What’s Love Got To Do With It?

The role of love in participatory music-making

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Abstract
Music has always been a vehicle for the expression of love. Shakespeare called music ‘the food of love’, and countless song writers and composers throughout history have made much of this special relationship. If we want to express love, we turn to music. When our hearts are broken, we also turn to music for solace. However, there may be an even deeper level to this special relationship between music and the human biological need for attachment, and it is perhaps best exemplified in instances of group music-making.

In recent years, we have critically examined some of the assumptions we have about the value of music to people and society, and have developed ever more sophisticated understandings of the power of music across the lifespan. There are apparent ‘concurrent’ benefits of active ‘musicking’ for children and young people (Hallam 2015) and older people (Creech 2014) alike. In studies of adult musicking, our breathing and heart rate variability (HRV) become synchronised (Vickhoff et al. 2013), and there are positive impacts on our hormonal balance (Kreutz et al. 2013). All of these phenomena can lead to increased feelings of individual wellbeing, and there is a comprehensive body of emergent knowledge (MacDonald et al. 2013; Rickard 2014) about the positive impact of music on us as individuals.

Yet how do we account for the subtle shifts in our energetic and empathic relationship to others, our feelings of being uplifted, energised and emotionally attached following collective musicking? And, as Tina Turner opined, ‘what’s love got to do with it?’ I hope to show that, when it comes to collective musicking or Community Music (CM), love has got a lot to do with it.

Following John Bowlby’s ground-breaking theories about human ‘attachment’ (Bowlby 1969; Bowlby 1973; Bowlby 1980; Bowlby 1988), Thomas Lewis et al proposed ‘a general...
theory of love’ (Lewis et al. 2001) building on Paul MacLean’s model of the ‘triune brain’ (MacLean 1990), where one of the functions of the mammalian limbic system is to promote attachment between parent mammals and their infants. This same neurobiological hardware predisposes us to continue to seek out and develop bonds of trust and attachment as adults. Recent developments in the field of interpersonal neurobiology (Siegel 2012) provide us with new ways of understanding this most fundamental of human emotional experiences, in particular a deeper understanding of the neural correlates of the experience of love and attachment (Siegel 2011), and the ‘resonance’ which exists between individuals as a function of shared neurobiological networks.

In contrast to the notion that ‘music is useless’ (Pinker 1995) in evolutionary terms, some evolutionary biologists now suggest that music has an important evolutionary function in promoting collaboration and cooperation across large groups (Dunbar 2012; Dunbar 2014), and may be one of the contributory factors to our evolution as cooperative social animals.

Far from being a ‘second-hand emotion’ as Tina Turner would have us believe, love is a basic human need. In this paper, I suggest that group music-making can help to address that need, helping to form healthy bonds of trust and attachment which contribute positively to participants’ wellbeing. Understanding this important feature of musicking has direct implications for our approach to how we facilitate music as Community Musicians and music educators, recognising the ethical importance of well-boundaried supportive relationships which facilitate our participants’ ‘ontological and historical vocation to be more fully human.’ (Freire 1970, p.37)

I Want to Know What Love Is
There is a great short story by Peter Carey entitled ‘Do You Love Me?’ (Carey 2004) in which all of the characters literally start disappearing. It transpires that the reason behind this dramatic turn of events is simply because they are not loved by anyone. The question, ‘do you love me?’ becomes a matter of life and death for the characters in the story. Carey’s futuristic fictional dystopia is unsettling, but speaks to a universal truth – we all need to be loved. It is the central stratum of Maslow’s pyramidical hierarchy of needs (Maslow 1943), providing not only the means by which the ‘basic needs’ of food, water, warmth, rest, security and safety can be met when we are too helpless to help ourselves, but also the ‘secure base from which to explore’ (Bowlby 1969) the higher levels of self-esteem and self-actualisation.

