

*Becky Lockett - PhD Booklet B*

# *Glossary of Terms*

This glossary presents key terminology used in the thesis, shown in alphabetical order.

# A

**Abstract expressionism** Visual art movement founded after the Second World War, in the USA, during the twentieth and twenty-first centuries. In abstract expressionism emphasis is placed on spontaneous emotional expression with shape and colour valued over figurative illustration; artists include Pollock, Rothko and de Kooning (Anfam, 2015).

**Affordance** In the theory of affordances Gibson explains that environments have an inherent value towards people and animals. Gibson uses the term 'afford' as a verb to denote what advantages the environment can offer and give (Gibson, 1977).

**Aleatoric** A form of music employed by twentieth-century composers such as Cage and Feldman, in which aspects of the music are left to chance within the

performance; for example, Stockhausen's *Zeitmasze*, which is composed in fragments to be played in any order (Griffiths, 1981).

**Analytic music therapy** A type of music therapy developed by Priestley which employs psychotherapeutic knowledge and techniques. The term is defined by Priestley as 'the analytically informed symbolic use of improvised music ... used as a creative tool with which to explore the client's inner life so as to provide the way forward for growth and greater self-knowledge' (Priestley, 1994, p.3).

**Arpeggio** 'Where a musician plays the notes of a chord individually, in sequence. Also known as a broken chord' (Lee, 2019–2020, no page).

**Atonality** 'Where tonality refers to an established musical key, atonality refers to music which does not conform to such a tonal centre or its related

harmonies. Atonality in music was explored extensively during the late nineteenth and early twentieth centuries, moving away from the tonal hierarchy and chord progression and towards the interplay of pitch and rhythm in sound. Examples of composers of atonal music include Stravinsky, Bartók, Schoenberg and Hindemith' (Lee, 2019–2020, no page).

# B

**Baroque period** 'A period in European arts, including music, architecture, painting, sculpture and other art forms, spanning from the early seventeenth century until the 1740s, in which both visual and musical arts were generally flamboyant and sumptuous, with embellishments such as extensive gilding and 'trompe

l'oeil' in art and similarly, extensive use of ornamental notes, such as trills, turns and mordents in music, giving music of that period an element of virtuosity for the performer. Examples of Baroque composers include J.S. Bach and Henry Purcell' (Lee, 2019–2020, no page).

**Bebop** Also called bop, bebop originated in 1940s America with key musicians such as Charlie Parker and Thelonious Monk. This style involved complex chromaticism, substituted altered chords, the breaking up of metronomic regularity and solos in double time and 16th notes (Porter, 1999)

**Blues** A musical form consisting of 12 bars of four/four time, consisting of blue notes, the minor third and seventh of the scale (Crofton, 1986a). The history is complex emerging out of slavery, work songs and north American colonies at the turn of the twentieth century (BBC, 2021)

**Body morphology** Both physical and psychological structures or form found externally and internally within the body and mind. For example, physical height or weight, muscle memory developed in pianists' hands, memory schemas related to playing certain instruments (Nijs, 2017).

**Bugaboos** Internalised fears musicians experience when playing improvised music, developed from past judgement of peers, teachers or audience (Nachmanovitch, 1990, p.135).

## C

**Cadenza** An improvised passage commonly found in eighteenth-century opera before the final cadence of an aria and first movements of instrumental concertos of

the Classical period. In the cadenza the soloist has the opportunity to demonstrate technical skill and virtuosity based on previous thematic material.

Cadenzas were originally left to the creativity of the performer; however, during the nineteenth and twentieth centuries composers tended to write out the cadenza with less freedom for the performer. Examples of cadenzas include Mozart's piano concerto no. 20 in D minor and the first movement of Beethoven's Emperor Concerto (Crofton, 1986a).

**Chromatic intervals** Notes which made up of the small intervals of semi-tones, not usually found in the designated key (Crofton, 1986a)

**Classical period** 'A period in musical history between the Baroque and the Romantic periods, spanning from 1730 until 1820. Less complex in texture, and lighter and clearer than the music of the Baroque period, music of the classical period is generally melodic with a

subservient harmony accompaniment. Forms such as the sonata, symphony and concerto matured during this period, and opera reached a new level of popularity.

Examples of Classical composers include Haydn, Mozart and Schubert' (Lee, 2019–2020, no page).

**Clinical improvisation** The use of music within music therapy which is 'free improvisation, which can simply encompass any sound that seems appropriate for or with the client at any one moment' (Darnley-Smith, 2013, p.20); this can include the use of song and pre-composed material as a basis for improvisation and be in any genre or style, with an emphasis on the musical expression, skill and individuality of the therapist and client.

**Colla voce style** Music where the solo instrument or voice plays freely and is followed and accompanied by the remaining instruments and voices.

**Collectivist societies** Societies in which psychological, cultural, economic, and philosophical emphasis is placed on group needs; these are commonly found in Eastern cultures such as China or Japan.

**Communicative musicality** The innate musical body and vocal expressions and communication found in human relations (Trevarthen and Malloch, 2000, p.5).

**Community of learning** An original phrase developed out of the thesis findings. It describes the relationships developed through learning to improvise and can include mentors, peers, colleagues, friends, and teachers. These relationships can sometimes be of a deep, intense, and special nature.

**Containing** Word originating with Bion (1961) in which the caregiver contains the good and bad feelings of the infant, providing a sense of emotional security and safety. Also applied in therapy.

