of American dance music culture, 1970-1979*. Durham and London: Duke University Press.
- LeCompte, M.D. and Schensul, J.J. (1999) *Designing and Conducting Ethnographic Research*. Walnut Creek: Altamira Press.
- Léger, S. (2011a) 13 October. Available at: <http://www.facebook.com/sebastienleger> (Accessed: 13 October 2011).
- Léger, S. (2011b) 19 October. Available at: <http://www.facebook.com/sebastienleger> (Accessed: 19 October 2011).
- Léger, S. (2011c) 21 October. Available at: <http://www.facebook.com/sebastienleger> (Accessed: 21 October 2011).
- Léger, S. (2011d) 19 November. Available at: <http://www.facebook.com/sebastienleger> (Accessed: 19 November 2011).

- Leneghan, S. (2010) *The Varieties of Ecstasy Experience: Ecstasy an Exploration of Body, Mind and Person in Sydney's Club Culture* (PhD thesis), University of Sydney, Sydney.
- Loftland, J. (2003) 'Analytic Ethnography: Features, Failings, and Futures', *Journal of Contemporary Ethnography*, 24(1), pp. 30-67.
- London Evening Standard* (2006) 'Ravers seize £10 million house', 31 August. Available at: <http://www.thisislondon.co.uk/news/article-23365223-rovers-seize-10-million-house.do> (Accessed: 14 July 2012).
- Loza, S. (2001) 'Sampling (Hetero)Sexuality: Diva-Ness and Discipline in Electronic Dance Music', *Popular Music*, 20(3), pp. 349-57.
- Macaulay, M. (2010) 'Charity owners of Roxy Art House declare bankruptcy', *The Journal*, 10 November. Available at: <http://www.journal-online.co.uk/article/7102-charity-owners-of-roxy-art-house-declare-bankruptcy> (Accessed: 28 August 2013).
- Malbon, B. (1999) *Clubbing: Dancing, Ecstasy and Vitality*. London and New York: Routledge.
- Malnig, J. (ed.) (2009) *Ballroom, Boogie, Shimmy Sham, Shake: A Social and Popular Dance Reader*. Chicago: University of Illinois Press.
- Matravers, D. (2010) 'Recent Philosophical Work on the Connection Between Music and the Emotions', *Music Analysis*, 29(1-3), pp. 8-18.
- McCall, T. (2001) *This is Not a Rave: in the shadow of a subculture*. New York: Thunder's Mouth Press.
- McElrath, K. and McEvoy, K. (2002) 'Negative Experiences on Ecstasy: The Role of Drugs, Set, and Setting', *Journal of Psychoactive Drugs*, 34(2), pp. 199-208.
- McLeod, K. (2001) 'Genres, Subgenres, Sub-Subgenres and More: Musical and Social Differentiation Within Electronic/Dance Music Communities', *Journal of Popular Music Studies*, 13, pp. 59-75.
- McRobbie, A. (1994) 'Shut Up and Dance: Youth Culture and Changing Modes of Femininity', in *Postmodernism and Popular Culture*. London and New York: Routledge, pp. 155-176.
- Measham, F. and Moore, K. (2006) 'Reluctant Reflexivity and the Development of Club Studies', in Sanders, B. (ed.) *Drugs, Clubs and Young People: sociological and public health perspectives*. Aldershot and Burlington, Ashgate, pp. 13-25.
- Measham, F. Aldridge, J. and Parker, H. (2001) 'The Clubbers and their Nights Out', in *Dancing on Drugs: risk, health and hedonism in the British club scene*. London and New York: Free Association Books, pp. 92-115.

The Melbourne Shuffler Documentary (2005) Directed by Stephen Coles, Michael Knispel and David Knispel [DVD]. Melbourne: Underground Epidemic Productions.

Melody – The Soul of Music: An Essay Towards the Improvement of the Musical Art (1798), Glasgow: Courier Office (Author Unknown).

Middleton, R. (1993) 'Popular Music Analysis and Musicology: Bridging the Gap', *Popular Music*, 12(2), pp. 177-90.

Middleton, R. (1990) *Studying Popular Music*. Milton Keynes and Philadelphia: Open University Press.

Miles, S. (2003) 'Researching Young People as Consumers: Can and Should We Ask Them Why?', in Bennett, A., Cieslik, M. and Miles, S. (eds) *Researching Youth*. Hampshire and New York: Palgrave Macmillan, pp. 170-185.

Mintel (2012) 'Nightclubs – UK – January 2012: Reports'. Available at: <http://academic.mintel.com/display/590015/> (Accessed: 19 March 2012).

Minus (2013) *m-nus*. Available at: <http://www.m-nus.com> (Accessed: 16 January 2013).

Miranda, E.R. (2010) 'Organised Sound, Mental Imageries and the Future of Music Technology: a neuroscience outlook', *Organised Sound*, 15(1), pp. 13-25.

Montague, E. (2001) *Moving to Music: A Theory of Sound and Physical Action*. PhD thesis. University of Pennsylvania. Michigan: UMI.

Montgomery, H. (2007) 'A comparative perspective', in Kehily, M. J. (ed.) *Understanding youth: perspectives, identities and practices*. London: Sage, pp. 45-71.

Moore, A. F. (2001) 'Categorical Conventions in Music Discourse: Style and Genre', *Music & Letters*, 82(3), pp. 432-42.

Moore, A. F. (1993) 'A Profusion of Styles', in *Rock: The Primary Text*. Buckingham and Philadelphia: Open University Press, pp. 104-53.

Morgan, R.P. (1991) *Twentieth-Century Music: A History of Musical Style in Modern Europe and America*. New York: Norton.

Moylan, W. (2009) 'Considering Space in Music', *Journal on the Art of Record Production*, 4 (Conference Papers). Available at: <http://arpjournal.com/1379/considering-space-in-music/> (Accessed: 2 September 2011).