And yet love is not something we really talk about outside of our intimate relationships of kith and kin. In music education circles, it’s almost taboo. Recent scandals in the UK regarding the inappropriate relationships that some music teachers have formed with their students threaten traditional models of music education, with suggestions of ‘scaling back or even abolishing one-to-one tuition to prevent the possibility of inappropriate sexual behaviour’ (Pidd 2013). Child protection and safeguarding procedures – for the safety of both students and staff – mean that the boundaries between professional and personal teacher-
student relationships are carefully monitored. So it came as a shock when of my undergraduate students asked me, in class, ‘do you love us?’

At this point, I should provide a little context. As part of their studies, small groups of students had been exploring a selection of texts they’d chosen to review. Two of them, getting their academic teeth into Paulo Freire, had come across a passage which had particularly caught their attention:

Dialogue is the encounter between [people], mediated by the world, in order to name the world. If it is in speaking their word that people, by naming the world, transform it, dialogue imposes itself as the way by which they achieve significance as human beings.

The naming of the world, which is an act of creation and re-creation, is not possible if it is not infused with love. Love is at the same time the foundation of dialogue and dialogue itself. (Freire 1970, pp.60–70).

It was only in the act of giving their presentation that the penny dropped for them. Education, in its broadest sense, is only partially fulfilling its purpose if the only thing students learn from it is how to be better skilled at something; in our case, music. Education is only really living up to its potential when it leads to learners’ holistic development and actualisation as human beings, and love is a pre-requisite for such development. Hence, to teach, in any capacity, is to carry the responsibility of providing a ‘secure base’ for learners’ future development, which as Freire observes, ‘is not possible if it is not infused with love.’ As the realisation dawned that this situation must also apply to their own learning, and their relationship with us as teachers, one of the students turned to me and asked the above question. I’m proud to be able to say that I barely hesitated before affirming that yes, of course, I loved them all. However, it made me think about it. Is it okay to love your students, or your participants for that matter?

It is a question worth asking, not least because so much of music’s power lies in its capacity to bring people together, often to share intense, intimate, emotional experiences. In situations of group musicking, the musical outcomes themselves are always important, but there are usually extra-musical ones as well:

‘Music offers opportunities for social bonding and cultural coherence. There is growing evidence that musical synchrony creates social cohesion and increased affiliation in infants and adults. Group music making has been shown to contribute to feelings of social inclusion. Collective music making supports co-operation, pro-social behaviour, belongingness, relationships, collaborative learning, social advancement, group identity, solidarity, taking turns, teamwork and helping others. (Hallam 2015, p.15)

A recent study of music activity with the over 50s at Sage Gateshead also found that, ‘by increasing levels of social interaction, there are greater opportunities to develop friendships
and close personal bonds’ (Abbott et al. 2015, p.25), whilst ‘feeling part of a community, united by shared interests and a very strong sense of belonging’ (p.26).

So, is this love? And why is it that people turn to music for it? To answer those questions, we must first consider a few more basic ones.

**What is Love Anyway?**

Many theories of love often start with a reference to the ground-breaking work that John Bowlby and Mary Ainsworth developed from the 1960s (Bowlby 1969; Bowlby 1973; Bowlby 1980) and which has led to the widespread recognition of ‘attachment theory’, a theory which argues that ‘our adult romantic and other intimate relationships develop out of, or are scaffolded by, our early experience of mother–infant relationships’ (Dunbar 2013, p.16). A healthy attachment to our mother gives us the ‘secure base’ we need to launch ourselves in to the world and form other attachments, but if that maternal attachment is not secure, it can have profound and complex ramifications on our psychological development, and our experience of the world.

Romantic love, by contrast, is to do with the attachments we form with those to whom we find ourselves sexually or romantically attracted. This gives us two distinct types of love, which are similar in many ways but also different: ‘neuroimaging suggests that maternal love and romantic love are actually two different things: they involve some of the same bits of the brain, but, importantly, they also involve some very different bits of the brain’ (p.17). As well as these more singular types of intense love, we also have substantial networks of friends and family whom we may also love: ‘There is good evidence that we find it difficult to maintain more than one genuinely committed romantic relationship at a time. But we can have many kinds of friendships, which grade imperceptibly into each other’ (p.14).

