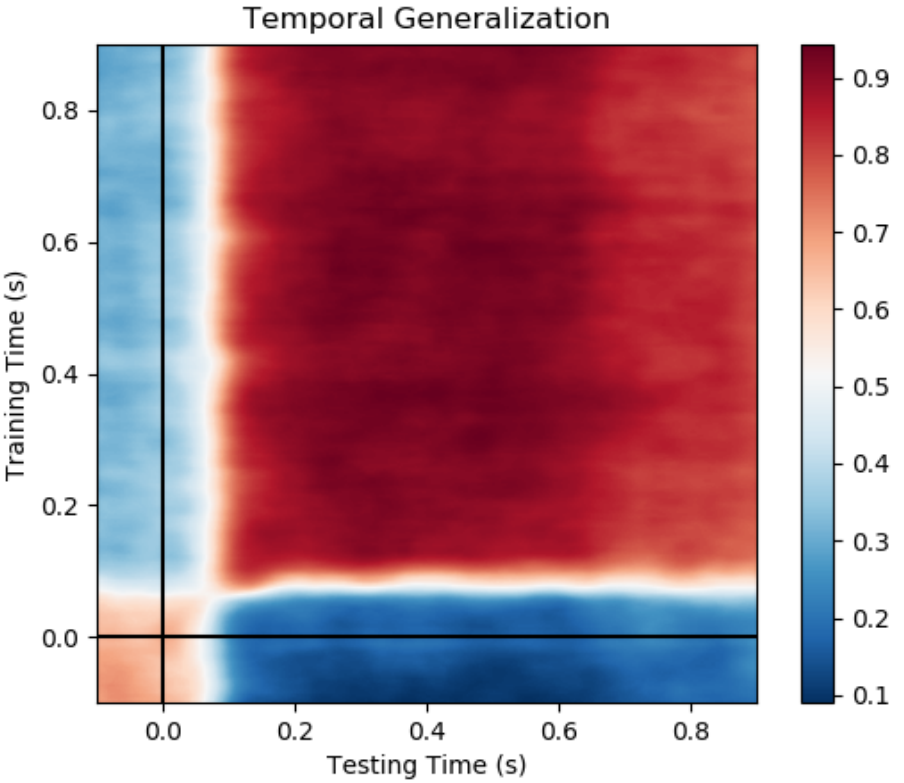
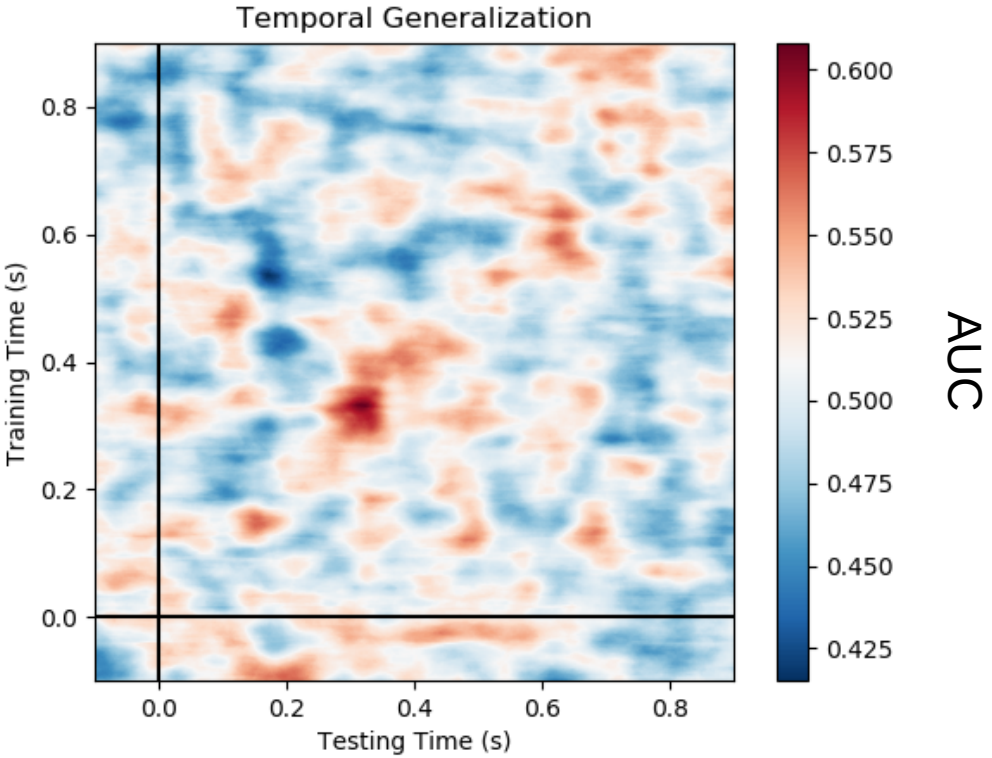
Decoding analyses

