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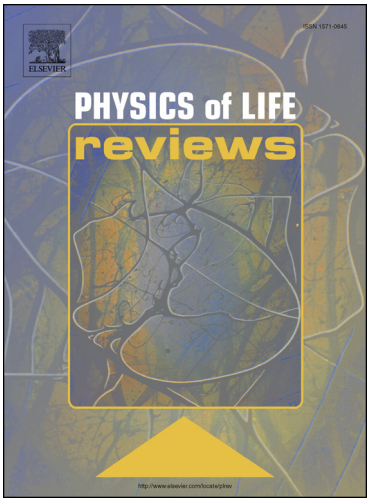

Re-thinking the paradox as catalyzed processing: Enjoyment of sadness in music as facilitated emotional processing

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Comment

Re-thinking the paradox as catalyzed processing: enjoyment of sadness in music as facilitated emotional processing: Comment on "An Integrative Review of the Enjoyment of Sadness Associated with Music" by Tuomas Eerola et al.

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The paper by Tuomas Eerola and colleagues addresses enjoyment of music-related sadness as a paradox of drawing pleasure from a habitually negative experience. Indeed, human attraction to tragedy in art has puzzled thinkers, philosophers and scientists for centuries, and the topic aptly deserves this modern review as an update. The great strength of the paper is the proposed integrative account in which three levels of explanation - biological, psycho-social, and cultural - are seen to contribute to the phenomenon in specific, yet interconnected ways. Theoretical propositions and empirical evidence about the underlying mechanisms existing at all of these levels are thoroughly considered, resulting in a model that refers to cascading impact of overlapping and simultaneous processes at the different levels, which, indeed, is a highly plausible proposition concerning this complex matter.

However, while the approach is comprehensive and argumentation solid, there is a need to challenge the very starting point of the paper. Here, I refer to the concept of paradox, and I argue that the co-presence of sadness and pleasure fundamentally is not a paradox but a reflection of human emotional experience as an inherently natural, adaptive process in which an emotional reaction (e.g. sadness evoked by loss) is processed, and this processing results in pleasure, or at least in stabilization of the hedonic balance. Modern accounts of emotions stress the fact that emotions are not stable states in a vacuum but constantly evolving procedural experiences, often difficult to disentangle from the concept of emotion regulation [1]. Emotions, regardless of their valence, serve the adaptive function of guiding, directing, and motivating human behavior [2], and this adaptive value inherently holds potential for experiencing pleasure. Therefore, I argue that music (and art in general) is not a paradoxical forum of contrasting emotions, but simply a catalyst for general, inherently human, adaptive emotional processing. One could say that people do not love music because it is fundamentally different, but because it is heightening the regular.

Eerola and colleagues themselves acknowledge at the end of their paper that enjoying sad music is not so much a paradox, but an ill-defined problem. They use a concept of *hedonic shift* as one of the key mechanisms underlying the enjoyment of music-related sadness. They specifically disentangle the process of hedonic shift from the concept of mixed emotions (simultaneous presence of

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different emotions). Mixed emotions can, for instance, occur if different emotion induction mechanisms function simultaneously (e.g. aesthetic appreciation of the perceived beauty of the song results in awe, while emotional contagion of a sad melodic line causes one to feel blue). As a contrast, Eerola and colleagues focus on discussing the hedonic shift as a process in which an initially sad experience transforms into a positive one. This comes very close to approaching the phenomenon as a process rather than a paradox. An intriguing equivalent of this concept can be seen in how emotional processing is conceptualized in the context of psychotherapy. Greenberg and Pascual-Leone [3] propose that the successful processing of emotions, in the context of any emotion-focused experiential therapy, consists of three core ingredients: a) some emotions are activated (arousal), b) the client is able to acknowledge, allow, and tolerate these emotions by finding a middle ground between avoidance and over-engagement (regulation), and c) the emotional experience is explored and reflected upon, for example, through symbolization and meaning-making (meaning-making).