**Counterpoint** ‘where a melody is supported by another melody rather than chords within a composition or performance, so that when the melodies are played together, they create a harmonious whole. One example of use of counterpoint is in the round, where a single melody is used, with voices entering at intervals; see also Fugue’ (Lee, 2019–2020, no page).

**Counter transference** a therapist’s emotional unconscious responses to the client (Streeter, 1999).

**Cross-modal** This can consist of communication, relationships and emotions as experienced across modalities, such as gestures into vocalisations. Cross-modality has been explored by Stern (1999) in child development, examining the cross-modal communication that occurs between caregiver and infant in the early stages of life.

**Crotchet** Also known as a quarter note, a quarter of a semibreve, relative in time to the beats per minutes of the music (Crofton, 1986i, p. 115)

**Culture** can be understood as a fixed creation of meaning amongst large groups of peoples, such as the use of shared language, values, or artistic practices (Barnett and Lee, 2003). Culture can also be thought about as socially constructed identity, where individuals change and adapt to fit into a smaller group dynamic, or as an individual's perception of the world formed by social, political, or geographical contexts (Hecht *et al.*, 2005; Baldwin *et al.*, 2006; Hornsey, 2008; Ruud, 1998).

# D

**Defence mechanisms** ‘Psychological strategies that are unconsciously used to protect a person from anxiety arising from unacceptable thoughts or feelings’ (simplepsychology, 2020).

**Diatonic tonality** A scale which is diatonic comprises five tones and two semitones and relates to musical modes. For example, in the major scale (or Ionian mode), the semitones fall between the third and fourth tones and the seventh and eighth tones.

**Dissonance** Music which is experienced and ‘interpreted’ by the listener or performer as ‘jarring’ (Crofton, 1986b, p.132), for example the sounding of notes at the same time which are a semi-tone apart. Examples of famous twentieth century dissonant pieces

in the Western art music tradition are Schoenberg's *Peripetie* from the five orchestral pieces (1909), and the final movement of the *Holiday* (1913) symphony by Ives. Both of these pieces push at the boundaries of nineteenth century tonality, introducing intense chromatic dissonance which produces the effect of moving away from tonal keys.

# E

**Elements of music** An understanding of music, particularly common in Western art music, as divided into differing but related components; these can be interpreted as 'timbre, pitch, loudness, duration, silence, rhythm, melody and harmony' (Bunt and Stige, 2014, pp. 57–79).

**Embodied cognition** Knowledge ‘grounded in sensory–motor processes ... and the body’s morphology and internal states (Ionescu and Vasc, 2014, p.55). The ‘mind as a fundamentally situated, embedded and ecological phenomenon ... embodied cognition arises through biological processes of life, movement, interactions and shapes of environments (van der Schyff, 2019, p.8).

**Embodiment** Physically internalised knowledge held within the body, often expressed through movement.

**Enactivism** The process of the embodied mind interacting with the environment and the world (van der Schyff, 2019).

**Enlightenment** ‘European intellectual movement of seventeenth and eighteenth centuries in which ideas concerning God, reason, nature, and humanity were synthesized into a world view that gained wide assent

in the West and that instigated revolutionary developments in art, philosophy and politics' (Britannica, 2020a, no page).

**Ecstatic experience** Term employed by Laski to describe a range of experiences characterised by 'being joyful, transitory, unexpected, rare, valued, and extraordinary to the point of often seeming as if derived from a praeternatural source' (Laski, 1915, p.5).

**Epistemology** The study of knowledge, or how we know what we know. This can include 'concepts of knowledge, evidence, reasons for believing, justification, probability and what one ought to believe' (Fumerton, 2009, p.1). Epistemology is found in Greek philosophy; Plato considered knowledge to be rational, fixed and linked to reason beyond sensory experience, with a distinction between knowledge and belief (Smith and Hetherington, 2012). Later empiricist philosophers in the seventeenth centuries such as Locke defined the theory

of knowledge as drawn from experience (Jacovides, 2002) and others such as Kant in the eighteenth century understood knowledge as both intuitive and developed through experience (Parrini, 1984).

**Ethnicity** The commonality of a group of people in race or geography.

**Experimental music** A term first used by Cage to describe his early works, and later coined by musicologist Nyman (Duch, 2010), referring to Western art music of the mid twentieth century in which chance and indeterminacy is employed. Examples of experimental music include Cage's famous 4' 33" in which the musicians remain silent and the sound events of the timespan are considered to be the music (Griffiths, 1981).

**Extemporisation/extemporise** 'To perform without preparation' from the Latin *ex*, out of, *tempus*,

*temporis*, time' (Fine Dictionary, 2020). In this study, I have not used the term *extemporisation*, since this has a very similar etymology to the word *improvisation*, implying offhand, in accordance with the needs of the moment' (Online Etymology Dictionary, 2020b).

Confusingly, in popular usage extemporisation is often used by musicians to refer to improvising upon music which already exists, for example as used by Wigram (2004) in relation to frameworking on a melody.

However, the difference between improvisation and extemporisation is not well defined and therefore to avoid conflict I have excluded the term.

# F

**Flamenco** Music of southern Spain and the Andalusian Roma. Typically involving dance, song and guitar, central to Flamenco is the ‘cante jondo’ or deep song, involving themes of intense emotion, death, anguish, despair and religious doubt (Britannica, 2021a).