Preliminary decoding analyses, after having:
- re-synchronized the log files
- More data: patients 479, 482, 487 and 493

Contrasts:
1) First word vs. end-of-sentence (sanity check)
2) Short vs. longs sentences (sanity check - for now, 2 vs. 5 words)
3) Part-of-speech (nouns vs. verbs – present tense only)
4) Grammatical number of nouns (singular vs. plural; with across-modalities testing)
5) Grammatical number of verbs (singular vs. plural; with across-modalities testing)
6) Grammatical number – generalization across conditions (nouns→verbs or verbs→nouns)
7) Grammatical number – generalization across conditions and modalities (nouns-visual→verbs-auditory)
8) Declarative vs. question sentences

First word vs end of sentence



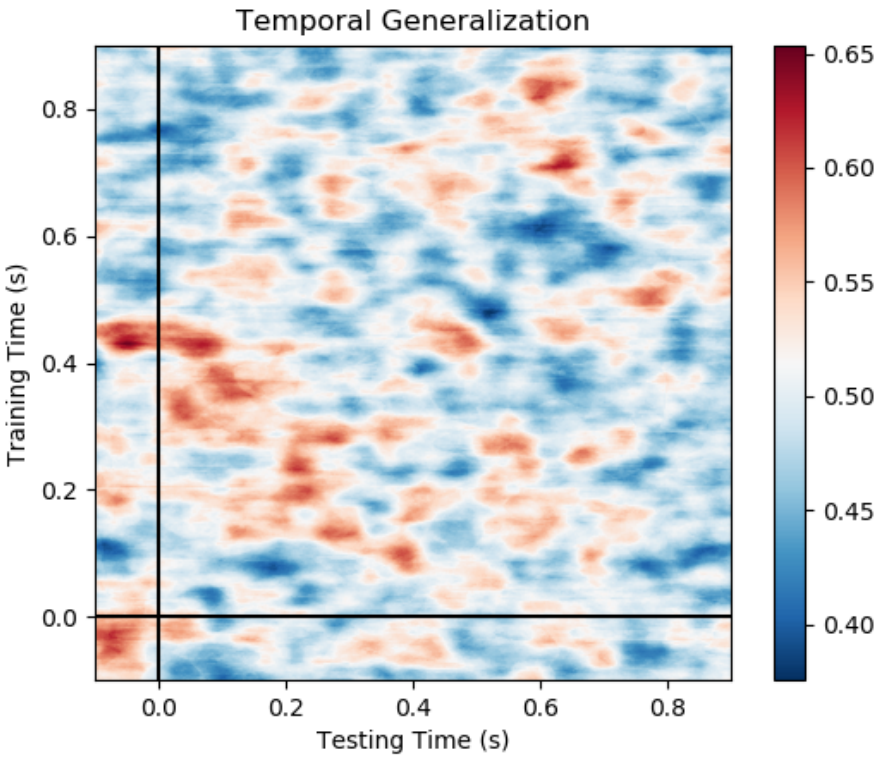


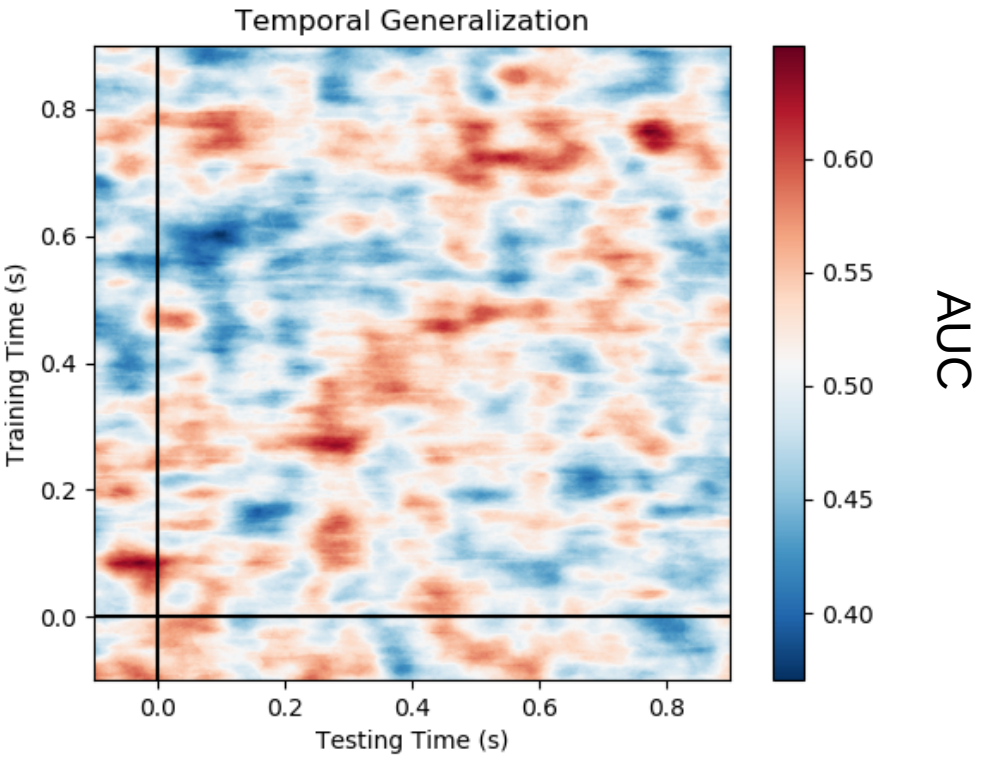
Auditory

Visual

Time zero corresponds to word onset

Short vs. long sentence (2 vs 5 words)



