



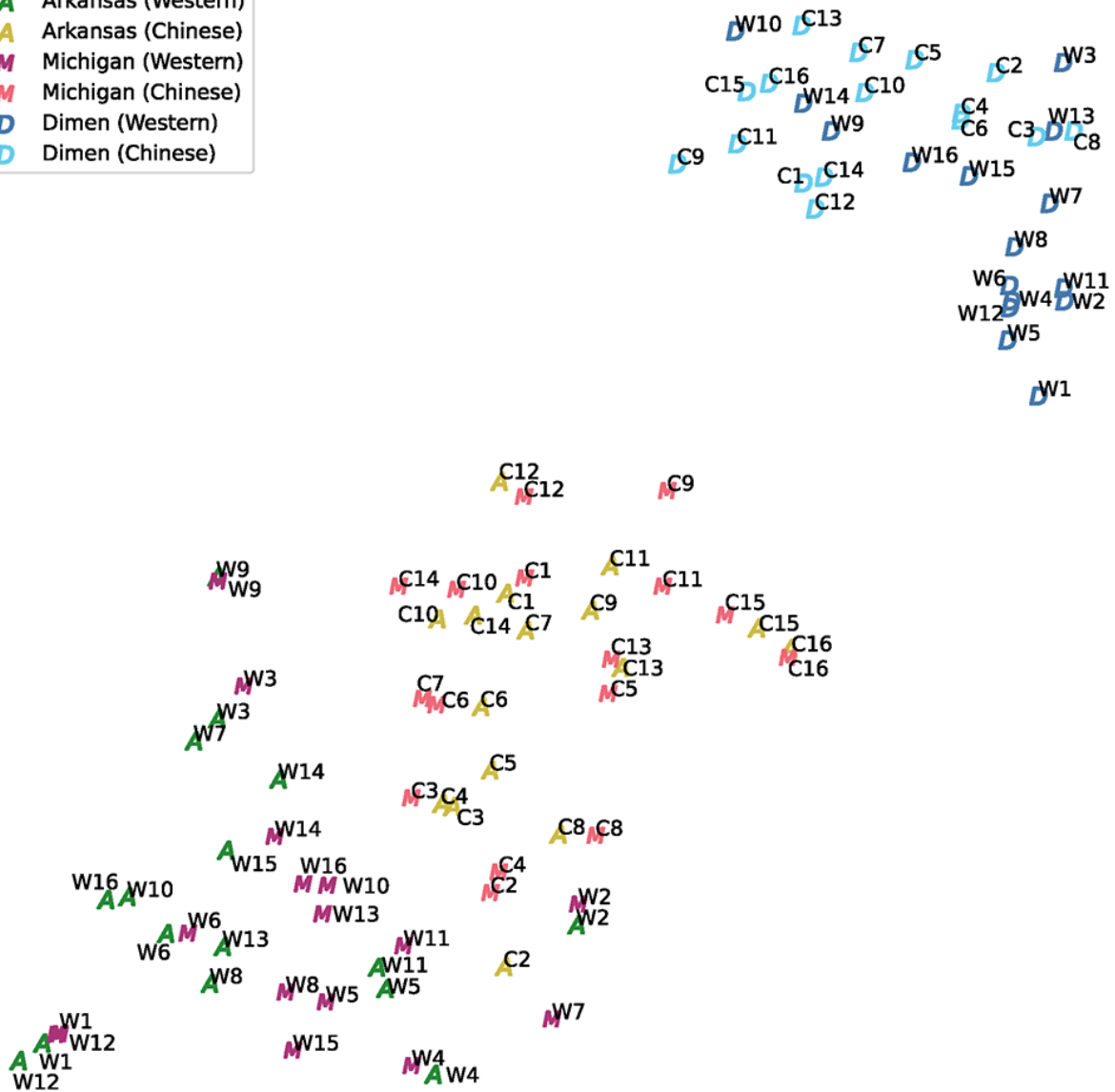
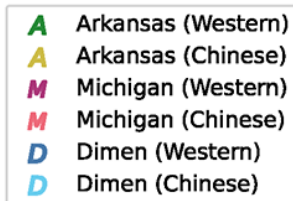
MTO 28.4 Examples: Margulis, Intersubjectivity and Shared Dynamic Structure in Narrative Imaginings to Music

(Note: audio, video, and other interactive examples are only available online)
<https://www.mtosmt.org/issues/mto.22.28.4/mto.22.28.4.margulis.php>