The emotional processing framework discussed by Greenberg and Pascual-Leone has intriguing resemblance to the three-level model of Eerola and colleagues. Figure 1 depicts the alignment of these theoretical frames. The ingredients of emotional processing (arousal, regulation, meaning-making) address many the very impact mechanisms that Eerola and colleagues propose to exist at the three levels (biological, psycho-social, cultural). Figure 1 situates both of these theoretical frames in a continuum from embodiment to conceptual awareness. Biological explanations and emotional arousal (on the left side of the continuum) inherently link to embodied and unconscious levels of experience, while the amount of conscious, reflective processing increases as we move towards the right end of the continuum, characterized by the cultural level and meaning-making processes. The arrows in Figure 1 illustrate the procedural nature of emotional experience as interlinked and potentially overlapping loops between the different explanatory levels and aspects of emotional processing and experience.

- Figure 1 here -

I further argue that the reason for us to commonly use the term paradox when talking about this process in the context of music and art is because music has the capacity to massively exaggerate and speed up emotional processing. Music provides an emotional depth-moderating access to our emotional experience, deepening and facilitating it [4]. A key question is whether emotional processing really needs to occur through the whole loop of reaching also the conscious meaning-making level? I argue not. While Greenberg and Pascual-Leone's discussion of emotional processing derives from the context of verbal psychotherapy, music inherently operates at the non-verbal, embodied-affective levels of communication [5]. In a music therapy context, music-making and music listening particularly serve as the trigger (arousal) and the tolerable space (regulation) for emotional experiences, while the client's meaning-making process is facilitated by the verbal therapeutic discussion [4]. It is thus possible,

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and likely, that in the context of music, the adaptive emotional processing can, at least partly, take place directly at the non-conscious level, without the presence of conscious meaning-making processes. This ability to operate at the embodied level of the social-emotional (and perhaps even the cultural) experiences, allows music to speed up the affective transformation process, to the extent that indeed seems like a paradox to our conscious mind.

However, music not only facilitates emotional processing at the embodied level, but also potentially encourages dialogue and transfer between the different levels of the embodied vs. mental-conceptual dimension. Body, feelings, and cognition have been noted as inherent and mutual dimensions of musical affect regulation [6] and the ways that music conveys intersubjectivity are also fundamentally linked to interconnecting embodiment, meaningful affect and personal meaning [7]. This ability of music to fluently operate across the non-verbal experiential processing and meaningful reflective thought is not far from how the symbolic nature of music as aesthetic expression has been discussed by philosophers like Langer [8], referring to how music, as symbolic object, allows playful, safe, and self-distancing reach of deeply meaningful personal content.

The ability of music to operate at all levels of the biological-embodied vs. cultural-conceptual continuum is inherently present at the integrative approach proposed by Eerola and colleagues. It is visible also in how Eerola and colleagues talk about music as a form of simulation: simulation can occur at the embodied (contagion) or conceptual (imagination) levels. Functioning as simulation that fluently employs all experiential levels music serves as an embodied-fictional-conceptual playground for real experiences, addressing meaningful moments through material that ranges from lullabies to funeral songs. Importantly, when studying music-related sadness we are not only studying a particular form of art, but we are studying the very human sadness itself, and further the mechanisms that are able to speed up and enhance the not-so paradoxical but inherently natural human processing of emotions. Music research that integrates approaches from neuroscience to psychology, cultural studies and humanities has the capacity to unveil and reveal something fundamental about the exceptionally complex topic of human emotion. The study of music-related sadness is an important piece in a puzzle of understanding the general mechanisms of facilitated emotional processing, whether in the context of therapy or our daily life.