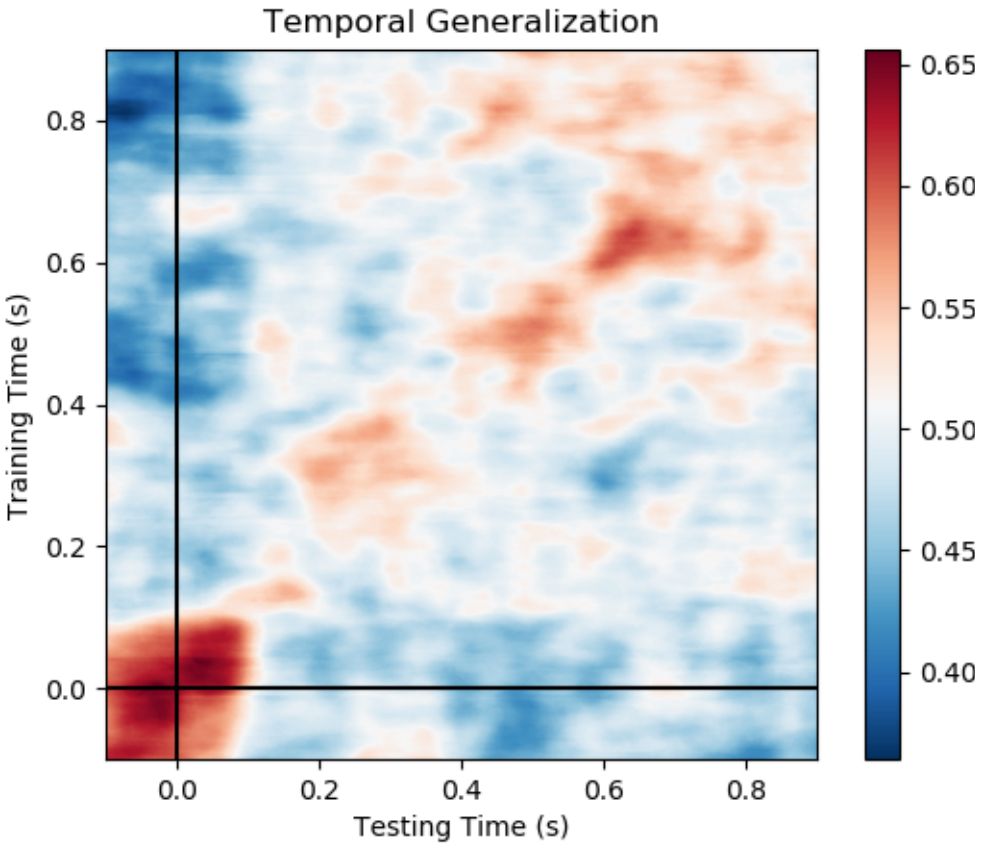


Auditory

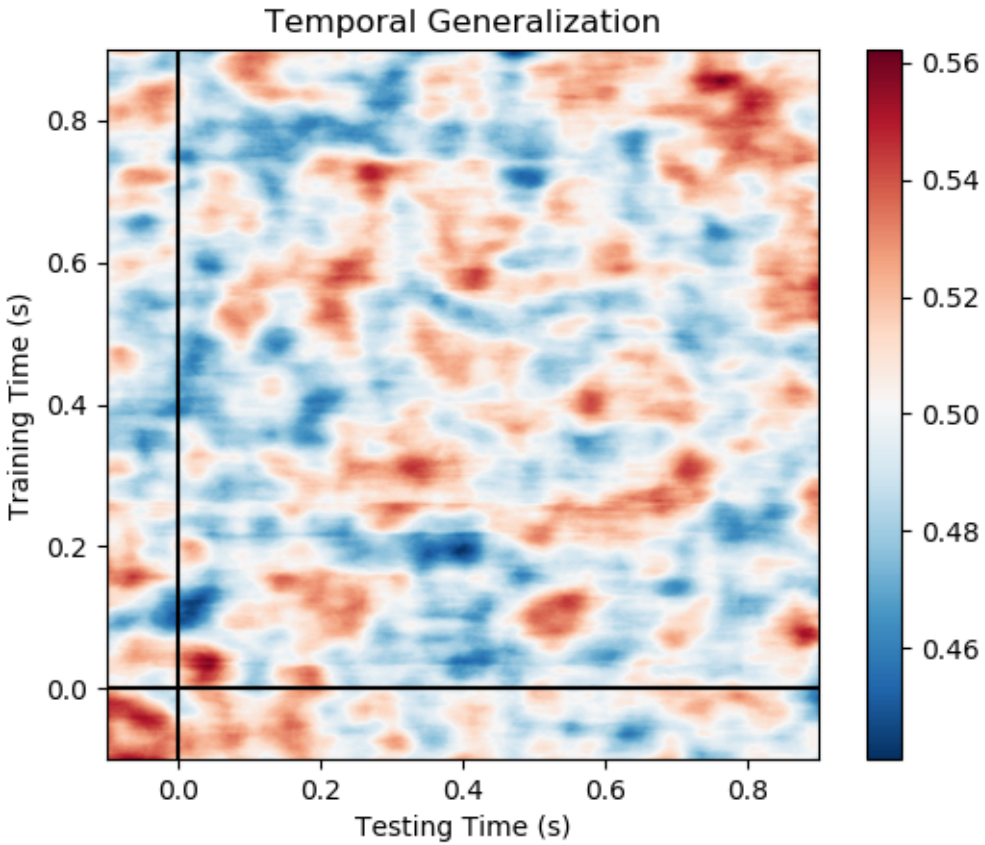
Visual

Time zero corresponds to end of sentence

Nouns vs. verbs



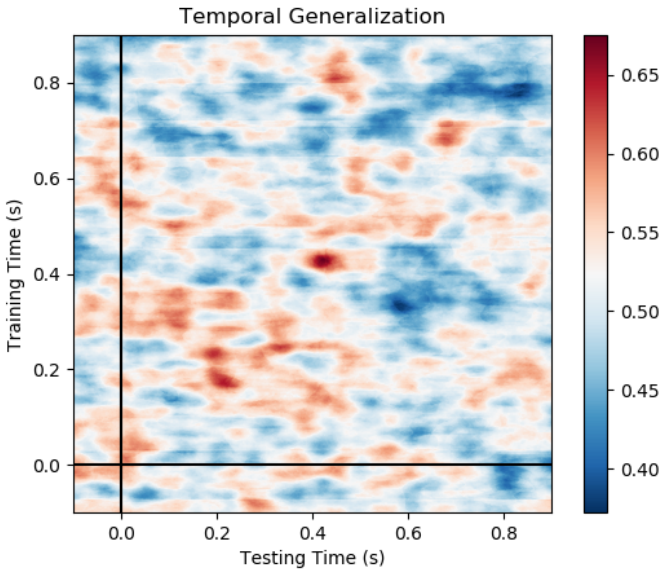
Auditory



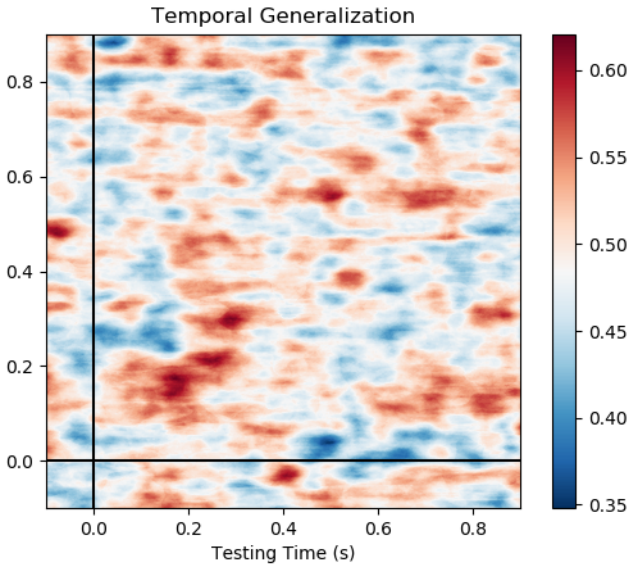
