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phenomenology of the dance event: How does the embodied perception of the live music, which accompanies contra dance, interact with the physical moves of the dancers? What is the dancer's experience when the musical gestures correspond to or contradict the physical gestures in the dance, and is this experience mediated by the statistical probability of the succession between dance figures? To answer such questions, this study establishes stylistic norms for this folk dance.

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### Does solo instrumentation convey sadness in orchestral music?

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Niels Chr. Hansen\*<sup>1</sup> and David Huron<sup>1</sup>

<sup>1</sup>Ohio State University

\*hansen.491@osu.edu

The Western symphony orchestra offers nearly endless possibilities for colorful instrument combinations (Adler, 1989). Yet, skillful composers sometimes resort to solo instrumentation with limited or no accompaniment. While no empirical studies have investigated what aesthetic goals motivate such sparse textures, one may speculate that orchestral solos are especially suitable for expressing states of individuality, vulnerability, and loneliness which could be evocative of sadness for listeners. Testing this conjecture, we conducted a corpus study hypothesizing that solo passages are more likely than ensemble passages to exhibit structural features typically associated with musical sadness. This includes slow tempo, long note values, quiet dynamics, legato articulation, narrow pitch range, and use of the minor mode (cf. Hansen, 2013).

To this end, we identified 1,150 orchestral excerpts for violin, viola, cello, contrabass, flute, oboe, clarinet, bassoon, trumpet, and French horn from the website [www.orchestraexcerpts.com](http://www.orchestraexcerpts.com). Solo-ness was coded in terms of (a) occurrence of "solo" designation in the score and (b) texture (i.e. combinations of solo/non-solo passages accompanied/unaccompanied by members of same/different instrument family). Additionally, sadness features were coded in terms of mode, tempo, dynamics, articulation, pitch range, and mean note duration during the first four measures.

Descriptive analysis of a preliminary random sample ( $n = 100$ ) from our database shows that designated solo passages tend to contain quieter dynamics, narrower pitch range, longer note durations, and greater prominence of legato articulation than non-solo passages. The hypothesized prominence of faster tempi and minor mode were, however, not supported. This could be due to the use of the minor mode to express "passion" or "seriousness" in addition to "sadness", especially during the Romantic era (Horn Huron, 2012; Post Huron, 2009).

These findings have implications for understanding the effects of compositional decisions on listening experiences.

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