At the heart of all these diverse kinds of close relationships – if they’re functioning healthily - is the sense that our parents, our life partner, our close friends and family, see us for ‘who we are’; the real ‘us’. Dan Siegel describes this ‘sense that our internal world is shared’ with another as ‘feeling felt’ (Siegel 2011, p.10). Or we might recognise it as the ‘unconditional positive regard’ found in the person-centred approach to psychotherapy of Carl Rogers (Rogers 1951) and his followers, characterised by, ‘an outgoing positive feeling without reservations, without evaluations’ (Rogers 1961, p.62). Although Maslow’s hierarchy of needs is ‘not nearly as rigid’ (Maslow 1943, p.27) as its title suggests, having these basic needs of ‘feeling felt’ or being loved unconditionally are important foundations upon which the higher orders of needs – esteem and ultimately self-actualisation (p.20-23) - can be established; it is hard to imagine having a sense of wellbeing whilst simultaneously feeling unloved.

**What’s Music Got To Do With It?**

I believe there are a number of related reasons why music might have something to do with this. Firstly, because of the nature of musical communication. Secondly, because of music’s
place in our evolution as a species. And thirdly, because of the possible impact of music on maintaining a healthy neurobiology.

Musical Communication

Unless we are practicing music on our own, music is generally something that we do with other people, and usually involves collaboration to make a good sound together. Because music is a simultaneous dialogue between voices - ‘each one expressing itself to the fullest while at the same time listening to the other’ (Barenboim 2009, p.20) – it means accounting for the ‘other’, not just your own expression. This naturally leads to a situation where our own expression ‘feels felt’ by others, whether that’s the group leader, other members, or indeed an audience.

This sense of reciprocal validation of expression is an important aspect of wellbeing, and relates closely to what some argue is a pre-requisite for the highest levels of self-actualisation:

‘Being human always points, and is directed, to something, or someone, other than oneself – be it a meaning to fulfil or another human being to encounter. The more one forgets himself - by giving himself to a cause to serve or another person to love – the more human he is and the more he actualises himself. What is called self-actualisation is not an attainable aim at all, for the simple reason that the more one would strive for it, the more he would miss it. In other words, self-actualisation is possible only as a side effect of self-transcendence.’ (Frankl 1946, p.2)

This sense of self-transcendence is also what people often feel in relation to the music itself, not just their fellow musicians, as evidenced by the ‘Flow’ state often experienced during musicking (Csikszentmihalyi 1991; Gloor et al. 2011)

In participatory music or CM, another dimension often comes into play, that of ‘non-auditioned’ participation. While previous experience is always beneficial, participants in a ‘non-auditioned’ group are welcomed for who they are and what they can bring to the group (Turino 2008, pp.31–36) i.e. ‘encouraging people to join in regardless of the quality of their contributions’ (p.36). This is significant, because it represents a fundamentally ‘unconditional’ acceptance of everyone’s contribution. For many, especially older musicians who may have grown up believing that they aren’t “good enough” to take part in musical activities because of previous negative experiences at school (Bithell 2014, p.51), this in itself can be a powerful affirmation. Rather than being judged on the quality of sound they can produce, participants in CM activity can ‘feel felt’ before they even produce a note.