Visual

Time zero corresponds to word onset

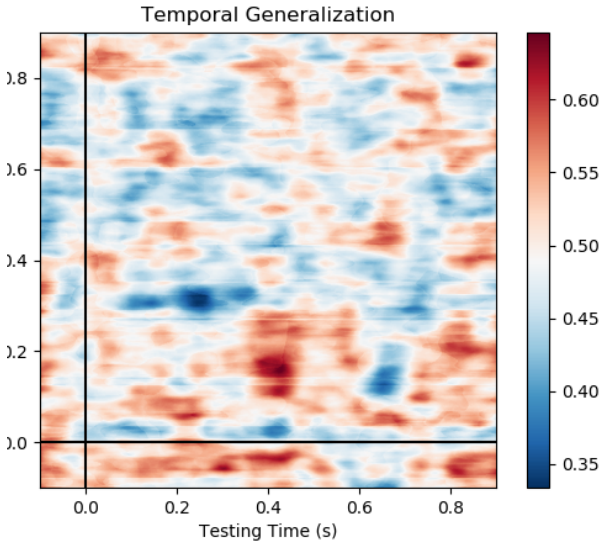
Nouns: singular vs. plural



Auditory



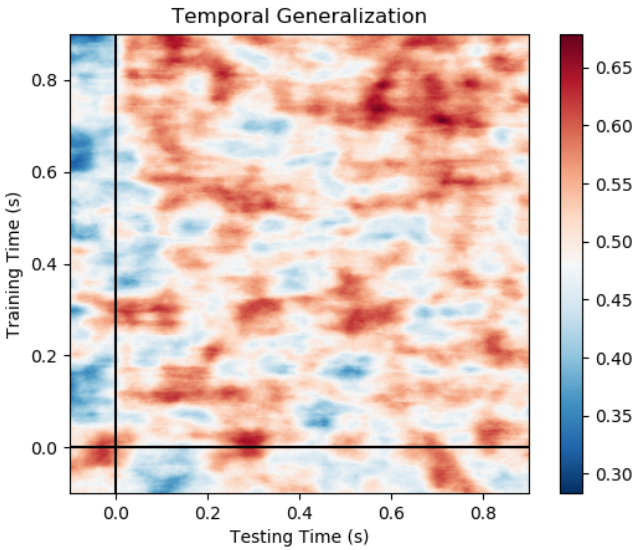
Visual



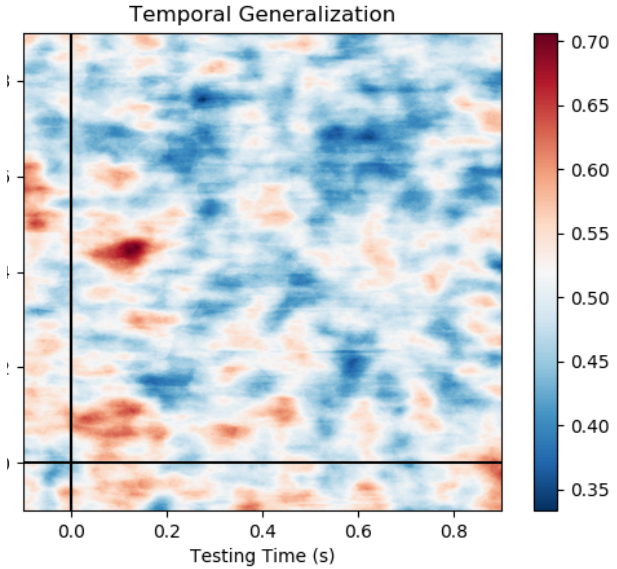
Across modalities
visual → auditory

