



INTRODUCTION

- Both music and language exist as intricate and 'meaningful' auditory sequences, specific to human communication.¹
 - \circ complex acoustic sequences \rightarrow perceptually discrete elements \rightarrow hierarchical structures \rightarrow meaning ¹
- Cognitive science \rightarrow exploration of perceived syntactic parallelisms²
- Overlap between these communications, but still exploration do be done \rightarrow memory³
- Question: Are the recognized grammatical similarities between music and language mutually exclusive in the memory domain?
- Previous research:
- Limit for memory for a musical key is limited to 11-20 seconds after modulation^{2,4}
- Musical surface features such as melody and rhythm enhance memory for key⁵
- However, these studies did not include language
- Nonadjacent key relationships:



Figure 1. Configuration of stimulus with examples.

Syntactic Parallelism Between Music and Language in Relation to Key Memorization

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METHODS

 Language-related effects will be tested using congruent and incongruent sentences with embedded clauses (sentences that are semantically and syntactically correct or incorrect)

Nonadjacent	Intervening	Probe	
Congruent Language Condition			
The angry bear	which was giant	frightened me.	
The pumpkin pie	which was yummy	poisoned me.	
The winter air	which was frigid	froze my nose.	
Incongruent Language Condition			
The angry bear	which was yummy	froze my nose.	

Figure 2.Sample of congruent and incongruent language stimuli

• Mimicking an embedded clause, music stimuli either had congruent or incongruent in the outer keys (ABA or CBA formatting)



NAKR: Different

• 2x2 design, musical and linguistic congruence will be paired as follows: Language

		Congruen
Music	Congruent	C-C
	Incongruent	I-C

• Each music-language sequence will finish with a probe cadence, which will be rated by participants for "goodness of musical completion" (GOC).





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DISCUSSION

Figure 6. Neither music nor language have a greater effect on GOC ratings; both are

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