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Figure caption:

Figure 1. Alignment of explanatory levels and components of emotional processing in a continuum from embodiment to conceptualization

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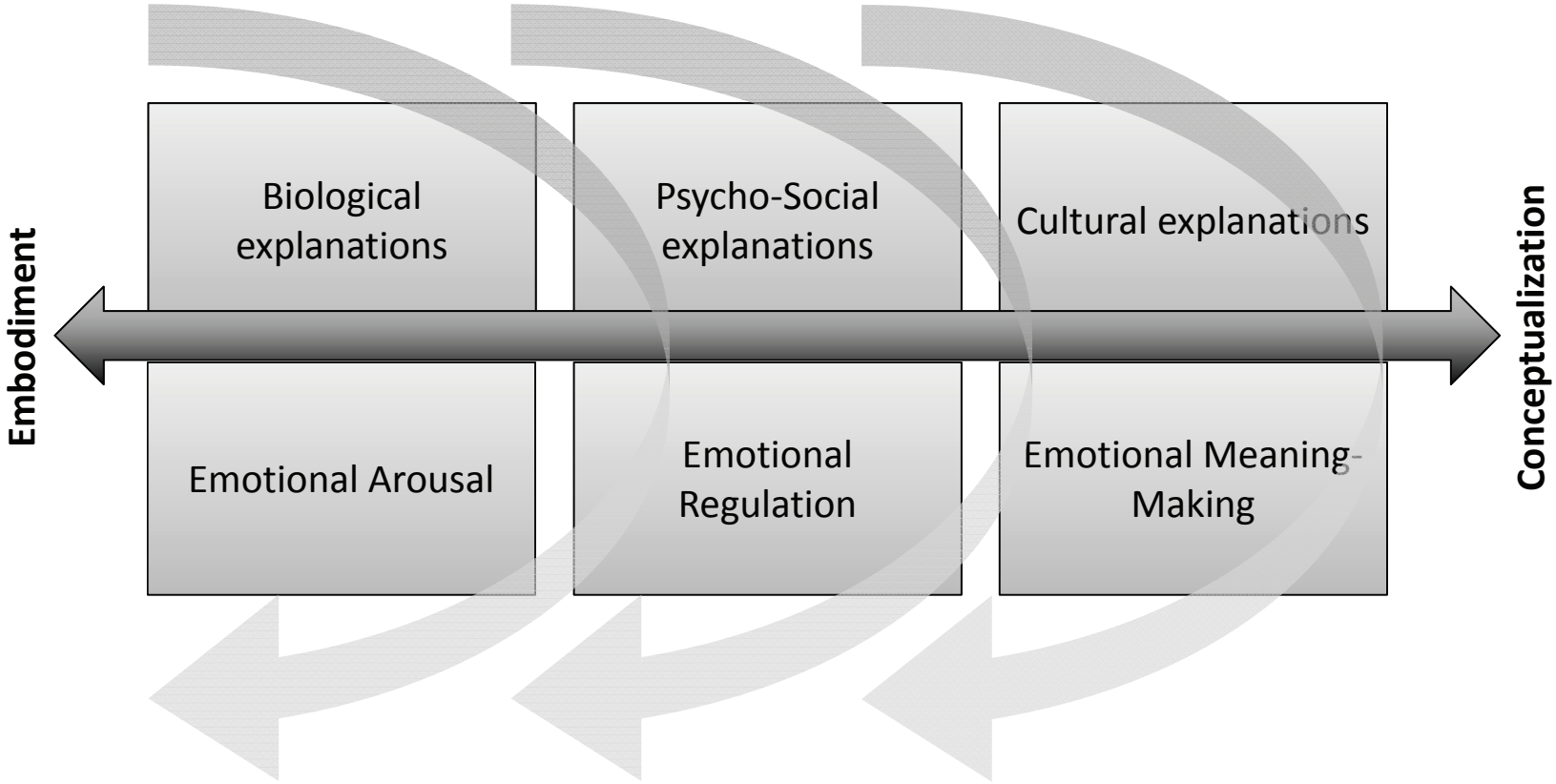

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