Nettl, B. (2000) 'An Ethnomusicologist Contemplates Universals in Musical Sound and Musical Culture', in Wallin, N.L., Merker, B. and Brown, S. (eds) *The Origins of Music*. Cambridge, MA: MIT Press, pp. 463-72.

- Noel, T. (1999) 'Terry Noel'. Interview with Terry Noel. Interviewed by Bill Brewster for *DJhistory.com*, 30 October. Available at: <http://www.djhistory.com/interviews/terry-noel> (Accessed: 16 February 2011).
- Noys, B. (1995) 'Into the 'Jungle'', *Popular Music*, 14(3), pp. 321-33.
- Odell, M. (2012) 'After the party: Norman Cook takes it easy', *The National* (UAE edn), 2 May. Available at: <http://www.thenational.ae/arts-culture/music/after-the-party-norman-cook-takes-it-easy> (Accessed: 01 October 2012).
- Osborn, M. (2009) 'Sounds of 1989', *BBC News*, 19 August. Available at: <http://news.bbc.co.uk/1/hi/8163941.stm> (Accessed: 16 February 2011).
- Paddison, M. (1982) 'The Critique Criticised: Adorno and Popular Music', *Popular Music*, 2, pp. 201-218.
- Parliament of New South Wales (1995) *Death of Anna Wood*. Available at: <http://www.parliament.nsw.gov.au/prod/parlment/hansart.nsf/V3Key/LA19951025017> (Accessed: 14 July 2012).
- Pears, R. and Shields, G. (2013) *Cite Them Right: The Essential Referencing Guide*. 9th edn. Basingstoke: Palgrave Macmillan.
- Pentney, A. R. (2001) 'An Exploration of the History and Controversies Surrounding MDMA and MDA', *Journal of Psychoactive Drugs*, 33(3), pp. 213-221.
- Perkins, J. and Perkins, C. (2012) *Rave Press Cuttings*. Available at: <http://www.fantazia.org.uk/Scene/press/press.htm> (Accessed: 27 February 2012).
- Perrone, D. (2010) 'Gender and Sexuality in the Field: A Female Ethnographer's Experience Researching Drug Use in Dance Clubs', *Substance Use and Misuse*, 45, pp. 717-35.
- Peterson, R. and Bennett, A. (2004) 'Introducing Music Scenes', in Bennett, A. and Peterson, R. (eds) *Music Scenes: Local Translocal, and Virtual*. Nashville: Vanderbilt University Press, pp. 1-16.
- Petridis, A. (2009) 'Drunk in charge of an album', *The Guardian*, 27 February. Available at: <http://www.guardian.co.uk/music/2009/feb/27/norman-cook-brighton-port-authority> (Accessed: 1 October 2012).
- Phillips-Silver, J. and Trainor, L. J. (2005) 'Feeling the Beat: Movement Influences Infant Beat Perception', *Science*, 308, p.1430.
- Pini, M. (2001) *Club Cultures and Female Subjectivity: The Move from Home to House*. New York: Palgrave.
- Pini, M. (1997) 'Technologies of the Self', in Roche, J. and Tucker, S. (eds) *Youth in Society: Contemporary Theory, Policy and Practice*. London: Sage, pp. 158-66.

- Plastikman (2013) *Plastikman*. Available at: <http://www.plastikman.com> (Accessed: 16 January 2013).
- Police National Legal Database (2009) 'Drugs slang: what police must learn – R to Z', *The Telegraph*, 8 November. Available at: <http://www.telegraph.co.uk/news/uknews/law-and-order/6521793/Drugs-slang-what-police-must-learn-R-to-Z.html> (Accessed: 26 November 2011).
- Pollick, F. (2011) *Brain Mechanisms of Expertise in Watching Dance and Audiovisual Integration of Drumming* [Seminar presentation], Institute for Music in Human and Social Development. University of Edinburgh. 15 December.
- Poole, A. (2010) 'Identity of Meaning', in Walker, G. and Leedham-Green, E. (eds) *Identity*. New York: Cambridge University Press, pp. 9-25.
- Pope, R. (2011) 'Hooked on Affect: Detroit Techno and Dystopian Digital Culture', *Dancecult*, 2(1), pp. 24-44.
- Prior, N. (2010) 'The Socio-technical biography of a musical instrument: the case of the Roland TB-303' [unpublished], Edinburgh: University of Edinburgh.
- Push and Silcott, M. (2000) *The Book of E: all about ecstasy*. London: Omnibus Press.
- Radocy, R. F. and Boyle, J. D. (2003) *Psychological Foundations of Musical Behaviour*. Springfield: Charles C. Thomas.
- Rayner, B. (2013) 'SXSW: Deadmau5, Richie Hawtin team up for seminar on the state of techno', *The Star*, 12 March. Available at: http://www.thestar.com/entertainment/music/2013/03/12/sxsw_deadmau5_richie_hawtin_team_up_for_techno_talk.html (Accessed: 18 April 2013).
- Redhead, S. (1993) 'The End of the End-of-the-Century Party', in Redhead, S. (ed.) *Rave Off: Politics and deviance in contemporary youth culture*. Aldershot and Brookfield: Ashgate, pp. 1-6.
- Renshaw, D. (2013) 'Avicii's mix of EDM and country has given ravers a wake-up call', *The Guardian*, 24 October. Available at: <http://www.theguardian.com/music/2013/oct/24/avicii-mixes-edm-country-dance-dj-miami> (Accessed: 5 November 2013).
- Reynolds, S. (2012) 'How rave music conquered America', *The Guardian*, 2 August. Available at: <http://www.guardian.co.uk/music/2012/aug/02/how-rave-music-conquered-america> (Accessed: 2 August 2012).
- Reynolds, S. (2008) *Energy Flash: into the world of techno and rave culture*. London: Picador.