**Flow** Theory developed by Csikszentmihalyi (1991) related to special and intense experiences which have long-lasting repercussions in individual development. Flow typically occurs in learning where challenges are at optimal and threshold levels; it can be part of many diverse activities, from composing music to business skills, and can be linked to personal transformations and engender feelings of happiness and well-being. Music and the arts are central components of flow

activities which can 'facilitate concentration and ordered states of mind' (Csikszentmihalyi, 1991, p.72).

**Frameworking** A clinical improvisation technique. Providing a clear musical framework for the improvised material of a client, or group of clients, in order to create or develop a specific type of musical structure (Wigram, 2004, p.118).

**Free association** Technique originally used by Freud (1997) in which patients in psychotherapy share any thoughts which come to mind in the moment. The therapist reflects on the thoughts or gives an interpretation. Free association is intended to help a patient with self-awareness of both conscious and unconscious thought processes.

**Free improvisation** 'Music characterised only by the sonic-musical identity of the person or persons playing it' (Bailey, 1992, p.83).

**Free improvisation movement** Can be understood as either a method or genre of improvised music, which grew out of the experimental music of twentieth-century composers such as Cardew (Duch, 2010).

Characterised by atonality, irregular harmonies, rhythms and melodies and relying on the autonomy of the musician in performance. Proponents of the free improvisation movement include Eddie Prévost and Derek Bailey (Watson, 2014).

**Free structures in improvised music** External structures used in improvised music to provide stability, direction, cohesion and focus. Examples would include the use of images, graphic scores, poetry or hand gestures.

**Free jazz** Jazz movement of the 1950s and 60s without 'fixed harmonic structure, characterised by chromatic intervals, harmonics, atonality and lack of

regular metres and tempo'. Proponents of free jazz include Tristano and Coleman (Britannica, 2021e).

**Fugue** 'A style of music which reached the zenith of its popularity during the Baroque period, the fugue is a complex example of counterpoint in music, where a musical theme – the subject – is introduced by one instrument and subsequently 'answered' several times by the other voices, often in different keys before returning to the original key, creating a sense of movement throughout the composition. The word 'fugue' comes from the Latin *fuga* meaning 'to flee' and also 'to chase', see also Counterpoint, (Lee, 2019–2020, no page).

**Für Elise** Beethoven's piano Bagatelle no. 25 in A minor.

# G

**Gamelan** The music of Indonesia, using metallophones, gongs, xylophones and flutes, characterised by complex interlocking rhythms (Sutton, 1998).

**Genre** ‘A set of shared musical rules in a tradition, e.g. the Baroque genre’ (Lee, 2019–2020, no page).

**Glissando** ‘A glide from one musical pitch to another. Depending on the instrument, this can be effected in various ways: for example, the trombone can do this using the slide. A pianist or harpist may perform a glissando by rapidly passing over each key or string in between. From the French *glisser* – to glide’ (Lee, 2019–2020, no page).

**Groove-based music** Music with a strong pulse and beat, often found in popular music with drum and bass.

# H

**Habituation** ‘Habituation’ is the process of learning new bodily schemas, fresh patterns of embodied knowledge expressed through movement. The internalising and memorizing of schemas, incorporating new knowledge into the body (Merleau-Ponty, 2012, p.143).

**Harmonics/harmonic series** Harmonics refers to a series of related pitches, consisting of a fundamental

and overtones or harmonics. Found in both music and mathematics, the pitches occur in constant whole-number ratios, for example, ‘... 4000, 5000, 6000 in Hertz (Bain, 2003, p.1). Harmonics on stringed instruments are produced by lightly touching the string at the fractional point. Brass instruments are able to produce the series of harmonics through increased overblowing and pressure in the vibrating wind column. (Crofton, 1986c, pp. 212–213).

**Heritage** The expression and features of a particular national, cultural or ethnic identity. Examples of heritage include the ‘bunad’ national costume of Norway, varying from region to region (norway-hei.com, 2020), or the dragon as a visual symbol of Wales (Pritchard and Morgan, 2003).

**Holding** Term originating with Winnicott (1971) referring to the need for a holding environment to be

created by the caregiver for the infant to experience security and safety. It is also applied to the therapeutic space in psychotherapy. Winnicott viewed the holding environment to be important for a developmental stage in which the infant is unaware of their need to be held and remains in a merged undivided state with the caregiver. This later changes through a process of individuation, in which the infant forms a separate identity.

**Humanistic/humanism** Philosophical and intellectual movement originating in the Renaissance and based on learning from the classics of Rome and Greece.

Humanism is associated with non-religious beliefs and the centrality of human autonomy and development.

Humanistic beliefs are defined as trusting to ... 'the scientific method when it comes to understand how the universe works and rejecting the idea of the supernatural. Making ethical decisions based on reason, empathy, and a concern for human beings and other

sentient animals. Believing that in the absence of an afterlife and any discernible purpose to the universe, human beings act to give their own lives meaning by seeking happiness in this life and encouraging others to do the same' (Humanist UK, 2021).



**Idiom** 'A small musical facet which is suited to a particular genre or style, such as the ornamental trill within the Baroque genre' (Lee, 2019–2020, no page).

**Imperfect cadence** A cadence is a term 'applied to a concluding phrase usually at the end of a musical section' with harmonization (Crofton, 1986d, p.68). An imperfect cadence consists of the tonic rising to the dominant (I–V, the first chord and fifth chord of a

scale), giving the impression of forward movement and something unfinished.

**Improvisation orchestra** A large ensemble of improvising musicians; the music can be directed through hand gestures, or structured through sources such as images and musical games, for example, see **Glasgow Improvisers Orchestra (GIO, 2020)**.