Time zero corresponds to noun onset

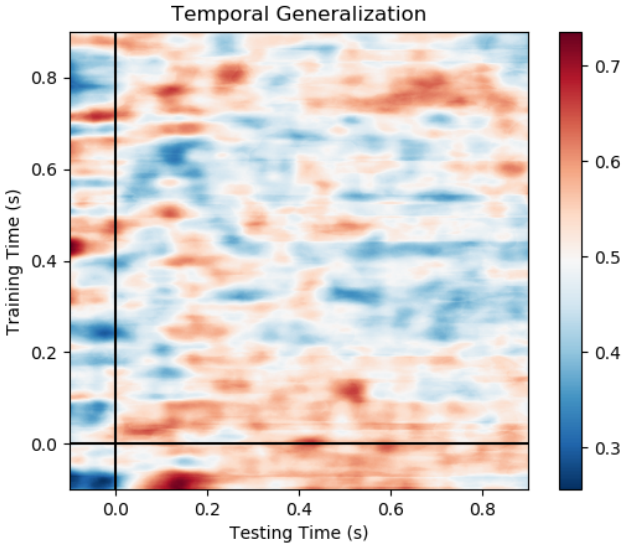
Verbs: singular vs. plural



Auditory



Visual



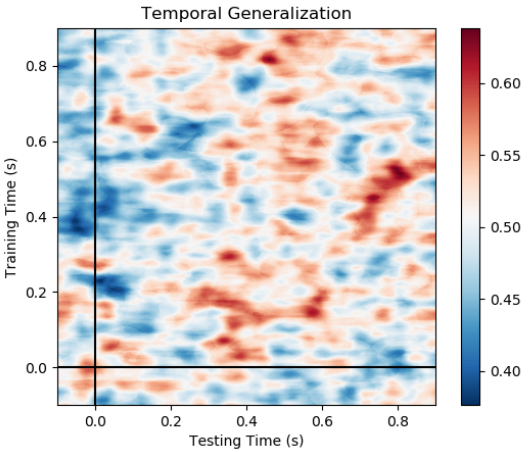
Across modalities
visual → auditory

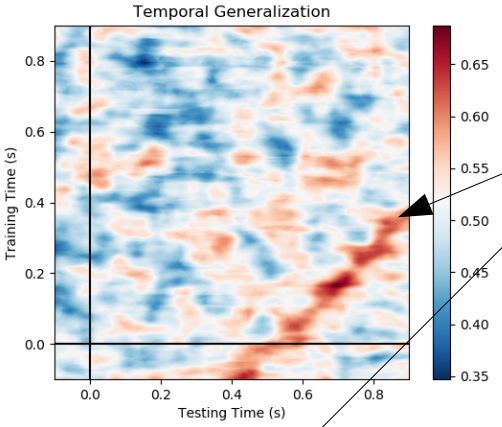
