

Positive Affect Evoked by Music and the Arts

Subjects: Music | Linguistics | Others

Contributor: Emery Schubert

A positive experience in response to a piece of music or a work of art (hence 'music/art') has been linked to health and wellbeing outcomes but can often be reported as indescribable (ineffable), creating challenges for research. There are two simultaneously occurring classes of experience are proposed: the 'emotion class' of experience (ECE) and the positive 'affect class' of experience (PACE). ECE consists of conventional, discrete, and communicable emotions with a reasonably well-established lexicon. PACE relates to a more private world of prototypical aesthetic emotions and experiences investigated in positive psychology.

Keywords: aesthetic emotion ; self-actualisation ; the arts ; negative emotion ; affective words ; awe ; positive psychology

1. Introduction

Music and art (hence music/art) have been linked with wellbeing (to be read 'improved/maintained wellbeing') through numerous medically and psychologically grounded studies. Music/art appears to improve or maintain wellbeing through the positive valence emotions (e.g., happiness, joy, and calm) they evoke ^[1] and pp. 21, 29 in ^[2], ^{[3][4]}. However, it is not clear exactly what is meant by a positive emotion when experienced in response to music/art. Does it equate to pleasure (enjoyment, attraction, liking, etc.), and so the pleasure (or dispelling displeasure) itself is the conduit to wellbeing caused by music/art? Furthermore, the supposed evocation of positive valence emotions by music/art suggests that negative (valence) emotions cannot or should not be evoked if wellbeing is a desired outcome. Yet, there is overwhelming evidence that people can derive much pleasure from music/art evoking *negative* valence emotions (such as sadness, despair, grief, tension, etc.) e.g., ^{[5][6][7]}.

Some have proposed that negative emotions experienced in response to music/art can occur because the negative portion of the experience is not in itself very important ^[8], because it is a means to an end (e.g., mediated by something that is more intrinsically positive) ^{[9][10][11][12]}, or because working through the negative experience has a therapeutic, psychically cleansing impact that leads to the positive wellbeing outcome ^{[13][14][15][16][17]}. Another school of thought is that negative emotions make an invaluable and powerful contribution to the experience of music/art, with explanations suggesting that they trigger an intensity of emotion ^[18]; they have intertwined components (both positive and negative) built into them ^[19]; or that they operate in tandem with other, related affects (rather than being subsumed or subservient to them) ^[20]. The latter 'co-existence' of negative and positive emotion theories are more difficult to evaluate because they require one to demonstrate the simultaneous coexistence of apparently contradictory negative and positive emotions. However, such a solution would be highly parsimonious to the matter at hand.

Co-existence theories suggest that two kinds of qualitatively diverse experiences can occur at the same time and each contribute to the overall positive experience of music/art. Along that line of thinking, some pertinent solutions have been offered. One builds on complementary concepts referred to as emotion-valence (e.g., sadness) and affect-valence (e.g., being moved) ^[21], where affect-valence is related to the metaphorical temperature, charge or force/energy of the emotion-valence (the author of ^[6] traces through historical precedents for such metaphors). Another was proposed by Russell and Barrett ^[22] and consisted of a distinction between prototypical emotional episodes, which are discrete, definable, and usually directed at something (e.g., happy, sad, angry ...) 'what most people consider the clearest cases of emotion' (p. 806), versus 'core affect', which refer to:

the most elementary consciously accessible affective feelings (and their neurophysiological counterparts) that need not be directed at anything. Examples include a sense of pleasure or displeasure, tension or relaxation, and depression or elation. Core affect ebbs and flows over the course of time. Although core affect is not necessarily consciously directed at anything—it can be free-floating (p. 806).

This distinction is reasonably consistent with Damasio's [23] emotion and 'feelings' (the latter being aligned with affect). 'Emotion' (from these perspectives) is a reasonably well-established terminology that allows people to communicate their feeling states to others fairly reliably through a set of prototypical emotion words. However, much less understood is how affect valence/core affect is experienced and communicated. Using the same conceptual distinction (emotion-valence and affect-valence), the Affect Space Framework [24] proposed that experience of music/art take place when an object or event is perceived as being (usually) beautiful or sublime, and evokes in the perceiver 'positive affect valence' (whether accompanied by negative *emotion* valence or not). It is this positive affect valence that has been understudied, yet it is critical if people wish to better understand the nuance among positive experiences that occur through engagement with music/art and its consequent wellbeing benefits.