Also, although some music may use words or lyrics, it is predominantly a sonic experience, where meaning is communicated through non-linguistic means. Our imagination may be captivated by the beauty of sounds in space, or our bodies may be moved to dance by the rhythms created through music, and music’s capacity for creating ‘strong’ experiences (Gabrielsson 2011; Lamont 2011) is well-known, as is its capacity for affecting our emotions (Sloboda 2004; Juslin & Sloboda 2011; Västfjäll et al. 2013).
As well as being predominantly non-linguistic, a significant part of music’s power might also be considered to be pre-linguistic, in the sense that it is a form of communication that language cannot be a substitute for. Being profoundly moved by music may render us literally speechless, because it speaks to a part of us deeper than language. There is much current research into these important aspects of music’s power, which point toward music’s function as a form of ‘communicative musicality’ (Malloch & Trevarthen 2010) which is at the heart of the bond between mother and infant. The prosodic communication - known variously as ‘baby-talk’, ‘motherese’ or ‘infant-directed speech’ (IDS) - which occurs between mother and infant in all known human cultures serves a number of key developmental functions, and is explicitly musical in nature:

We talk like this because human infants demonstrate an interest in, and sensitivity to, the rhythms, tempos and melodies of speech long before they are able to understand the meanings of words. In essence, the usual melodic and rhythmic features of spoken language – prosody – are highly exaggerated so that our utterances adopt an explicitly musical character. (Mithen 2007, p.74)

Hence, one’s most formative experiences of being loved or ‘feeling felt’ are contained in these musical exchanges with one’s mother before we have learned the rudiments of language, and goes some way to explaining why we can be so profoundly affected by musical experiences which transcend our ability to describe them in words.

Evolutionary biologists now seem to concur that, far from the ‘useless’ trait which Pinker dismisses it as in evolutionary terms (Pinker 1995), music serves an important evolutionary function around promoting pro-social behaviour and cooperation across large groups (Mithen 2007, p.229; Dunbar 2012). The size of social groups amongst apes - our nearest primate relatives – is restricted to the small number of other individuals a relationship can be maintained with by physical ‘grooming’ (Mithen 2007, p.146; Dunbar 2012, p.212), whilst our hominid ancestors typically cooperated across much larger groups. Part of the reason for this difference, Robin Dunbar explains, derives from the ‘vocal grooming hypothesis’ which suggests that musical communication in the form of ‘enhanced vocalization’ may have evolved among our hominid ancestors as ‘an expression of mutual interest and commitment that could be simultaneously shared with more than one individual’ (Aiello & Dunbar 1993, p.187).

As a species, musical communication with those around us helps to reassure us that we are under no direct threat from them, and hence helps us to experience others in a positive and loving way rather than as potential threats to our health or security. Stephen Mithen refers to this kind of primal cooperative communication system as ‘holistic, multi-modal, manipulative musical and mimetic’ (Mithen 2007, p.183). Or ‘hmmmm’ for short. Music in this sense is literally part of the glue that bonds societies together, enabling cooperation. As such, when we sing or make music together, we are participating in a form of social bonding that is at least as old as our species, and probably much older (pp.241-243).
Furthermore, I believe our responsibilities as educators extend to the degree to which we facilitate participation in this kind of social bonding. If we facilitate musicking with the awareness that as well as any musical outcomes we may be working toward, we are also facilitating a basic human need for attachment, our work will be all the stronger for it. And this principle also applies to our students – if they are to facilitate this kind of ‘loving’ space for participants themselves, they will do so more congruently if they have direct first-hand experience of being held in ‘unconditional positive regard’ by their own teachers.

Is This Love That I’m Feeling?
The steady blossoming of advances in neuroscience is enabling ever more sophisticated ways of understanding some of these phenomena. Social bonding is not something that is restricted to humans – all mammals have evolved similar ways of strengthening the bond between mother and infant, which extends to developing cooperative ‘communities’:

Mammals bear their young live; they nurse, defend, and rear them while they are immature. Mammals, in other words, take care of their own. Mammals form close-knit, mutually nurturant social groups – families – in which members spend time touching and caring for one another. Parents nourish and safeguard their young, and each other, from the hostile world outside their group. A mammal will risk and sometime lose its life to protect a child or mate from attack. (Lewis et al. 2001, p.25)

The means through which these strong attachment bonds are formed and sustained are complex, but include the part of the brain which mammals posses, but which other animals – reptiles, for example – don’t: the limbic system.