- Reynolds, S. (2000) 'Kosmik Dance: Krautrock and its Legacy', in Shapiro, P. (ed.) *Modulations: A History of Electronic Music*. New York: Caipirinha Productions, pp. 24-34.
- Reynolds, S. (1997) 'Rave Culture: Living Dream, or Living Death?', in Redhead, S. (ed.) *The Clubcultures Reader: Readings in Popular Cultural Studies*. Oxford: Blackwell, pp. 84-93.
- Richardson, C. (2010) 'Edinburgh University Settlement: When not if; the slow demise of a much loved old friend...', *Bright Green*, 25 November. Available at: <http://brightgreenscotland.org/index.php/2010/11/edinburgh-university-settlement-when-not-if-the-slow-demise-of-a-much-loved-old-friend> (Accessed: 10 December 2010).
- Rietveld, H. (1997) 'The House Sound of Chicago', in Redhead, S. (ed.) *The Clubcultures Reader: Readings in Popular Cultural Studies*. Oxford: Blackwell, pp. 106-18.
- Ringer, A. L. (2012) 'Melody', in *Grove Music Online. Oxford Music Online*. Oxford University Press. Available at: <http://www.oxfordmusiconline.com/subscriber/article/grove/music/18357> (Accessed: 1 May 2012).
- Roberts, K. (2003) 'Problems and Priorities for the Sociology of Youth', in Bennett, A., Cieslik, M. and Miles, S. (eds) *Researching Youth*, Hampshire and New York: Palgrave Macmillan, pp. 13-51.
- Roberts, M. (2009) 'Planning, urban design and the night-time city: Still at the margins?', *Criminology and Criminal Justice*, 9(4), pp. 487-506.
- Roche, J. and Tucker, S. (1997) 'Youth in Society: Contemporary Theory, Policy and Practice', in Roche, J. and Tucker, S. (eds) *Youth in Society: Contemporary Theory, Policy and Practice*. London: Sage, pp. 1-7.
- Romano, T. (2013) 'Women Edging Their Way Into the D.J. Booth', *New York Times*, 1 November. Available at: http://www.nytimes.com/2013/11/03/arts/music/women-edging-their-way-into-the-dj-booth.html?pagewanted=1&ref=arts&_r=0 (Accessed: 3 November 2013).
- Ross, A. (1994) 'Introduction', in Ross, A. and Rose, T. (eds) *Microphone Fiends: Youth Music and Youth Culture*. New York and London: Routledge, pp. 1-16.
- Rubin, M. (2000) 'Techno: Days of Future Past' in Shapiro, P. (ed.) *Modulations: A History of Electronic Music*. New York: Caipirinha Productions, pp. 108-123.
- Saffle, M. and Yang, H-L (2010) 'Aesthetic and Social Aspects of Emerging Utopian Musical Communities', *Croatian Musicological Society*, 41(2), pp. 319-341.

Salimpoor, V., Benovoy, M., Larcher, K., Dagher, A. and Zatorre, R. J. (2011) 'Anatomically distinct dopamine release during anticipation and experience of peak emotion to music', *Nature Neuroscience*, 14, pp. 1-9.

Samson, J. (2012) 'Genre', in *Grove Music Online. Oxford Music Online*. Oxford University Press. Available at: <http://www.oxfordmusiconline.com:80/subscriber/article/grove/music/40599> (Accessed: 6 January 2012).

Sanders, B. (2006) 'Young People, Clubs and Drugs', in Sanders, B. (ed.) *Drugs, Clubs and Young People: Sociological and Public Health Perspectives*. Aldershot and Burlington: Ashgate, pp. 1-12.

Sanders, B. (ed.) (2006) *Drugs, Clubs and Young People: Sociological and Public Health Perspectives*. Aldershot and Burlington: Ashgate.

Save Bongo Club (2012) 6 February. Available at: <http://www.facebook.com/savebongo> (Accessed: 6 February 2012).

Schäfer, T. and Sedlmeier, P. (2011) 'Does the Body Move the Soul? The Impact of Arousal on Music Preference', *Music Perception*, 29(1), pp. 37-50.

Schuller, B., Hage, C., Schuller, D. and Rigoll, G. (2010) 'Mister D.J., Cheer Me Up!': Musical and Textual Features for Automatic Mood Classification', *Journal of New Music Research*, 39(1), pp. 13-34.

The Scotsman (2007a) 'All hands on decks, clubbers', 17 March. Available at: <http://www.scotsman.com/lifestyle/music/news-and-features/all-hands-on-decks-clubbers-1-1425157> (Accessed: 1 August 2012).

The Scotsman (2007b) 'The party people', 29 March. Available at: <http://www.scotsman.com/news/the-party-people-1-692787> (Accessed: 1 August 2012).

The Scotsman (2006) 'Wendy keeps Trendy party going at Tackno', 22 December. Available at: <http://www.scotsman.com/what-s-on/music/wendy-keeps-trendy-party-going-at-tackno-1-1199573> (Accessed: 24 September 2013).

Scruton, R. (1997) *Aesthetics of Music*. Oxford and New York: Oxford University Press.

Sensation (2012) *Sensation*. Available at: <http://www.sensation.com> (Accessed: 22 May 2012).

Sethares, W. (2004) 'The Science of Sound', in *Tuning, Timbre, Spectrum, Scale*. London: Springer Verlag, pp. 11-38.

Shapiro, H. (2006) 'Stoned is the Way of the Walk', in *Waiting for the Man: the Story of Drugs and Popular Music*. London: Helter Skelter Publishing, pp. 243-264.