2. Aesthetic Emotion Words

Aesthetic emotions are those emotions evoked by objects or events defined as having aesthetic value (usually as a result of being perceived as sublime or beautiful), and are an important, highly enriching part of human life. They are reported in response to sunsets, pieces of music, paintings, architecture, sport, and potentially any object or event. Experiences of awe, wonder, thrills, and being-moved are typical examples of aesthetic emotions, and these are particularly interesting examples because, apart from thrills, none of them are clearly and completely positive in valence but are, overall, positive, powerful experiences, each with a different nuance. Given the considerable attention paid to aesthetic emotions by philosophers; psychologists; and, more recently, neuroscientists, aesthetic emotions may provide a solution to the question of how to provide nuanced descriptions of positive affect experience evoked by music/art.

The modern, English-language conception of aesthetic experience has its roots in Western European thought from the Renaissance, with the introduction of the 'aesthetic' label attributed later to Alexander Baumgarten in a treatise dated 1735 [25]. Since then, theorising about aesthetics has occupied a significant literature in Western thought [26]. The expression 'aesthetic emotion' is even more recent, not receiving regular usage until the 20th century, and has come to refer to the central, visceral sensation of the aesthetic experience. While there is little consensus on the precise meaning of 'aesthetic emotion', the term has received sufficient attention to warrant consideration.

The set of aesthetic emotions as a lexicon for positive experiences in music/art show promise but also two considerable limitations. One limitation is that the concept has defied anything resembling a well-settled vocabulary. The emotions that are aesthetic are a matter of debate. They range from all emotions that are produced in response to an aesthetic object/event, e.g., [27], through to an exclusive subset that only particularly special aesthetic objects/events evoke [28] (for more detailed discussion, see [27]). To exemplify, in a comprehensive investigation of aesthetic emotions, Schindler et al. [29] proposed a 21 category (subscale) measure that constituted their Aesthetic Emotions Scale ('Aesthemos'). They conveniently group the subscales (see **Table 1**), which allows us to ascertain how their usage is only partly suitable to the matter of interest here. In fact, in their classification system, the emotions that are commonly considered part of the special, smaller set are labelled 'prototypical' (see first row of the table), indicating that these subscales arise as a result of empirical usage rather than as a theoretical position (devised through research or introspection). Two of the other groupings (pleasing and epistemic emotions) could be incorporated into the present concept of positive affect experience; however, the final grouping in the table (negative emotion) does not because it refers to the adaptive function of negative experiences [30].

Table 1. A grouping of 21 subscales in AESTHEMOS (Aesthetic Emotions Scale [29]) and their relevance to present study.

Grouping	Explanation of Grouping	Subscale Labels ¹	Role in Present Study
Prototypical aesthetic emotions	"capture aesthetic appreciation irrespective of the pleasingness"	(1) feeling of beauty/liking, (2) fascination, (3) being moved, (4) awe (and, more weakly, (5) enchantment/wonder and (6) nostalgia/longing).	This links well to the proposed conceptualization of positive affect class.
Pleasing emotions [†]	"all emotions with positive affective valence"	(7) joy, (8) humour, (9) vitality, (10) energy, and (11) relaxation	This links fairly well to the proposed conceptualization of positive affect class, but may also be well suited to the emotion class (e.g., relaxation).
Epistemic emotions [*]	"the search for and finding of meaning during aesthetic experiences"	(12) surprise, (13) interest, (14) intellectual challenge, and (15) insight	These subscales can be characterised as a positive affect class or as a separate experiential class.

Grouping	Explanation of Grouping	Subscale Labels ¹	Role in Present Study
Negative emotions	“emotions often are felt during aesthetic experiences that not only are unpleasant but also contribute to a negative evaluation regarding aesthetic merit”	(16) feeling of ugliness, (17) boredom, (18) confusion, (19) anger, (20) uneasiness, and (21) sadness.	Omitted because it could include an other-than-positive experience.

Note: ¹ Subscale labels and explanations are taken from [29]; * Adopted as part of the affect class experience; † adopted as part of the emotion class of experience as part; other groupings not adopted.