‘The limbic area lies deep within the brain’ (Siegel 2011, p.17), and ‘drapes itself around the [Reptilian Brain] with a languid ease’ (Lewis et al. 2001, p.24). ‘It evolved when small mammals first appeared around two hundred million years ago,’ [and] ‘works closely with the brainstem and the body proper to create not only our basic drives but also our emotions’ (Siegel 2011, p.16). In Dan Siegel’s ‘hand’ model of the brain, if you make your hand into a fist, the limbic area is where your thumb is, tucked underneath your fingers and sitting on top of your wrist (p.16). He elaborates:

‘The limbic regions help create the “e-motions” that “evoke motion,” that motivate us to act in response to the meaning we assign to whatever is happening to us in that moment. The limbic area is also crucial for how we form relationships and become emotionally attached to one another.’ (p.16)

The way it does this is very clever. Essentially, the limbic system is an ‘open-loop’ system that only functions healthily in an individual when it is attuned to another’s:

‘Because human physiology is (at least in part) an open-loop arrangement, an individual does not direct all of his own functions. A second person transmits regulatory information that can alter hormone levels, cardiovascular function, sleep rhythms, immune function, and more – inside the body of the first. The reciprocal
process occurs simultaneously: the first person regulates the physiology of the second, even as he himself is regulated.’ (Lewis et al. 2001, p.85)

Siegel refers to this as our ‘resonance circuitry’ which explains ‘how we can come to resonate physiologically with others—how even our respiration, blood pressure, and heart rate can rise and fall in sync with another’s internal state. This is the pathway that connects us to one another’ (Siegel 2011, p.61). In other words, neurobiology is interpersonal: ‘the internal states of others—from joy and play to sadness and fear—directly affect our own state of mind’ (p.61).

This kind of interpersonal ‘limbic regulation’ is an important factor in maintaining homeostasis. When it is disrupted, the results can be catastrophic, especially for dependent organisms. Universally, an infant mammal separated from its mother will cry in protest (Lewis et al. 2001, p.76), but if it fails to be reunited with them, will sink into the second stage of separation, despair (p.78), from which it may not recover. (Lewis et al. 2001) cite the work of Rene Spitz in the 1940s researching the fate of orphaned children reared in foundling homes and institutions:

In deference to the newly validated germ theory of disease, institutional babies were fed and clothed, and kept warm and clean, but they were not played with, handled, or held. Human contact, it was thought, would risk exposing the children to hazardous infectious organisms. Spitz found that while the physical needs of the children were met, they inevitably became withdrawn and sickly, and lost weight. A great many died. Death rates at the so-called sterile nurseries near the turn-of-the-century were routinely above 75%, and in at least one case, nearly 100%. Spitz had rediscovered that a lack of human interaction - handling, cooing, stroking, baby talk, and play - is fatal to infants. (Lewis et al. 2001, pp.69–70)

While our resilience to isolation may be stronger as adults, the impact of regular limbic regulation is still significant for our general health and wellbeing:

When we attune to others we allow our own internal state to shift, to come to resonate with the inner world of another. This resonance is at the heart of the important sense of “feeling felt” that emerges in close relationships. Children need attunement to feel secure and to develop well, and throughout our lives we need attunement to feel close and connected. (Siegel 2011, p.27)

And it is also one way of understanding the various questions about the nature of love that poets and song writers have posed over the years, and which have found their way into the headings of this paper:

When we see the mind of another person we bring the qualities of being present—curiosity, openness, and acceptance—into our relationships. These qualities seem to me to be the essence of that overused, often misunderstood word: love. I propose that this stance of curiosity, openness, acceptance, and love is at the heart of secure
attachments. And this stance is the felt sense you pick up from a coherent narrator’s relationship with himself. (Siegel 2011, p.188)