**Individualistic societies** Societies in which psychological, cultural, economic and philosophical emphasis is placed on individual needs; this is commonly found in Western cultures such as the **USA** or **UK**.

**Internal representations of music** ‘Internal representations of musical variables (timbre, volume ...) ... and characteristics ... (cohesive entrances and exits ...) grounded in both experience and imagination’ (Murphy McCaleb, 2014, p.52).

**Interpretation** Interpretation of a client's verbal statements and physical presentation made by the therapist. The American Psychological Association defines it as 'explanation by the therapist in terms that are meaningful to the client, of the client's issues, behavior, or feelings. Interpretation typically is made along the lines of conceptual framework or dynamic model of the particular therapy. Psychoanalysis ... uses the constructs of psychoanalytic theory to interpret the patient's early experience, dreams, character, defences and resistance' (APA, 2020).

**Intersubjectivity** 'Intersubjectivity is the shared reciprocal experience between the parent and child.' Also thought about as 'intersubjectivity between conscious minds' (Child Psychology Service, 2021 no page). Intersubjectivity is central to the work of psychologists such as Winnicott (1971) and Stern (1998).

**Intervals** ‘The difference in pitch between two sounds. For example, a whole tone is an interval of two semitones, a major third is an interval of four semitones’ (Lee, 2019–2020, no page).

## J

**Jazz chord changes or voicings** A form of musical structure based on regular sequences of chords found in jazz standards (a repertoire of songs and ballads mainly from the twentieth century). The musician is required to memorise the changes and soloists typically improvise over the chords, often using a different appropriate scale for each chord. A typical example of this is Johnny Green’s *Body and Soul* (1930), made famous by saxophonist Hawkins (1939).

**Jazz harmony** Chord shapes, structures and progressions which are particular to jazz. Jazz harmony varies greatly depending on the historical context, style and musicians. Typical features of jazz harmony might be rapid movement of diatonic chord sequences, substitutions (i.e., V7 or sus4 as a dominant chord) and voice leading (i.e., the function of individual notes in a chord progression to achieve smooth forward motion). In the twentieth century jazz harmony developed from a focus on tonal chord changes, such as found in the music of bebop and Coltrane, to modal (i.e. Dorian mode, see modes) and linear harmonic structures, found in Davis's *Kind of Blue* and Coleman's *The Shape of Jazz to Come* (Broze and Shanahan, 2014).

**Jumping in** Risk-taking when beginning to improvise; the common and necessary stepping into the unknown in order to make the music happen (Rose, 2017, p.108).

# L

**Lexicon** ‘A collection of words’ or ‘a stock of terms used in a particular profession, subject or style’. From the Greek ‘lexis’ or word (Nordquist, 2017).

**Liminal/liminality/liminal states** The term liminal comes from the Latin, ‘limen’ meaning threshold. It was developed in the twentieth century by Turner (1974) to describe transitional rites of passage. Liminal spaces can be understood as a ‘space between different worlds: a threshold between the inner and outer, between conscious and unconscious processes, between the individual and the collective, between silence and sound’ (Bunt and Hoskyns, 2002, p.3). The music

therapist Ruud (1995) links liminal experience to improvisation and play, as a space of experimentation, potential transformation and growth.

**Long-term significant experience** Phrase developed for the purpose of this thesis. Long-term significant experiences denote special experiences which, rather than taking place in a specific moment, are developed gradually over a longer time period. These experiences have similar characteristics to special experiences, such as long-lasting effects, intense emotions and influence on self-identity.

# M

**Magic moment(s)** Colloquial term commonly used by musicians to describe special experiences. The use of the word magic denotes connection to other-worldly, spiritual or mystical experience. Examples of use of the term 'magic moments' can be found in Hytönen-Ng's (2013) study on jazz musicians' experience of flow.

**Matching** Musical improvisation technique employed by music therapists focusing on relational aspects of music. Defined by Wigram as 'improvising music that is compatible, matches or fits in with the client's style of playing while maintaining the same tempo, dynamic, texture, quality and complexity of other musical elements' (Wigram, 2004, p.84). A second alternative definition of matching is given by Pavlicevic (1997) as

‘partial mirroring’ where the therapist ‘mirrors some, but not all’ of the client’s music (Wigram, 2004, p.84).

**Metal music** ‘A style of rock music featuring heavily distorted guitars, bass guitar, loud drums, and vocals often characterised by screaming, shouting, growling or a combination of each. Pioneered in the late sixties and early seventies by British bands such as Led Zeppelin and Black Sabbath, metal music has evolved and spawned multiple sub-genres and subcultures world-wide. It is sometimes known for its violent lyrics, imagery and style of dancing known as *head-banging* or *moshing*, whereby fans rock their head forwards and backwards repeatedly. Also known as heavy metal, sometimes redacted to metal’ (Allison, 2020, no page).

**Middle Ages** ‘A period in European history spanning the fifth to the fifteenth centuries, beginning with the fall of the Western Roman Empire and merging into the

Renaissance. It is also known as the Medieval period' (Lee, 2019–2020, no page).

**Minim** A note with half the time value of a semi-breve, and value of two crotchets, related to the beats per minute of the music (Crofton, 1986j, p. 315).