3. Subtle, Coarse, Pseudo, and Real

An early example of two phenomenologically distinct classes of ‘emotion’ in modern psychology can be found in the writings of William James. He proposed that there are subtle emotions and coarse emotions. The coarse emotions are those that are explained by James’ famous theory of emotion generated through the primacy of bodily response (that is, an emotion is initiated by a bodily response)—when seeing an angry bear, I run, and so feel afraid, rather than running *because* I feel afraid. Regardless of the causal chain of events, these highly functional kinds of emotions align favourably with the emotion class of experience, and James also provided several specific examples of these: “grief, fear, rage, love, in which every one recognises a strong organic reverberation” [31] (p. 449).

The subtle emotions are aesthetic, and they are those that give pleasure through the form of the art work, its combinations of shapes, colours, aural properties, etc. This pleasure impacts so directly upon the individual that James refers to the pleasure as being of a primary kind. However, a ‘secondary pleasure’ also plays an important role, being linked to physical characteristics and feelings rather than particular emotions of the coarse variety. James explains:

These secondary emotions themselves are assuredly for the most part constituted of other incoming sensations aroused by the diffusive wave of reflex effects which the beautiful object sets up. A glow, a pang in the breast, a shudder, a fulness of the breathing, a flutter of the heart, a shiver down the back, a moistening of the eyes, a stirring in the hypogastrium, and a thousand unnamable symptoms besides, may be felt the moment the beauty *excites* us. [31] (p. 470), italics as in the source)

The physical aspect of these responses resembles Sloboda’s [32] notion of using self-reported physical ‘emotion’ states, instead of emotion adjective vocabulary (emotion class experience descriptions). Sloboda argued that these physically based terms are well suited to describing music because they are memorable, distinct, and shared. The non-verbal nature of the physical symptoms that are associated with emotions were indicated as being pre or supra verbal: “They are arguably more closely connected to the experience of emotion than verbalizations which may be infected with rationalizations” [33] (p. 40), making the link between them and the concept of affect class experience plausible. Sloboda identified 12 physical emotions, with three of them reported reasonably frequently and consistently in response to music: tears (which included the symptoms crying and lump in the throat); shivers (consisting of goose pimples and shivers down the spine); and (least frequently) heart reactions (racing heart and pit-of stomach sensations).

James’ concept of primary and secondary subtle emotions also has a striking parallel with affect class experience, while the coarse emotions are commensurate with emotion class experience. Furthermore, the primary subtle emotions suggest a shallow hedonic tone (concerned with preference, liking, enjoyment, and so on [24]), and the secondary subtle emotions suggest deep hedonic tone (related to deeper, more intense and powerful positive experiences such as awe, being moved, and wonder, both part of the positive affect class of experience).

Pratt, who critiqued James’ assertion regarding subtle emotions, nevertheless also made reference to a distinct class [34] (p. 175) of aesthetic emotions that included ‘feelings’ of ‘pleasantness, enjoyment, pleasure, rapture, elation, delight, transport, exultation, ecstasy’, which describe affect class experiences. He used the terms feeling and aesthetic emotions interchangeably and contrasted these with ‘real’ emotions (the same term used by Thorndike). He was convinced that there was a difference between enjoyment and pleasantness, but the explanation provided draws on attributing emotion to a work of art (such as a piece of music) rather than experience, leaving the individual free to enjoying its pleasantness:

How far can unpleasantness go before it is incompatible with aesthetic enjoyment? Can a person enjoy music and have an unpleasant emotion at the same time? Are there mixed feelings? Such troublesome questions as these must be answered if it is assumed that a person's pleasure in a work of art can be accompanied by displeasure, but they need never be raised if it is discovered that the so-called emotions are really not emotions at all, but are characters of the music which bear a striking formal resemblance to emotion ^[34] (pp. 199–200).

Some philosophers refer to this as a cognitivist stance ^{[35][36]}, with contradictions due to mixed feelings resolved by attributing the source of one emotion to the stimulus, and the felt experience being attributed to the other (the affect class). However, humans are able to, and do, experience these mixtures (but I suggest *classes*) of 'feeling' more or less simultaneously. The affect class of experience, which includes the subtle emotions for James, was lost by these and other researchers of the first half of the twentieth century (including James' own later writing) as it became influenced by the emerging zeitgeist of behaviourism, which stifled thought on the matter, limiting emotions, feelings, and affects to purely observable behaviours ^[37].