- Shapiro, P. (ed.) (2000) *Modulations: A History of Electronic Music*. New York: Caipirinha Productions.
- Sharp, C. (2000) 'Modern States of Mind', in Shapiro, P. (ed.) *Modulations: A History of Electronic Music*. New York: Caipirinha Productions, pp. 130-147.
- Shepherd, J. (2010) 'A Theoretical Model for the Sociomusicological Analysis of Popular Musics', *Popular Music*, 2, pp. 145-77.
- Shiner, M. and Newburn, T. (1997) 'Definitely, Maybe Not? The Normalisation of Recreational Drug Use Amongst Young People', *Sociology*, 31(3), pp. 511-529.
- Sicko, D. (1999) *Techno Rebels: the renegades of electronic funk*. New York: Billboard Books.
- Snelson-Figueroa, L. (2004) Lost and Found in Translation: Dancing With and Beyond Consciousness (professional paper), M.F.A. in Dance, Texas.
- Sommer, S. (2009) 'C'mon to my house: Underground-House Dancing', in Malnig, J. (ed.) *Ballroom, Boogie, Shimmy Sham, Shake: A Social and Popular Dance Reader*. Chicago: University of Illinois Press, pp. 285-301.
- Spike (2010) <http://www.spike.com/video/ableton-tutorial/3005513>, Spike Digital Entertainment Inc.
- Spring, K. (2004) 'Behind the Rave: Structure and Agency in a Rave Scene', in Bennett, A. and Peterson, R. (eds) *Music Scenes: Local Translocal, and Virtual*. Nashville: Vanderbilt University Press, pp. 48-63.
- St. John, G. (ed.) (2001) *Free NRG: Notes from the Edge of the Dancefloor*. Melbourne: Common Ground Press.
- Stainton Rogers, R. (1997a) 'The Making and Moulding of Modern Youth: a Short History', in Roche, J. and Tucker, S. (eds) *Youth in Society: Contemporary Theory, Policy and Practice*. London: Sage, pp. 8-16.
- Stainton Rogers, R. (1997b) 'Constructing a Way of Life', in Roche, J. and Tucker, S. (eds) *Youth in Society: Contemporary Theory, Policy and Practice*. London: Sage, pp. 176-182.
- Straw, W. (2004) 'Systems of articulation, logics of change: communities and scenes in popular music', in Frith (ed.) *Popular Music: Critical Concepts in Media and Cultural Studies*. London: Routledge, pp. 268-88.
- Stuff DJs Hate (2012) *Stuff DJs Hate*. Available at: www.stuffdjshate.wordpress.com (Accessed: 12 November 2012).
- Tagg, P. (1994) 'From Refrain to Rave: The Decline of Figure and the Rise of Ground', *Popular Music*, 13(2), pp. 209-22.

- Tagg, P. (1982) 'Analysing Popular Music: Theory, Method and Practice', *Popular Music*, 2, pp. 37-67.
- Tarrant, M., North, A.C. and Hargreaves, D. J. (2002) 'Youth identity and music', in MacDonald, R., Hargreaves, D. and Miell, D. (eds) *Musical Identities*. New York: Oxford University Press, pp. 134-150.
- Taylor, J. (2011) 'The intimate insider: negotiating the ethics of friendship when doing insider research', *Qualitative Research*, 11(1), pp. 3-22.
- The Sun* (2009) 'Soak up some rays in Ibiza', 10 August. Available at: <http://www.thesun.co.uk/sol/homepage/fun/competitions/2576893/Soak-up-some-rays-in-Ibiza.html> (Accessed: 26 November 2011).
- The Telegraph* (2008) 'Police can't break up 'too dark' raves', 8 May. Available at: <http://www.telegraph.co.uk/news/newstopics/howaboutthat/1937946/Police-cant-break-up-too-dark-raves.html> (Accessed: 26 November 2011).
- Thomson, R. (2007a) 'A biographical perspective', in Kehily, M. J. (ed.) *Understanding youth: perspectives, identities and practices*, London: Sage, pp. 73-105.
- Thomson, R. (2007b) 'Belonging', in Kehily, M. J. (ed.) *Understanding youth: perspectives, identities and practices*. London: Sage, pp. 147-179.
- Thornton, S. (1995) *Club Cultures: Music, Media and Subcultural Capital*. Cambridge: Polity.
- Thornton, S. (1994) 'Moral Panic, the Media and British Rave Culture', in Ross, A. and Rose, T. (eds) *Microphone Fiends: Youth Music and Youth Culture*. New York and London: Routledge, pp. 176-92.
- Todorov, T. and Berrong, R.M. (1976) 'The Origin of Genres', *New Literary History*, 8(1), pp. 159-70.
- Toiviainen, P. and Keller, P.E. (2011) 'Spatiotemporal Music Cognition', *Music Perception: An Interdisciplinary Journal*, 28(1), pp. 1-2.
- Tomazen, F., Donovan, P. and Mundell, M. (2002) 'Dance trance', *The Age*, 7 December. Available at: <http://www.theage.com.au/articles/2002/12/07/1038950203557.html?oneclick=true> (Accessed: 2 October 2012).
- Trevarthen, C. (2012) 'Communicative Musicality: The Human Impulse to Create and Share Music', in Hargreaves, D.J., Miell, D.E. and MacDonald, R. (eds) *Musical Imaginations: Multidisciplinary Perspectives on Creativity, Performance and Perception*, Croydon: Oxford University Press, pp. 259-84.