**Minimalism** A form of twentieth-century music typified by contrapuntal textures, broken chords, slow harmonic changes, melodic cells, gradual changes in texture, tonal ambiguity and emerging melodies (BBC, 2021a). Examples of minimalism include Reich's *Music for 18 Musicians* and *Einstein on the Beach* by Phillip Glass (Bernard, 2003).

**Mirroring** Improvisation technique employed by music therapists focusing on relational aspects of music.

Defined by Wigram as 'doing exactly what the client is doing musically, expressively and through body language at the same time as the client is doing it. The client

will then see his or her own behaviour in the therapist's behaviour (Wigram, 2004, p.82). Also described by Bruscia (1987, p.535) as 'synchronising doing what the client is doing at the same time'.

**Modes** Based on ancient Greek patterns of music with names derived from tribes and geographical places, these are entitled: Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian and Locrian. Modes were linked to specific emotional expression and believed to influence character (Monro, 1894). Modes found in the folk traditions in the UK include the Ionian (same pattern as a major scale), Dorian (flat third, flat sixth) and Aeolian (flat third, flat sixth, flat seventh).

**Musical intention** The internal embodied 'musical world' of the musician consisting of 'cognitive ideas and gestural and motor activity' (Nijs, Coussement, *et al.*, 2012, p.240; Nijs, 2017).

**Musical research relationship** Phrase developed for the purpose of this thesis. The musical research relationship refers to the relationship that developed between participants and researcher in co-creating joint improvisations as part of the research process.

**Musical tribes** Tarrant *et al.* (2002, p.134) describe tribes as groups in music related to musical identity, typically created in adolescence, which belong to specialised expressions with specific characteristics such as clothing, sounds and ways of behaving (for example the northern soul scene of the 1970s, Raine *et al.*, 2019).

**Music-centered music therapy** Music therapy approach originating in the work of Nordoff and Robbins (2007) and expanded upon by therapists such as Ansdell (1995) and Aigen (2014). In music-centered music therapy, the music and musical processes are understood as the main locus of transformation and

change, rather than the therapeutic relationship or interpersonal dynamics. Proponents of music-centered music therapy have aimed to develop an independent theory of music therapy, without drawing on theoretical concepts from other professions such as psychotherapy (Aigen, 1998, 1999; Lee, 2003a, 2003b, 2003c, 2012).

Aigen describes the chief therapeutic components of music-centered music therapy as ‘... the forces, experiences, processes and structures of music’ (Aigen, 2014, p.51).

# N

**Non-idiomatic improvisation** Improvised music without deliberate reference to genre, style or idiom.

# O

**Oceanic moment** Colloquial term commonly used by musicians to describe special experiences. The use of the word oceanic has similar use to the phrase magic moments and denotes connection to other-worldly, spiritual or mystical experience. Examples of use of the term 'oceanic moments' can be found in Hytönen-Ng's (2013) study on jazz musicians' experience of flow.

**Octave** An interval between first and eight notes of the diatonic scale (Crofton, 1986h, p.344).

**Ontology** The study of being, an examination of the 'nature of reality and existence' (Heidegger, 2014; Kant, 2014, p.69). Heidegger, the philosophical originator of ontology, considered ontological understanding to be

essential to an investigation into the open-ended nature of the human being (Rae, 2010; Heidegger, 2014).

**Organum** Form of vocal and instrumental music developed in the Middle Ages employing polyphony (see p.33) Early organum (900 ad), initially found in the treatise *Musica enchiriadis*, consisted of plainsong and a second improvised voice moving in parallel thirds, fifths or fourths. In the eleventh and twelfth centuries this was expanded into melismatic organum using octaves, fifths and fourths, becoming more complex and florid, an example of which is the *Magnus Liber organi* (Leoninus, 1170). Organum was a precursor of the motet, a thirteenth-century form of vocal music with words and in three parts (Crofton, 1986a; Britannica, 2021b).

**Overblowing** The act of blowing with force into a wind instrument, which causes the fundamental of the note to skip to a higher harmonic. For example, on the

tin whistle this can be a movement of 500 Hz (Davies, Pinho and English, 2019).

# P

**Peak experience** Encompassed within Maslow's self-actualisation are peak experiences, which refer to important moments which occur throughout a person's life linked to events such as being in love, reading books, seeing art and listening to music. Maslow's concept of peak experiences has the characteristics of intense focus, euphoric emotional reactions, loss of time, an absence of negative feelings and clarity of cognition (Maslow, 1959).

**Palimpsest** In the context of this thesis the term palimpsest refers to the lived experience of consecutive layering of time periods, a device used by authors such

as Garner (1973) in the novel *Red Shift* where the narrative is set in three time periods.

**Pan-improvisation** Improvised music which spans differing genres, styles and idioms.

**Perfect cadence** A cadence is a term ‘applied to a concluding phrase usually at the end of a musical section’ with harmonisation (Crofton, 1986e, p.68). A perfect cadence consists of the dominant falling to the tonic (V-I, the fifth chord and first chord of a scale), giving the impression of forward movement and something finished.

**Performative** ‘Certain kind of enactment’ (Butler, 2009, p.1) or a creation (i.e. of gender, Butler, 1999, 2006) or a management of external presentation of an individual to the world.

**Phenomenology** The study of human lived experience.

Phenomenology arose as a continental philosophical movement of the twentieth century, with the foundational figures of Husserl (1859–1938), Heidegger (1889–1976), Sartre (1905–1980) and Merleau-Ponty (1908–1961). Husserl, considered phenomenology's founding father, sought to understand human experience through the ideas of construction of consciousness and intentionality.