4. Refined Emotions

Frijda and Sundararajan ^[38] developed the idea of refined emotions or 'emotions of refinement' as a concept highly compatible with the affect class and James' subtle emotions. The concept 'emotions of refinement' was inspired by Chinese poetics and Confucian philosophy and drew on a broad range of research concerned with related concepts, thus marking a historical turning point in the amount of detail given to this additional affect class of experience. Refined emotion was differentiated from coarse emotions that align with the meaning James ^[31] uses, as well as the emotion class concept. Frijda and Sundararajan avoided listing sample emotions that could be considered exclusively refined, as well as an additional list that could be considered exclusively coarse. Rather, a wide range of emotions can be both coarse and refined. The categories, as with emotion and affect classes, overlap, but when entering the realm of refined emotion, scholars are focussing on the savouring of, and yet detachment from, the coarse emotion. They explain that refined emotions are not simply a subset of emotions but an elaboration of them:

[R]efinement represents a mode of perhaps all emotions that language or emotion taxonomy could distinguish. There exist refined anger, love, and sexual ecstasy, as well as coarse, straightforward anger, love, and sexual ecstasy. (p. 227)

Refined emotions are described by the authors as, for example, 'noticing a felt bite or *glow*', '*pondering and exploring* one's misfortunes, aversions, or grief', and they suggest that '[a]ction is absent, except for *contemplation* and *acceptance wiggles*'. The italicised terms (added) are possible affect class expressions that embellish the simultaneously experienced (coarse) emotion class. Refined emotion is therefore the phenomenological manifestation of emotional charge, heat, or force ^[6], being a separate class (or 'mode', using Frijda and Sundararajan's term) while interacting with the emotion class of the experience.

5. Flow, Absorption, and Concepts in Positive Psychology

In the psychological literature, there exists reasonably well understood experiences that can be seen as emotion-like while at the same time being quite distinct from emotion. The experience of flow, or being 'in-the-zone', is a period of intense, highly focused performance, where perception of time and space are altered through a highly motivated, deep level of absorption in the performance task itself. The experience is dependent on the level of skill the performer possesses and the level of challenge the performance task presents. High levels of both challenge and skill will produce flow experiences more readily than low levels of both, or an imbalance between the two. The experience of flow is therefore also apt to be considered an affect class rather than an emotion class of experience.

Absorption is closely related to flow ^{[39][40]}. While flow refers to a state induced by engagement with an activity (production rather than just perception), the *experience* of flow is highly compatible with absorption during contemplative (not actively performing) music/art engagement. Indeed, absorption is quite likely an experiential component of flow ^{[41][42]}. Tellegen and Atkinson ^[43] refer to the honing of an individual's attention when describing absorption: "total" attention, involving a full commitment of available perceptual, motoric, imaginative, and ideational resources to a unified representation of the attentional object' ^[43] (p. 274).

The explicit link between absorption and affects but not absorption and emotion is further supported through the discovery of a more implicit relationships between absorption and the affect phenomena. Sandstrom and Russo ^[44] reported that 'absorption may be an important moderator of the *strength* of emotional responses to music' (p. 224, italics added), and, similarly, Kreutz, Ott, Teichmann, Osawa, and Vaitl ^[18] identified a positive relationship between emotional *intensity* (not specific emotions) and absorption. Kreutz and colleagues found that both intensely happy experiences and intensely sad experiences induced by music listening correlated with absorption, suggesting that the valence of the emotion (in this case whether happy or sad) does not exclusively influence the experience of absorption. Instead, it is the strength or intensity of an emotion that concurs with Charland's ^[21] ideas of emotional heat, charge, or force. It is as though an emotion class of experience consists of a special component that allows the affect class of experience to percolate forth under the appropriate (e.g., typical music/art event) contextual conditions. This interpretation is similar to Tomkin's ^{[45][46]} motivational amplifier theory where emotions drive or attenuate motivation, with motivation here being closely aligned to the affect class of the experience. Flow and absorption are powerfully positive experiences (regardless of the nature of the emotion with which the experience may or may not be associated).