- Trevarthen, C., Delafield-Butt, J. and Schögler, B. (2011) 'Psychobiology of Musical Gesture: Innate Rhythm, Harmony and Melody in Movements of Narration', Gritten, A. and King, E. (eds), *New Perspectives on Music and Gesture*, Farnham and Burlington: Ashgate, pp. 11-43.
- Trevarthen, C. (1999) 'Musicality and the Intrinsic Motive Pulse: evidence from human psychobiology and infant communication', *Musicae Scientiae*, Special issue: 'Rhythms, Musical Narrative, and the Origins of Human Communication', pp. 157–213.
- Ungvary, T. and Waters, S. (1992) 'The Sonogram: A Tool for the Documentation of Musical Structure', *Ex Tempore*, 6(1). Available at: <http://www.ex-tempore.org/Ungvary/Ungvary.htm> (Accessed: 1 August 2013).
- Van Hulst, D. (2002) *DJ Sammy & Yanou Ft. Do – Heaven (Live @ TOTP UK 2002)*. Available at: <http://www.youtube.com/watch?v=D5gurC1KF3M> (Accessed: 20 December 2010).
- Waters, S. (1994) 'Timbre composition: Ideology, metaphor and social process', *Contemporary Music Review*, 10(2), pp.129-134.
- Weinstein, D. (1995a) 'Rock Youth and Its Music', in Epstein, J. (ed.) *Adolescents and their Music: If It's Too Loud, You're Too Old*. New York and London: Garland, pp. 3-23.
- Weinstein, D. (1995b) 'Expendable Youth: The Rise and Fall of Youth Culture', in Epstein, J. (ed.) *Adolescents and their Music: If It's Too Loud, You're Too Old*. New York and London: Garland, pp. 67-85.
- Westbrook, D.A. (2008) *Navigators of the Contemporary: Why Ethnography Matters*. Chicago and London: The University of Chicago Press.
- Whiteley, S., Bennett, A. and Hawkins, S. (eds) (2004) *Music, Space and Place: popular music and cultural identity*. Aldershot: Ashgate.
- Whyte, S. (2012) 'He's come a long way, baby', *The Sydney Morning Herald*, 11 February. Available at: <http://www.smh.com.au/entertainment/music/hes-come-a-long-way-baby-20120211-1svpt.html> (Accessed: 1 October 2012).
- Wowk, A. (2013) 'Trentemøller – Lost'. Review of *Lost*, by Trentemøller. *Inthemix*. Available at: http://www.inthemix.com.au/music/56385/Trentemoller_Lost (Accessed 10 October 2013).
- Worth, R. (2013) Email to Tami Gadir, 13 November.
- Ziv, N. and Omer, E. (2010) 'Music and time: the effect of experimental paradigm, musical structure and subjective evaluations on time estimation', *Psychology of Music*, 39 (2), pp. 182-95.

Discography

501 (2010) 'Ultraviolet', *X*. Off Road Recordings. OFFROAD010. Available at: <http://boomkat.com/downloads/354082-501-rise-fall-ultraviolet> (Downloaded: 11 December 2010).

808 State (2004) 'Cubik', *Ravin'!* [CD]. London: V2TV. V2TV1028942.

808 State (1990) 'Sunrise', *90*. ZTT - 246 461-2. Available at: www.legalsounds.com (website removed June 2013) (Downloaded: 2 April 2013).

A Guy Called Gerald (1988) 'Voodoo Ray', *Voodoo Ray*. Warlock Records. SUGOI-088. Available at: <http://www.beatport.com/track/voodoo-ray-original-mix/72125> (Downloaded: 2 April 2013).

Aaron Underwood (2011) 'Beach Cruise (Andy Notalez Remix)', *Beach Cruise*. HMSPmusic Society. 1361 D. Available at: <https://itunes.apple.com/gb/album/beach-cruise/id417805269> (Downloaded: 22 February 2011).

Addled (2009) 'She's My Lady Friend', *Heartbreachno EP*. Moodgadget Records. MGT-043. Available at: <http://boomkat.com/downloads/157658-addled-heartbreachno-ep> (Downloaded: 19 March 2009).

Âme & Amampondo (2012) 'Ku Kanjani (Âme Live Version)', *Âme Live*. Innervisions. IV33. Available at: <http://boomkat.com/downloads/529471-am-me-live> (Downloaded: 21/05/2012).

ATB (2001) 'Hold You (Airplay Mix)', *Hold You*, Kontor Records. Kontor021. Available at: <http://www.beatport.com/track/hold-you-airplay-mix/13202> (Downloaded: 26 September 2012).

Back Pack Poets (2011) 'Objective T', *Objective EP*. Electric Deluxe. EDLX019. Available at: <http://www.beatport.com/track/objective-t-original-mix/2751588> (Downloaded: 10 November 2011).

Bart Skills (2012) 'Observer', *Walking At My Girl*. Tronic. TR84. Available at: <http://www.beatport.com/track/observer-original-mix/3403246> (Downloaded: 15 May 2012).

Beat Pharmacy (2005) 'Afrotech', *Earthly Delights*. Wave Music. DS50151-U. Available at: <http://boomkat.com/downloads/301090-beat-pharmacy-earthly-delights> (Downloaded: 7 May 2010).

Beat Pharmacy (2005) 'Cape Town', *Earthly Delights*. Wave Music. DS50151-U. Available at: <http://boomkat.com/downloads/301090-beat-pharmacy-earthly-delights> (Downloaded: 7 May 2010).

Beethoven, L. V. (1984) 'Allegro con brio, Symphonie No. 5 op. 67', Herbert von Karajan, Berliner Philharmoniker. *Beethoven 9 Symphonien Ouvertüren Karajan*. [CD]. Deutsche Grammophon.

Ben Klock (2009) 'Subzero (Function-Regis aka Sandwell District Remix)', *Ben Klock/Robert Hood/Sandwell District Remixes*. Ostgut Ton. OTON026. Available at: <http://boomkat.com/downloads/220694-ben-klock-subzero-function-regis-aka-sandwell-district-remix> (Downloaded: 31 August 2009).

Butch (2010) 'XTC (Riva Starr Cut)', *XTC. 100% Pure*. PURE061D. Available at: <http://boomkat.com/downloads/333916-butch-xtc> (Downloaded: 3 December 2010).