Time zero corresponds to verb onset

singular vs. plural (across conditions)

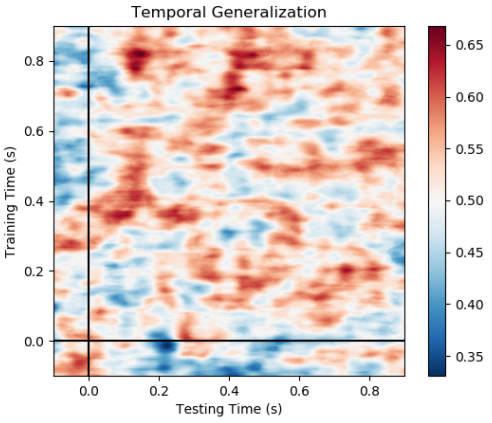
verbs -> nouns

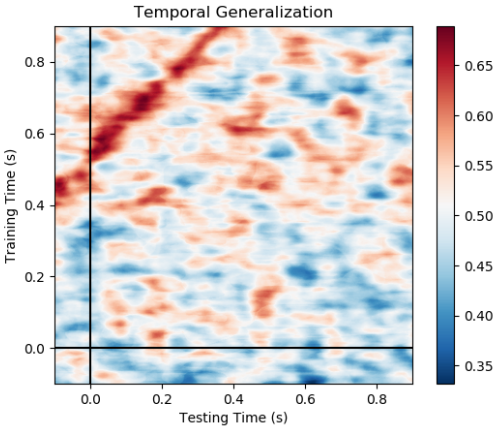
nouns -> verbs





Generalization to the succeeding word (SOA of RSVP = 500ms)