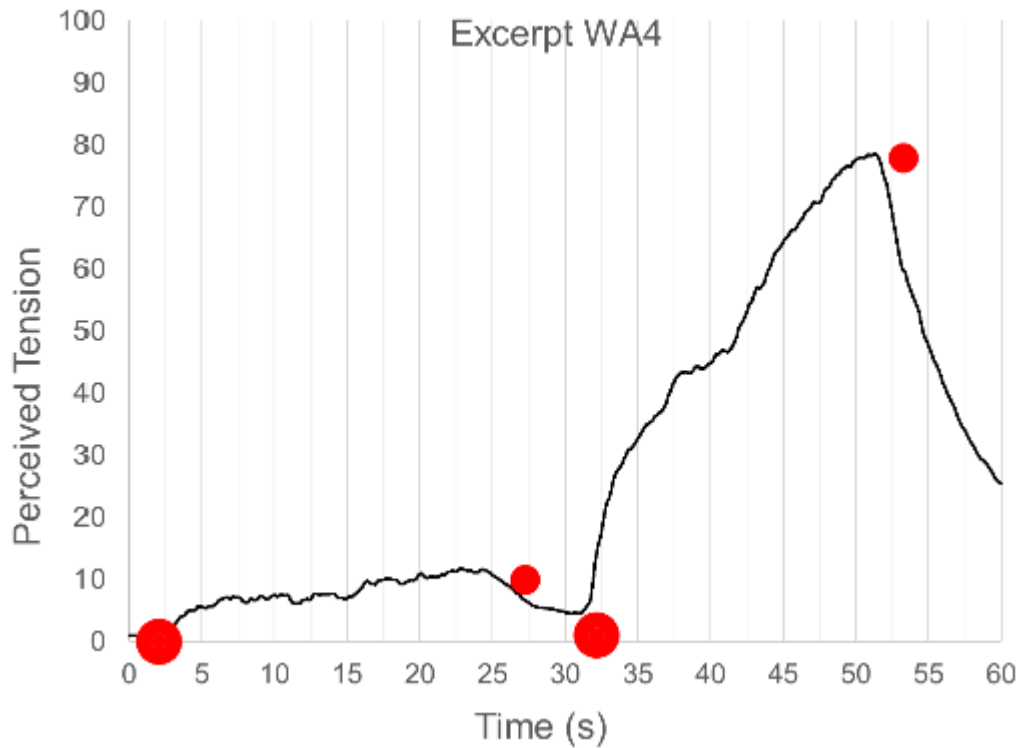
Table 1. Overview of studies described in this paper

Publication	Participant Groups	Key measures	Stimuli	Central findings
Margulis, Wong, Simchy-Gross and McAuley. 2019. "What the Music Said: Narrative Listening Across Cultures." <i>Palgrave Communications</i> 5(1), 146.	Arkansas, Michigan, Dimen	Narrativity (yes/no on story question); Narrative Engagement (score on Narrative Engagement scale); Enjoyment ratings	60s excerpts of Western and Chinese art music	<p>People at all geographic locations narrativized easily in response to music</p> <p>People at all geographic locations tended to enjoy excerpts more when they had narrativized in response to them</p> <p>There are similarities within- but not across-cultures in the excerpts to which people narrativize most</p>
McAuley, Wong, Mamidipaka, Phillips and Margulis. 2021. "Do You Hear What I Hear? Perceived Narrative Constitutes a Semantic Dimension for Music." <i>Cognition</i> 212, 104712.	Arkansas, Michigan, Dimen	Matching performance (selecting which of two stories was the one imagined by previous participants)	60s excerpts of Western and Chinese art music	Within- but not across-cultures, people could correctly match the story previous participants had tended to provide for an excerpt
Margulis, Wong, Turnbull, Kubit and McAuley. 2022. "Narratives Imagined in Response to Instrumental Music Reveal Culture-Bounded Intersubjectivity." <i>Proceedings of the National Academy of Sciences</i> 119, e2110406119.	Arkansas, Michigan, Dimen	Free response story description (similarity measured using Natural Language Processing)	60s excerpts of Western and Chinese art music	Within- but not across-culture participants freely generate similar stories to individual musical excerpts
Margulis, Williams, Simchy-Gross and McAuley. 2022. "When Did That Happen? The Dynamic Unfolding of Perceived Musical Narrative." <i>Cognition</i> 226, 105180.	Arkansas	Continuous tension slider; Button presses indicating time points of new events in ongoing imagined story	60s excerpts of Western art music	<p>Participants tend to imagine story events at discrete, shared timepoints within individual musical excerpts</p> <p>The points at which participants most often imagine events tend to be the points at which perceived tension changed, as measured during a separate session</p>
McAuley, Wong, Bellaiche and Margulis. 2021. "What Drives Narrative Engagement with Music?" <i>Music Perception</i> 38, 509-521.	Arkansas, Michigan, Dimen	Narrativity (yes/no on story question); Narrative Engagement (score on Narrative Engagement scale)	60s excerpts of Western art music, and experimentally manipulated versions, with High or Low Topicality and Contrast	<p>Topicality (the degree to which an excerpt features patterns associated with conventional extramusical referents), but not Contrast (the degree to which an excerpt features salient changes in acoustic parameters), drives narrative perception for Western music for Arkansas and Michigan participants</p> <p>Reducing an excerpt's Topicality, but not its Contrast, can reduce narrative perception</p>

Example 1. Reprinted with permission from Margulis et al. 2022a. Visualization of narrative documents (nardocs) in semantic space. Each symbol represents the average position of a nardoc projected into the predefined embedding space. Proximity in embedding space corresponds to shared semantic content. Individual excerpt labels are represented by W or C for music tradition (Western or Chinese) followed by the excerpt number (1–16 for each). Locations are labeled by a larger letter (A=Arkansas, M=Michigan, D=Dimen).



Example 2. Reprinted with permission from Margulis et al. 2022b. Mean tension ratings across the 60 seconds of an excerpt from the first movement of William Grant Still’s Symphony No. 1. The red dots show moments at which a critical mass of participants, in a separate task, reported imagining the start of a new event in their ongoing imagined story. The larger the dot, the more participants reported imagining a new event at that time.



Example 3. Narrative structure reflects musical structure in an excerpt from Liszt’s “Dante” Symphony, S. 109

The musical score is divided into five events, each with a specific tempo and dynamic marking:

- Event 1:** *tempestuoso*, starting at measure 19. Description: *stalking, swimming (etc.)*
- Event 2:** *f marcato*, starting at measure 22. Description: *assailant nears victim*
- Event 3:** *f violente*, starting at measure 26. Description: *chase begins*
- Event 4:** *f* and *ff*, starting at measure 30. Description: *attack, bite, (etc.)*
- Event 5:** *tempestuoso*, starting at measure 32. Description: *return to Event 1*