Calibre (2010) 'Even If, *Even If*. Signature. SIGCD006. Available at: <http://boomkat.com/downloads/356564-calibre-even-if> (Downloaded: 3 December 2010).

Cause4Concern (2010) 'Hammer House', *Hammer House/Amnesiac*. C4C Recordings. C4CDIGUK004. Available at: <http://boomkat.com/downloads/361535-cause4concern-hammer-house-amnesiac> (Downloaded: 11 November 2010).

Chaim (2009) 'We Do', *Thrill You*. Bpitch Control. BPC 197. Available at: <http://boomkat.com/downloads/223889-chaim-thrill-you> (Downloaded: 8 October 2009).

Christian C (2011) 'Elizabeth', *We Are Glow vol. 1*. Glow Music. Available at: www.beatport.com (link removed) (Downloaded: 21 July 2011).

Cybotron (2005) 'Alleys of your Mind', *Juan Atkins: 20 Years 1985-2005*. [CD]. Tresor Records. Tresor 216.

Dani Sbert (2011) 'Incoming', *Crazy World*. FHD Records. FHD 200. Available at: <http://www.beatport.com/track/incoming-original-mix/2075066> (Downloaded: 10 November 2011).

Dapayk & Padberg (2009) 'Sugar', *Fenou08*. Fenou08. Available at: <http://boomkat.com/downloads/178017-dapayk-padberg-dredl-kibosh-fenou08> (Downloaded: 28 May 2009).

Daso (2008) 'Meine (Lucio Aquilina Remix)', *Spectral Remixed*. Spectral Sound. SPC-51. Available at: <http://boomkat.com/downloads/165883-various-spectral-sound-spectral-remixed>. (Downloaded: 25 March 2009).

Davide Cali (2011) 'Tantra', *Tantra*. Reiz Music. RM122. Available at: <http://www.beatport.com/track/tantra-original-mix/2710312> (Downloaded: 10 November 2011).

Deadmau5 (2008) 'Alone With You', *Alone With You*. Mau5trap Records. MAU5006. Available at: <http://www.beatport.com/track/alone-with-you-original-mix/538713> (Downloaded: 26 September 2012).

DJ Fresh (2006) 'Babylon Rising', *Escape From Planet Monday*. System Recordings. SYS1093. Available at: <http://www.beatport.com/track/babylon-rising-original-mix/176405> (Downloaded: 11 September 2013).

DJ Lion and Luigi Rocca (2011) 'Krakra Hurricane', *Luigi Rocca pres. Tales of a Lost Lover*. Hotfingers. HFS1148A. Available at: <http://www.beatport.com/track/krakra-hurricane-original-mix/3033932> (Downloaded: 26 January 2012).

DJ Sammy and Yanou feat. Do (2002) 'Heaven', *Heaven*. Robbins Entertainment. 76869-75031-2. Available at: <https://itunes.apple.com/gb/album/heaven/id17769934> (Downloaded: 15 January 2011).

Dustin Zahn and Edit Select (2012) 'Tunnels (Dub Tool)', *Tunnels*. Enemy Records. ENEMY020. Available at: <http://www.beatport.com/track/tunnels-dub-tool/3435086> (Downloaded: 15 May 2012).

DZ (2010) 'Down', *Diplo Presents Dubstep*. Mad Decent/Downtown. MAD115X. Available at: <http://www.beatport.com/release/blow-your-head-diplo-presents-dubstep/284822> (Downloaded: 8 February 2011).

Eats Everything (2011) 'Entrance Song', *Entrance Song EP*. Pets Recordings. PETS011. Available at: <http://boomkat.com/downloads/450035-eats-everything-entrance-song-ep> (Downloaded: 26 July 2012).

Extrawelt (2012) 'Yummy Unbroken', *Vorsprung Durch Hektik*. Boxer Recordings. BOXER081. Available at: <http://www.beatport.com/track/yummy-unbroken-original-mix/1921778> (Downloaded: 15 May 2012).

Extrawelt (2009) 'Trümmerfeld (Oliver Huntemann Remix)', *Trümmerfeld Remixes*. Cocoon Recordings. CORDIG009. Available at: <http://boomkat.com/downloads/216987-extrawelt-trummerfeld-mixes> (Downloaded: 29 August 2009).

Fatboy Slim (1998) 'Build It Up, Tear It Down', *You've Come A Long Way, Baby*. [CD]. Brighton: Skint. BRASSIC 11CD.

Firefly (2011) 'Join The Foray', *Conflict/Join The Foray*. Rotation Recordings. RR001. Available at: <http://www.beatport.com/track/join-the-foray-original-mix/3000586> (Downloaded: 26 January 2012).

Various Artists (2006) *Floorfillers: The Ultimate Party Album* [CD]. Australia: EMI. 927876