Auditory

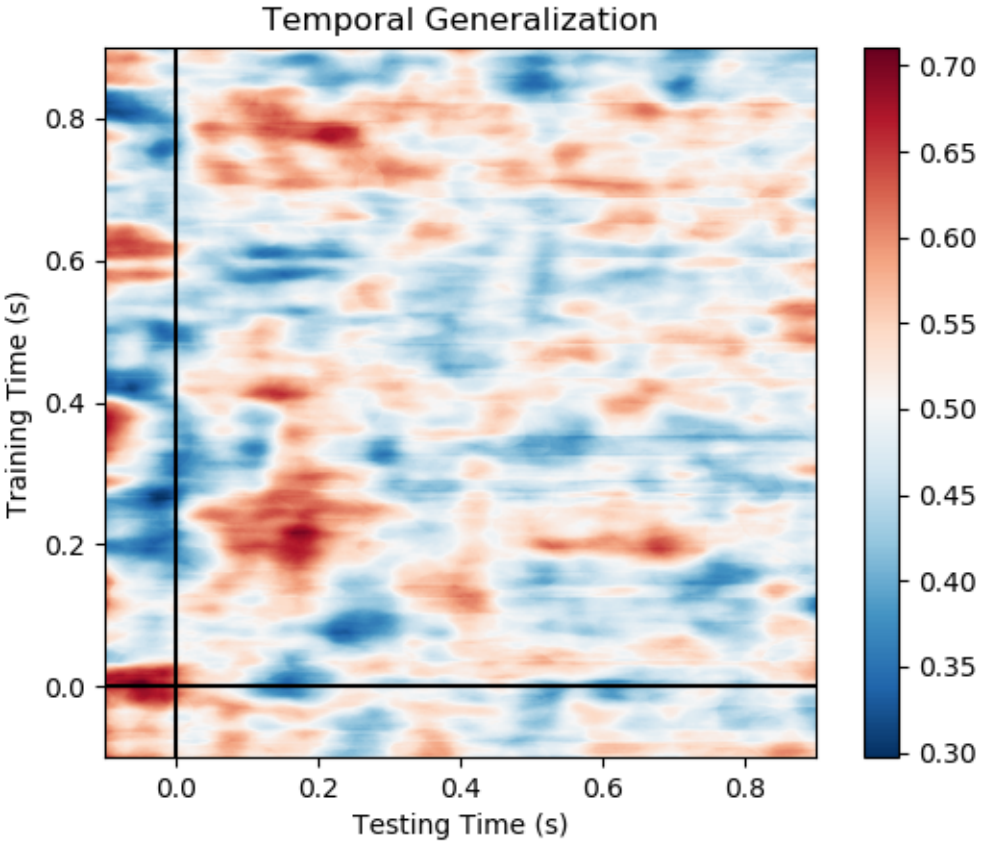
Visual

Time zero corresponds to word onset

Singular vs. plural

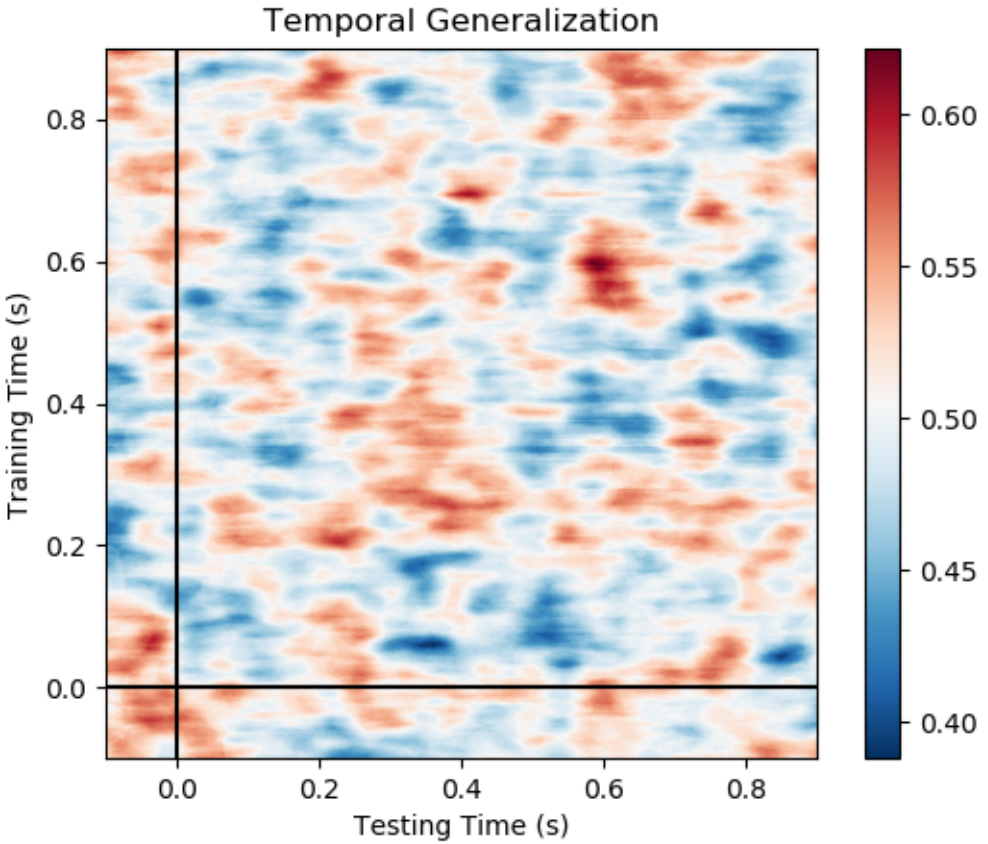
(across conditions and modalities)