**Playing by ear, also known as memorisation** The ability to commit to memory any musical materials either composed or improvised.

**Pointillism** A late-nineteenth-century style of painting which focuses on the importance of the small individual mark, with thousands of marks creating a whole image. It is typically found in the work of Seurat (1859–1891) or Van Gogh (1853–1890). Pointillist painters had an influence on composers of the

twentieth century, such as Debussy (1862–1918) who painted in sound with individual notes.

**Polyphonic/polyphony** From the Greek *polyphonia*, meaning many voices, defined as, ‘the simultaneous combination of two or more tones in melodic lines’ (Britannica, 2021c). Polyphony is a ‘style of music in which the composer pays particular attention to melodic value of each part, distinct from homophony which consists of chordal accompaniment. Most important polyphonic forms are the motet, polyphonic mass, canon and round, polyphonic chanson, canzona, ricercar and fugue (Crofton, 1986f, p.380).

**Power ballads** Typical soft rock songs of the 1980s and 1990s. Defined as ‘emotional hard rock/heavy metal songs, often with a slow tempo, dramatic sung vocals, and many instruments, including acoustic and synthesizers. Power ballads usually start soft, then heaviness builds up with drums and heavy electric

guitar' (Urban Dictionary, 2021). Popular examples of power ballads include Bryan Adams's *Can't Stop This Thing We Started* and Bon Jovi's *Livin' on a Prayer*.

**Projective identification** Projections by the therapist of ideas, feelings and thoughts onto the client (Priestley 1994).

**Proprioceptive** The sensory system found in the inner ear (muscles, joint and tendons) giving information to the body in relation to space.

**Psychoanalytic theories** Refers to the original theories of Freud (1930, 1997) employing dream analysis and free interpretation. The core theories of Freud are the dividing of the mind into conscious and subconscious or surface awareness, and unconscious deep unknowable thoughts; development of the psyche, with the id (instincts) and ego (reality and superego);

and psychosexual stages of development (oral, anal, phallic, latent and genital) (Simply Psychology, 2021).

**Psychodynamic music therapy** ‘A psychoanalytical informed approach in music therapy ... whereby a process of understanding the conscious and unconscious dynamics in the therapeutic relationship is at the centre of the work’ (Darnley-Smith, 2013, p. 64).!

**Psychodynamic theories** Theories originated by Freud, (1997) and subsequently developed by therapists such as Klein and Anna Freud (Freud, 1974; Mitchell, 1986) Hartman (1939) and Sullivan (1953). In psychodynamic theories the unconscious mind is said to influence the conscious. The unconscious mind comprises mental processes that are inaccessible to consciousness but that ‘influence judgements, feelings or behaviours’ (Wilson, 2004, p.45).

**Psychotherapy** Application of psychoanalytic and psychodynamic theories in talking therapy first developed by Freud (1997), and later developed by Klein (Mitchell, 1986), Anna Freud (1974), Hartman (1939) and Sullivan (1953). In psychotherapy unconscious and conscious processes are explored through techniques such as transference, free association and interpretation. The Tavistock and Portman NHS trust (2021) in London is an example of a contemporary mental health service which provides psychotherapy.

## R

**Radif** ‘Traditional repertoire of the classical music of Iran that forms the essence of Persian musical culture’ (UNESCO, 2020). Consisting of melodic units arranged

in cycles and improvised in performance, the Radif is an aurally transmitted musical tradition (Racy 1998).

**Referent** Term developed by Pressing (1988) which describes the repertoire of improvisational ideas built up by individual musicians. Referents are defined as musical intentions, influenced by past musical memory events, and sensory and motor feedback.

**Renaissance period** From the French word 'rebirth'; historical period of music during the mid fifteenth and late sixteenth centuries, with a resurgence of interest in the ancient civilisations of Greece and Rome. The music of the Renaissance period was characterised by the use of polyphony, regulation of dissonance and less florid melodic styles than that of the medieval period. During the Renaissance there was the emergence of triadic harmony and moving away from modes towards diatonic tonality. In sacred Renaissance music motets and masses dominated and the madrigal (unaccompanied

secular song) became adapted to church music (Kite-Powell, 2007). Examples of sacred Renaissance music include Palestrina's motet *Ad te levai animam meam* (1594) and the seven-part mass *Missa Papae Marcelli* (1562), Allegri's Miserere and Josquin's *Missa 'L'homme armé' super voces musicales*. In secular Renaissance music, composers began to write for wealthy patrons and there was a development of instrumental and vocal music for performance. Examples include Byrd's *Fantasia* (an instrumental motet) and the sacred-secular piece Monteverdi's *Vespers* (1610).

**Research encounter** Phrase developed in dialogue with Haire (2019; Haire and MacDonald, 2021) to describe the musical and verbal meeting between participants and researcher. Influenced by Goffman's (1961) concept of 'encounter', defined as 'a focused gathering or a situated activity system with participants and persons physically present, continually engaged in activity, ...

sustained interaction ... focused attention and tasks jointly pursued (Goffman, 1961, p.1).

**Research music** Term developed within this thesis.

The music produced in the improvisations between researcher and participant.

**Research relationship** Term developed within this thesis to describe the relationship between participants and researcher which arose in the verbal interviews and musical improvisations.

**Reshaping** Term developed through the findings in this thesis. Used to describe the process musicians undertake when learning to develop improvisation skills. This can include embodied, cognitive, social and emotional learning. The findings show that this can sometimes be a difficult process, as musicians strive to change previously embedded and habituated motor

schemas or embodied/cognitive relationships to music and instruments.