- Flying Belt (2009) 'Kaddish', *Icarian Games and Indian Clubs Volume Three*. Adjunct Digital. ADIGxCO03. Available at: <http://boomkat.com/downloads/244699-flying-belt-kaddish>. (Downloaded: 5 December 2009).
- George Fitzgerald (2012) 'Like A Child', *Child EP*. AUS Music. 0827170292086. Available at: <http://boomkat.com/downloads/543902-george-fitzgerald-child-ep> (Downloaded: 26 July 2012).
- Gui Boratto (2009) 'Take My Breath Away', *Take my Breath Away*. Kompakt. KOMPAKTCD70. Available at: <http://boomkat.com/downloads/163194-gui-boratto-take-my-breath-away> (Downloaded: 13 March 2009).
- J. Rabbit (2010) 'Holy Guacamole', *Too Much Sexy EP*. Badman Digital. BDM015. Available at: <http://boomkat.com/downloads/343101-j-rabbit-too-much-sexy-ep> (Downloaded: 3 December 2010).
- Jan van Lier (2011). 'Eternalize', *Miama 2011*. BluFin. BFCD08. Available at: <http://www.beatport.com/track/eternalize-original-mix/1748456>. (Downloaded 3 October 2011)
- Jay Shephard (2010) 'Umzug', *Umzug*. Dirt Crew Recordings. DIRT042. Available at: <http://boomkat.com/downloads/289861-jay-shephard-umzug> (Downloaded: 29 April 2010).
- Jeff Mills (2013) 'The Bells', *Sequence. A Retrospective of Axis Records*. Axis Records. AXCD200. Available at: <http://www.beatport.com/track/the-bells-original-mix/4043392> (Downloaded: 2 April 2013).
- Justice (2005) 'Waters of Nazareth', *Waters of Nazareth*. Ed Banger Records. ED 005. Available at: www.legalsounds.com (website removed June 2013) (Downloaded: 2 April 2013).
- Kraftwerk (1978) 'The Robots', *The Man Machine* [CD]. Hayes Middlesex: Capitol. CDP 7 46039 2.
- Krause Duo (2009) 'Wurm', *Beans In Sandels Part 1*. MK 029. Available at: <http://boomkat.com/downloads/178111-krause-duo-beans-in-sandels-part-1> (Downloaded: 10 June 2009).
- Lawler, S. (2008) *Viva Toronto* [CD]. New York: Ultra Records. UL 1752-2
- Lil' Louis (1989) 'French Kiss', *French Kiss*. Epic. FFRR – 886 675-2. Available at: www.legalsounds.com (website removed June 2013) (Downloaded: 2 April 2013).
- Losoul (2009) 'Up The Beach', *Up The Beach*. Playhouse. Play 155. Available at: <http://boomkat.com/downloads/176226-losoul-up-the-beach> (Downloaded: 3 May 2009).

Madison Avenue (2000), 'Don't Call Me Baby', *100% Hits: Best of 2000* [CD].
Australia: Warner. 9548392262

Marek Hemmann (2009) 'Kaleido', *In Between*. Freude Am Tanzen. FATCD004.
Available at: <http://boomkat.com/downloads/232635-marek-hemmann-in-between>
(Downloaded: 22 November 2009).

Markus Homm (2012) A120, *Giants, Vol. 3*. Doppelgaenger.
DOPPELGAENGERCOMP147. Available at:
<http://www.beatport.com/track/a120-original-mix/3804317> (Downloaded: 11
October 2012).

Mike Dehnert (2010) 'Chardon', *Spreepool*. Fachwerk Digital. FW015. Available at:
<http://boomkat.com/downloads/337334-mike-dehnert-spreepool> (Downloaded: 3
December 2010).

Model 500 (2005) 'Off To Battle', *Juan Atkins: 20 Years 1985-2005*. [CD]. Tresor
Records. Tresor 216.

Modeselektor (2007) *Boogy Bytes Vol. 3* [CD]. Germany: BPitch Control. BPC 151.

Orbital (1990) 'Chime', *Chime*. FFRR - 886 976-7. Available at:
www.legalsounds.com (website removed June 2013) (Downloaded: 26 November
2006).

P.Toile (2011) 'Face (Cosmic Cowboys Remix)', *Face*. Ostwind Records. OW037.
Available at: <http://www.beatport.com/track/face-cosmic-cowboys-remix/4018262>
(Downloaded: 2 April 2013).

Paul Thomas (2011) 'Ultraviolet', *Miami 2011*. Toolroom Records. TOOL11901Z.
Available at: <http://www.beatport.com/track/ultraviolet-original-club-mix/4092334>
(Downloaded: 3 October 2011).

Paul van Dyk (2002) 'For An Angel (Pvd E-Werk Club Mix)', *Back To The Old Skool
Ibiza* Disc 2. [CD]. Ministry of Sound Recordings. MOSCD41.

Pig&Dan (2009) 'Terminate', *Terminate*. Cocoon Recordings. COR12055. Available
at: <http://boomkat.com/downloads/160332-pig-dan-terminate> (Downloaded: 24
February 2009).

Pig&Dan and Mark Reeve (2012) 'Violets', *Turbulence/Violets*. Bedrock Records.
BEDDIGI20. Available at: <http://www.beatport.com/track/violets-original-mix/3416219> (Downloaded: 15 May 2012).

Rhadow (2012) 'Discourse', *Stand For Something*. Pura Music. PUR041. Available at:
<http://www.beatport.com/track/discourse-original-mix/3387864> (Downloaded 18
April 2012).

Robert Hood (2009) 'Obey', *Obey/Resurrection*. M-Plant. M.PM2. Available at: <http://boomkat.com/downloads/218424-robert-hood-obey> (Downloaded: 31 August 08 2009).

Samuel L. Session (2010) 'Can You Relate (Joris Voorn Flooding the Market With Remixes)', *Can You Relate (Remixes Part 2)*. Soma Records. SOMA285D. Available at: <http://boomkat.com/downloads/307846-samuel-l-session-can-you-relate-remixes-part-2> (Downloaded: 10 December 2010).

Sarah Goldfarb (2009) 'Billie Jean Vince', *Too Slow*. 200 Records. 200002. Available at: <http://boomkat.com/downloads/214607-sarah-goldfarb-too-slow> (Downloaded: 28 July 2009).

The Setup (2012) 'Darkened Room', White Label.

Silent Witness (2010) 'Frozen Still', *Braindrain/Frozen Still*. Triple Speed. TRIPS004. Available at: <http://boomkat.com/downloads/361557-silent-witness-braindrain-frozen-still> (Downloaded: 11 December 2010).

Skrillex (2010) 'Scary Monsters and Nice Sprites', *Scary Monsters and Nice Sprites*. Mau5trap Recordings. MAU5004. Available at: www.legalsounds.com (website removed June 2013) (Downloaded: 2 April 2013).