The connection between music and this limbic regulation, or interpersonal ‘resonance’, is very strong, and grounded in the nature of our close relationships, as already described. Musical communication in the form of Infant-Directed Speech (IDS) lies at the heart of the mother-infant bond, which influences our approach to all subsequent relationships. It is an affordance of the limbic brain that ‘permits mammals to sing to their children. Vocal communication between a mammal and offspring is universal. And mammals can play with one another, an activity unique to animals possessing limbic hardware’ (Lewis et al. 2001, p.26). In other words, musical communication may be indicative of this ‘open-loop’ ‘resonance circuitry’ being activated and synchronised. If the evolutionary biologists are right, and music is one of the primary means by which we can connect and cooperate with our fellows, then we can recognise widespread music-making as indicative of a healthy society; everyone deserves music as meeting a basic human need.

I Still Haven’t Found What I’m Looking For

However, while one of the great unspoken truths about music-making may be the opportunities it affords for limbic regulation in this way, it isn’t something that has been widely studied at the time of writing. Even though we seem to know it when we experience it, how do we measure interpersonal ‘resonance’ or this sense of ‘feeling felt’ during musicking? Interpersonal ‘resonance’ is something which can be measured, because of the fact that different neural circuits of the brain are not only activated, but become synchronised with others when in attunement: ‘internal and interpersonal forms of attunement each lead to the growth of the regulatory circuits of the brain’ (Siegel 2011, p.86).

Even more significantly, it may also be the case that when we engage in participatory musical activity, we can help to strengthen these ‘resonance circuits’ and attunement to others that is so critical to our wellbeing. For example, when we are ‘attuned’ to another person, this manifests in the engagement of our mirror neuron system (MNS), ‘now considered the root of empathy’ (Siegel 2011, p.59), and visible through synchronised movements, respiration and other functions. So, if we set out – as we do when we make music together – to breathe together, or to synchronise our movements around a mutually agreed ‘pulse’, to match others’ pitch, harmonies, onsets and so on - we help to strengthen this interpersonal attunement by activating the same parts of our central nervous system that are naturally synchronised when they are in a state of attuned resonance with others’.

(Vickhoff et al. 2013) have already demonstrated that our breathing and heart rate variability (HRV) become synchronised during singing, and HRV coherence – especially when compared with other co-participants - is one of the things that could be taken as evidence of the internal and interpersonal ‘resonance’ which Siegel talks about (Siegel 2015). As advances in Science make the technology for measuring such phenomena more accessible, a body of evidence will undoubtedly emerge which will be able to identify exactly how
effective music is at promoting congeniality – and yes, love – in our relationships with our fellows.

**All You Need Is Love**

In conclusion, I suggest that we shouldn’t shy away from talking about love when we talk about music. Certainly love is a complex emotion, but as neuroscience evolves, the important role that music has had - and continues to have - on us as a species is becoming ever clearer. In terms of promoting loving bonds of cooperation between us, musicking has been – and is – a significant factor in our ongoing evolution. And if feeling loved is about the feeling of intimacy and security associated with being held in another’s ‘unconditional positive regard’, then Community Music is a powerful way of achieving it:

If we have a positive relationship with a relative, teacher, counselor, or friend, the path is set for us to create a positive relationship with ourselves. Wonderful things happen when people feel felt, when they sense that their minds are held within another’s mind. (Siegel 2011, p.188)

Because collective music-making works on the basis of attuning one’s breathing and movement to that of others - often in a non-auditioned and hence ‘unconditional’ setting - it means that these positive relationships can be even stronger and have more positive impact on the health and wellbeing of all involved. While the evolution of ‘communicative musicality’ might be something which we share to a certain extent with all other mammals, our advanced capacity for musical communication means that we have the means at our disposal not only to regulate some of our basic neurobiological functions, easily and cheaply, simply by making music with other people, but also to feel loved in the process.
References


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1 Throughout this essay, I use Christopher Small’s notion of ‘musicking’ as a verb meaning ‘to take part, in any capacity, in a musical performance, whether by performing, by listening, by rehearsing or practicing, by providing material for performance (what is called composing), or by dancing’ (Small 1998, p.9)