**Riff** Colloquial term to denote a short repetitive musical phrase or melodic, harmonic or rhythmic fragment used by musicians to create longer structures. For example, the bass line in Ben E. King's *Stand by Me* could be considered a bass riff.

**Rococo style of late Baroque** A style with composers and artists such as Couperin (François) and Fragonard found in the eighteenth century, incorporating flamboyant natural shapes, colours, ornamental instrumental lines and wide varieties of dynamics (Rosenberg, 1988; Milam, 2011; Tunley, 2016; V&A, 2020).

**Romantic music** Period of historical Western art music between early 1800s to early 1900s. In Romantic music there is an emphasis on the individual expression

of the composer and emotions. Originating with Beethoven's middle works such as the Fifth Symphony (1808) and compositions such as Schubert's lieder or songs, developments include: new instrumental repertoire and forms, for example, preludes and mazurkas; an influence of folk legends; and use of words and music in poetic forms. With composers such as Berlioz, Bruckner and Brahms there was an expansion of symphonic expression and form with large orchestras, symphonic tone poems and exploration of rich chromaticism in diatonic tonality. Examples of the middle period of Romantic music can be found in the compositions of Grieg in his *Peer Gynt Suite* and Dvorak with the *New World Symphony*. Further music which typifies the later period include the works of Mahler, Wagner and Sibelius, in which chromaticism is pushed to its limits and large orchestral ensembles made grandiose and intensively expressive (Britannica, 2021d).

# S

**Schemas** defined as knowledge, patterns and structures in body and mind formed through interaction with environment and people (Piaget, 2002; Barlett, 1932).

**Self-actualisation** Term developed by Maslow (1959) which is found to be at the pinnacle of the hierarchy of needs, consisting of basic of physiological safety, belonging and relationships, self-esteem and then self-actualisation. **Self-actualisation** represents a complete fulfilment and achievement in the human condition, in which an individual is developed to their full potential. Peak experiences can be said to contribute to or develop self-actualisation.

**Semantics** The study of meaning, words and phrases in language, first developed in the late nineteenth century by French philologist Breal (Riemer, 2016). In semantic analysis there is always an attempt to focus on what the words conventionally mean, rather than on what an individual might want them to mean on a particular occasion (Cambridge Core, 2021).

**Semibreve** A whole note, longest note value used in Western art notation, consisting of four crotchets (see Crotchet).

**Semiology (of music)** Linguistic semiology seeks to understand the patterns, codes, signs, symbols and patterns within language (Saussure, 1915, cited in Bhatt, 1988). In music, semiology has been used to codify and attempt to understand inherent patterns and meaning in music. For example, Nattiez (1990) presents a semiology of music through a 'poietic process' (p.30) in which meaning of signs (see definition of sign)

changes according to the interpretation and relationship made by music (as an outside force acting upon people) and receivers (people). Nattiez states, 'as soon as one analyses language as expression or communication, then the explanation that seems more natural and occurs most easily is the intention of the speaking subject. Here, the level of immanent description is declared to be related to the poietic' (Nattiez, 1990, p.30).

**Sensori-motor trajectories** Physical and motor schemas that are built up over a period of time and become habituated into the body.

**Serialism** A form of twentieth-century music, defined by Griffith as 'a technique of composing with reference to series of pitch classes or other musical elements. The implication is that the series is read off in the music, from first note to last, and then repeated in some transformation' (Griffith, 1986, p.163). Also known as twelve-tone music, serialism was first developed by

Schoenberg, and later formed by Webern and Berg.

Examples of serialist works include Schoenberg's concertos for violin and piano and the Fourth Quartet (1936) and Berg's *Lyric Suite* (1925–6).

**Shred heads** 'Guitarists in metal music' (see metal music, Allison, 2020, no page).

**Sign** Term originally used in linguistics by Saussure (1915, cited in Bhatt, 1988), which denotes a concept and sound-image combined, for example the concept of a 'cup' and the sound 'cup'. In this thesis this is translated into musical terms and it is proposed that the elements of music could be considered 'signs', involving both concepts and sound-images, i.e. the concept of timbre as texture in music and the sound of timbre.

**Signifiers** This study utilises Nattiez's (1990) semiotic definition of signs and signifiers, in which the sign is

the whole (consisting of concept and sound image) and the signifier the 'expression' (Nattiez, 1990, p.4).

Applied in this study this is interpreted as an element of music as the sign (including concept and sound), and the expression of the element of music as the signifier.

For example, a melody is played – the sign is presented; a melody is played expressively – it is signified.

**Site-specific art** Refers to a work of art designed specifically for a particular location and that has a relationship with the location (Tate, 2020). An example of an artist who employs site-specific art is Flavin (1933–1996) who works with the interplay of fluorescent lights, space and environment (Tate, 2021).

**Situated spatiality** Where there is a constant awareness of the situatedness of the whole body in space, i.e. the feel of the limbs, torso and head through

the proprioceptive (spatial awareness) and vestibular (balance) systems (Merleau-Ponty, 2012a, p.127).

**Sound healing** Refers to sound therapy, a specific method of the use of resonant instruments for health and well-being (The British Academy of Sound Therapy, 2014).