Subfocus (2008) 'Timewarp', *Stadium Drum and Bass* [CD]. London: Breakbeat Kaos. BBK005CD.

Tiësto (2007) 'Bright Morningstar', *Elements of Life*. [CD]. Magik Muzik. CD07.

Tiësto (2004) 'Adagio For Strings', *Just Be*. [CD]. Magik Muzik/Black Hole Recordings. NEBCD9010.

Tommy Four Seven (2009) 'Surma (Speedy J Dub Tool)', *Surma EP*. Electric Deluxe. EDLX005. Available at: <http://boomkat.com/downloads/207651-tommy-four-seven-surma-ep> (Downloaded: 20 July 2009).

Tube & Berger (2003) 'Straight Ahead (Extended Mix)', *Sonic Sessions*. [CD]. EMI. SONIC001.

Urban Shakedown (2008) 'Some Justice', *The No. 1 Jungle Album* [CD]. Rome: Decadance. DECESS32.

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- Audio 38. J. Rabbit (2010) 'Holy Guacamole'. 01.00 – 01.30
- Audio 39. Back Pack Poets (2011) 'Objective T'. 02.30 – 03.00
- Audio 40. Davide Cali (2011) 'Tantra'. 03.30 – 03.45
- Audio 41. Dani Sbert (2011) 'Incoming'. 04.30 – 04.45

- Audio 42. Beat Pharmacy (2005) 'Afrotech'. 01.45 – 02.10
- Audio 43. ----- 03.48 – 04.00
- Audio 44. ----- 00.00 – 00.25
- Audio 45. ----- 01.50 – 02.00
- Audio 46. Model 500 (2005) 'Off To Battle', *Juan Atkins: 20 Years 1985-2005*. [CD]. Tresor Records. Tresor 216. 00.00 – 00.30
- Audio 47. A Guy Called Gerald (1988) 'Voodoo Ray'. 01.45 – 02.15
- Audio 48. 808 State (1990) 'Sunrise'. 02.30 – 03.00
- Audio 49. Back Pack Poets (2011) 'Objective T'. 00.00 – 00.30
- Audio 50. Christian C (2011) 'Elizabeth'. 01.00 – 01.30
- Audio 51. Dapayk & Padberg (2009) 'Sugar'. 01.31 – 02.11
- Audio 52. Daso (2008) 'Meine (Lucio Aquilina Remix)'. 02.10 – 02.40
- Audio 53. Flying Belt (2009) 'Kaddish'. 06.00 – 06.30
- Audio 54. Bart Skills (2012) 'Observer'. 01.20 – 01.35
- Audio 55. Pig&Dan and Mark Reeve (2012) 'Violets'. 01.15 – 02.00
- Audio 56. Gui Boratto (2009) 'Take My Breath Away'. 02.50 – 03.30
- Audio 57. P.Toile (2011) 'Face (Cosmic Cowboys Remix)'. 03.10 – 03.40
- Audio 58. Addled (2009) 'She's My Lady Friend'. 01.00 – 01.30
- Audio 59. Tiësto (2004) 'Adagio For Strings'. 02.30 – 03.00
- Audio 60. Dustin Zahn and Edit Select (2012) 'Tunnels (Dub Tool)'. 01.30 – 02.00
- Audio 61. Bart Skills (2012) 'Observer'. 05.00 – 05.30
- Audio 62. Mike Dehnert (2010) 'Chardon'. 02.00 – 02.30
- Audio 63. Jan van Lier (2011). 'Eternalize'. 03.20 – 03.50
- Audio 64. Orbital (1990) 'Chime'. 01.45 – 02.15
- Audio 65. Butch (2010) 'XTC (Riva Starr Cut)'. 02.00 – 02.40

- Audio 66. Eats Everything (2011) 'Entrance Song'. 01.30 – 03.00
- Audio 67. DJ Lion and Luigi Rocca (2011) 'Krakra Hurricane'. 04.30 – 05.00
- Audio 68. Âme & Amampondo (2012) 'Ku Kanjani (Âme Live Version)'. 00.00 – 00.45
- Audio 69. Beat Pharmacy (2005) 'Cape Town'. 01.30 – 02.00
- Audio 70. Rhadow (2012) 'Discourse'. 03.50 – 05.20
- Audio 71. Lil' Louis (1989) 'French Kiss'. 05.15 – 06.15
- Audio 72. Robert Hood (2009) 'Obey'. 01.00 – 01.30
- Audio 73. Marek Hemmann (2009) 'Kaleido'. 02.30 – 03.00
- Audio 74. Chaim (2009) 'We Do'. 01.40 – 02.10
- Audio 75. ----- 04.00 – 04.30
- Audio 76. Losoul (2009) 'Up The Beach'. 05.00 – 05.30
- Audio 77. The Setup (2012) 'Darkened Room'. 02.15 – 02.45
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- Audio 88. Paul van Dyk (2002) 'For An Angel (Pvd E-Werk Club Mix)'. 04.15 – 04.35

Audio 89. Justice (2005) 'Waters of Nazareth'. 02.15 – 02.45

Audio 90. Skrillex (2010) 'Scary Monsters and Nice Sprites'. 0001.15 – 01.45

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- Video 2. Adams, B. (2008) *Bryan Adams – Heaven – Live at Slane Castle, Ireland*. Complete (4.52)
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- Video 4. Gadir, T. (2012) Fieldwork footage, Clip #viii, *Circus*, 26 October 2012. 48.39 – 48.49
- Video 5. Gadir, T. (2012) Fieldwork footage, Clip #ix, *Circus*, 26 October 2012. 05.35 – 06.05

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- Video 6. Gadir, T. (2013) *Speedy J and Chris Liebing Interview*. Excerpted from Traktor (2009) *Speedy J and Chris Liebing discuss why they love Traktor 1.2*. 03.40 – 04.10.
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