nouns-visual-->verbs-auditory

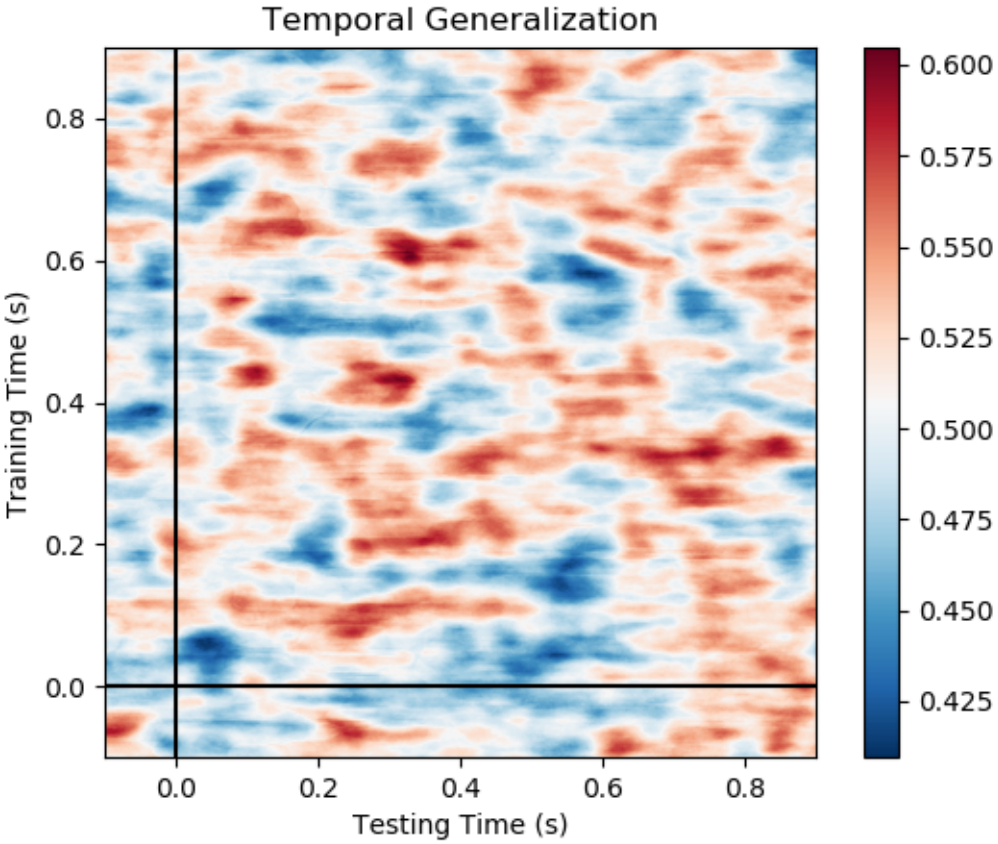


Time zero corresponds to word onset

Declarative vs. question



Auditory



Visual

Time zero corresponds to end of sentence