References

1. Berridge, K.C.; Kringelbach, M.L. Building a neuroscience of pleasure and well-being. *Psychol. Well-Being Theory Res. Pract.* 2011, 1, 3.
2. Fancourt, D.; Finn, S. What Is the Evidence on the Role of the Arts in Improving Health and Well-Being? A Scoping Review; Health Evidence Network (HEN) Synthesis Report 67; WHO Regional Office for Europe: Copenhagen, Denmark, 2019.
3. Huppert, F.A.; Baylis, N.; Keverne, B. Introduction: Why do we need a science of well-being? *Philos. Trans. R. Soc. Lond. B* 2004, 359, 1331–1332.
4. Mastandrea, S.; Fagioli, S.; Biasi, V. Art and Psychological Well-Being: Linking the Brain to the Aesthetic Emotion. *Front. Psychol.* 2019, 10, 739.
5. Gabrielsson, A. *Strong Experiences with Music: Music Is Much More than Just Music*; Oxford University Press: Oxford, UK, 2011.
6. Schubert, E. Loved music can make a listener feel negative emotions. *Musicae Sci.* 2013, 17, 11–26.
7. Rozin, P. Glad to be sad, and other examples of benign masochism. *Judgm. Decis. Mak.* 2013, 8, 439–447.
8. Kivy, P. *Sound Sentiment: An Essay on the Musical Emotions, Including the Complete Text of the Corded Shell*; Temple University Press: Philadelphia, PA, USA, 1989.
9. Huron, D. *Sweet Anticipation: Music and the Psychology of Expectation*; MIT Press: Cambridge, MA, USA, 2006.
10. Hanich, J.; Wagner, V.; Shah, M.; Jacobsen, T.; Menninghaus, W. Why we like to watch sad films. The pleasure of being moved in aesthetic experiences. *Psychol. Aesthet. Creat. Arts* 2014, 8, 130.
11. Vuoskoski, J.K.; Eerola, T. The pleasure evoked by sad music is mediated by feelings of being moved. *Front. Psychol.* 2017, 8, 439.
12. Meyer, L.B. *Emotion and Meaning in Music*; University of Chicago Press: Chicago, IL, USA, 1956.
13. Levinson, J. Music and negative emotions. In *Music, Art and Metaphysics: Essays in Philosophical Aesthetics*; Levinson, J., Ed.; Cornell University Press: Ithaca, NY, USA, 1990; pp. 306–335.
14. Cook, T.; Roy, A.R.K.; Welker, K.M. Music as an emotion regulation strategy: An examination of genres of music and their roles in emotion regulation. *Psychol. Music* 2019, 47, 144–154.
15. Gruber, H.; Oepen, R. Emotion regulation strategies and effects in art-making: A narrative synthesis. *Arts Psychother.* 2018, 59, 65–74.
16. Dingle, G.A.; Williams, E.; Jetten, J.; Welch, J. Choir singing and creative writing enhance emotion regulation in adults with chronic mental health conditions. *Br. J. Clin. Psychol.* 2017, 56, 443–457.
17. Aristotle. *Poetics*. In *Aristotle's Theory of Poetry and Fine Art*; Dover: New York, NY, USA, 1951.
18. Kreutz, G.; Ott, U.; Teichmann, D.; Osawa, P.; Vaitl, D. Using music to induce emotions: Influences of musical preference and absorption. *Psychol. Music* 2007, 36, 101–126.
19. Schubert, E. Enjoyment of negative emotions in music: An associative network explanation. *Psychol. Music* 1996, 24, 18–28.
20. Schubert, E. Enjoying sad music: Paradox or parallel processes? *Front. Hum. Neurosci.* 2016, 10, 312.