**Special experiences** This study employs the term 'special experiences', drawing on Grocke's (1991) definition of 'pivotal experience' as 'emotional and embodied' (p.2) combined with Csikszentmihalyi's (1998) flow theories which involve 'fulfillment of established goals' (p.33) through total absorption in the moment. Historically, psychologists have used many differing labels for special experience. This may be due to changing definitions and language usage; for example, Laski (1961, p.37) employed the term 'ecstatic', which although a common term for emotional experience, has connotations with drug use and so has fallen out of

favour within psychological professions. Other terms include Maslow's 'peak' (1959, p.43), Csikszentmihalyi's (1988, p.15) 'flow', musicians' conversational language such as 'the groove, magic moment or oceanic feelings' (Hytönen–Ng, 2013, p.2) and musicologist Gabrielsson's (2011) 'strong' (p.27).

**Staccato** 'Detached notes. May be indicated either by pointed dash, indicating that the note is to be as short as possible, or by DOT, indicating that it is to be short. In mezzo-staccato, also called portato, indicated by combination of slur and dots, notes are slightly detached (Crofton, 1986g, pp. 474– 475).

**Strong experience** Term used by Gabrielsson (2011) in a study on strong experiences in music. Strong experiences have similar characteristics to special experience, flow and peak experience (see special experience).

**Style** ‘The use of elements of music related to a genre, i.e. the composing style of J.S. Bach’ (Lee, 2019–2020, no page).

**Swing feel** Microtiming deviations and fluctuations in jazz rhythm. ‘Playing after the beat in a laid-back fashion’ (Datseris, *et al.*, 2020).

# T

**Timbre** A multifaceted element of music, which can be defined as the characteristics or tone colours of a sound. It is created by a combination of the envelope of the sound wave, consisting of attack – sustain and decay, and the spectrum – the frequency of pitch and range of fundamentals and harmonics. Timbre is always

individually perceived and affected by environmental acoustics, such as material surfaces and ambient noise.

**Transference** The unconscious projections and emotions of the client felt by the therapist (Streeter, 1999).

**Transferential relationship** Phrase used by Streeter (1999) to describe the therapeutic relationship involving transference and countertransference.

**Transitional object** Term developed by Winnicott (1971) to refer to physical objects which are used by infants in the transition from a merged state with the mother/carer into individuation. Winnicott's transitional objects are regarded as 'not me' in the transition between the self and other. Typical examples of transitional objects include soft toys and blankets or hard toys such as cars or plastic bricks.

**Tremolo** ‘Rapid reiteration of single note or alternation of two or more notes’ (Creswell, 1986, p.515).

**Tritone** An interval made up of three whole tones (also an augmented fourth or diminished fifth), avoided in plainsong and medieval polyphony (Creswell, 1986).

**Twentieth-century/modern/contemporary music** Period of Western art music between 1890 and 1999 which developed out of the Romantic period and music of Wagner, Strauss, Mahler and Sibelius in which large symphonic ensembles and structures and chromaticism were highly dominant. During the twentieth century, the concept of the expert composer persisted, but there was also saw period of rapid change and challenges to the traditional forms of the Classical music period, pushing at the boundaries of diatonic tonality into atonality, reducing hierarchies of the elements of music,

changes from horizontal to linear structures, the influence of jazz and introduction of new technologies and instruments (Griffiths, 1986).

At the beginning of the twentieth century Debussy's *Prélude à l'après-midi d'un faune* (1894) broke loose from diatonic tonality, exploring tonal ambiguity through the interval of a tritone (three whole tones), Stravinsky's *Rite of Spring* (1913) presented pounding polyrhythms which dominated over melody and harmony, and further innovations such as Serialism, with Schoenberg, Berg and Webern, explored alternative forms of tonal structures in tone rows (groups of notes which replaced diatonic scales). Further developments include Neoclassical, a return to Classical period forms, with examples such as Stravinsky's *Symphony of Psalms* (1930); Schaeffer's music concrete in the 1940s and 1950s with the advent of electroacoustic music; the chance music of Cage, drawing on eastern philosophy;

and the minimalism of Glass and Reich, with repetitive melodic cells, linear structures and long forms.

## U

**Unconscious** ‘Pervasive, adaptive, sophisticated mental processes that occur largely out of view’ (Wilson, 2004, p.5).

## V

**Vestibular** The sensory system related to balance, gravity and awareness of body in space.

**Vitality affects** Defined by psychologist Stern (2010) as 'qualities of feeling'. He states: 'these elusive qualities are better captured by dynamic kinetic terms, such as "surging", "fading away", "fleeting", "explosive", "crescendo", "decrescendo", "bursting", "drawn out" ... These qualities of experience are most certainly sensible to infants and of great daily, even momentary, importance. It is these feelings that will be elicited by changes in motivational states, appetites and tensions.' (Stern, 2010, p.54)

## W

**Werktreue** 'The idea of being true or faithful in a musical work to a composer's original intentions' (Benson, 2003, p.5).

**Western art music (also known as Western classical music)** A broad term, used in this thesis to describe music which originates in White European and Western medieval to twenty-first-century traditions. Focused on developments in the Classical period (1730–1820) in which diatonic tonality and temperament became increasingly uniform with the note A established at 440 Hz, the elements of music, such as melody and harmony, regulated into a hierarchy, and new structural forms such as the symphony arose (Kramer, 1995). Further developments include the concept of the expert ‘composer’ such as Mozart, Haydn or Beethoven; the move from church and community, sacred and secular, to concert hall and performance; and the advent of recording technology.

**Whole tone scale** A five note scale made up of intervals of two semi-tones.