21. Charland, L. The heat of emotion: Valence and the demarcation problem. *J. Conscious. Stud.* 2005, 8, 82–102.
22. Russell, J.A.; Barrett, L.F. Core affect, prototypical emotional episodes, and other things called Emotion: Dissecting the elephant. *J. Personal. Soc. Psychol.* 1999, 76, 805–819.
23. Damasio, A.R. *Descartes Error: Emotion, Reason and the Human Brain*; G.P. Putnam's Sons: New York, NY, USA, 1994.
24. Schubert, E.; North, A.C.; Hargreaves, D.J. Aesthetic Experience explained by the Affect-space framework. *Empir. Musicol. Rev.* 2016, 11, 330–345.
25. Guyer, P. History of Modern Aesthetics. In *The Oxford Handbook of Aesthetics*; Levinson, J., Ed.; Oxford University Press: Oxford, UK, 2005; pp. 25–61.
26. Townsend, D. From Shaftesbury to Kant: The development of the concept of aesthetic experience. *J. Hist. Ideas* 1987, 48, 287–305.
27. Juslin, P.N. From everyday emotions to aesthetic emotions: Towards a unified theory of musical emotions. *Phys. Life Rev.* 2013, 10, 235–266.
28. Konečni, V.J. The aesthetic trinity: Awe, being moved, thrills. *Bull. Psychol. Arts* 2005, 5, 27–44.
29. Schindler, I.; Hosoya, G.; Menninghaus, W.; Beermann, U.; Wagner, V.; Eid, M.; Scherer, K.R. Measuring aesthetic emotions: A review of the literature and a new assessment tool. *PLoS ONE* 2017, 12, e0178899.
30. Shariff, A.F.; Tracy, J.L. What Are Emotion Expressions For? *Curr. Dir. Psychol. Sci.* 2011, 20, 395–399.
31. James, W. *The Principles of Psychology in Two Volumes*; Henry Holt and Company: New York, NY, USA, 1890; Volume II.
32. Sloboda, J.A. Music structure and emotional response: Some empirical findings. *Psychol. Music* 1991, 19, 110–120.
33. Sloboda, J.A. Empirical studies of emotional response to music. In *Cognitive Bases of Musical Communication*; Jones, M.R., Holleran, S., Eds.; American Psychological Association: Washington, DC, USA, 1992; pp. 33–46.
34. Pratt, C.C. *The Meaning of Music*; McGraw-Hill: New York, NY, USA, 1931.
35. Kivy, P. *Music Alone: Philosophical Reflections on the Purely Musical Experience*; Cornell University Press: Ithaca, NY, USA, 1990.
36. Kivy, P. Feeling the musical emotions (A philosophical approach). *Br. J. Aesthet.* 1999, 39, 1–13.
37. Lazarus, R.S. The Cognition-Emotion Debate: A Bit of History. In *Handbook of Cognition and Emotion*; Dalglish, T., Power, M.J., Eds.; John Wiley & Sons: Chichester, UK, 1999; pp. 3–19.
38. Frijda, N.H.; Sundararajan, L. Emotion refinement: A theory inspired by Chinese poetics. *Perspect. Psychol. Sci.* 2007, 2, 227–241.
39. Dietrich, A. Neurocognitive mechanisms underlying the experience of flow. *Conscious. Cogn.* 2004, 13, 746–761.
40. Jackson, S.A.; Thomas, P.R.; Marsh, H.W.; Smethurst, C.J. Relationships between flow, self-concept, psychological skills, and performance. *J. Appl. Sport Psychol.* 2001, 13, 129–153.
41. Martin, A.J.; Jackson, S.A. Brief approaches to assessing task absorption and enhanced subjective experience: Examining 'short' and 'core' flow in diverse performance domains. *Motiv. Emot.* 2008, 32, 141–157.
42. Csikszentmihalyi, M. *Flow: The Classic Work on How to Achieve Happiness*; Rev. Ed.; Rider: London, UK, 2002.
43. Tellegen, A.; Atkinson, G. Openness to absorbing and self-altering experiences. *J. Abnorm. Psychol.* 1974, 83, 268–277.
44. Sandstrom, G.M.; Russo, F.A. Absorption in music: Development of a scale to identify individuals with strong emotional responses to music. *Psychol. Music* 2013, 41, 216–228.
45. Tomkins, S.S. Affect as amplification: Some modifications in theory. In *Theories of Emotion*; Plutchik, R., Keilerman, H., Eds.; Emotion: Theory, Research, and Experience; Academic Press: New York, NY, USA, 1980; pp. 141–164.
46. Tomkins, S.S. *Affect, Imagery, Consciousness*; Springer: New York, NY, USA, 1962.