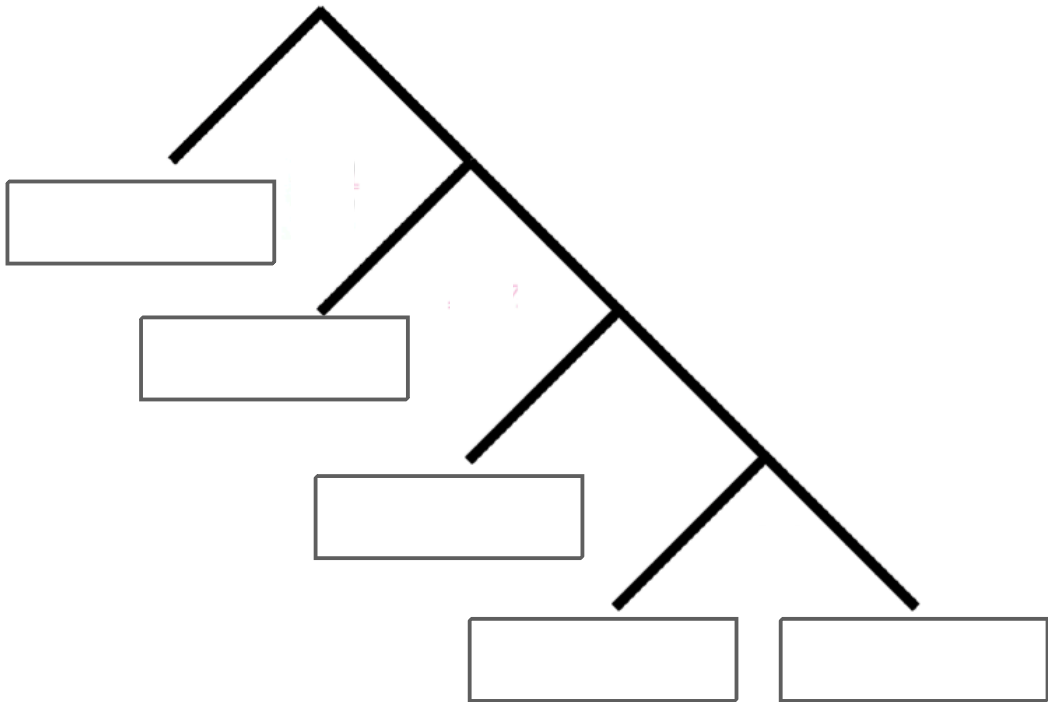


Frank & Christiansen, 2012

Gold et al., 2018



Brennan & Hale, 2019

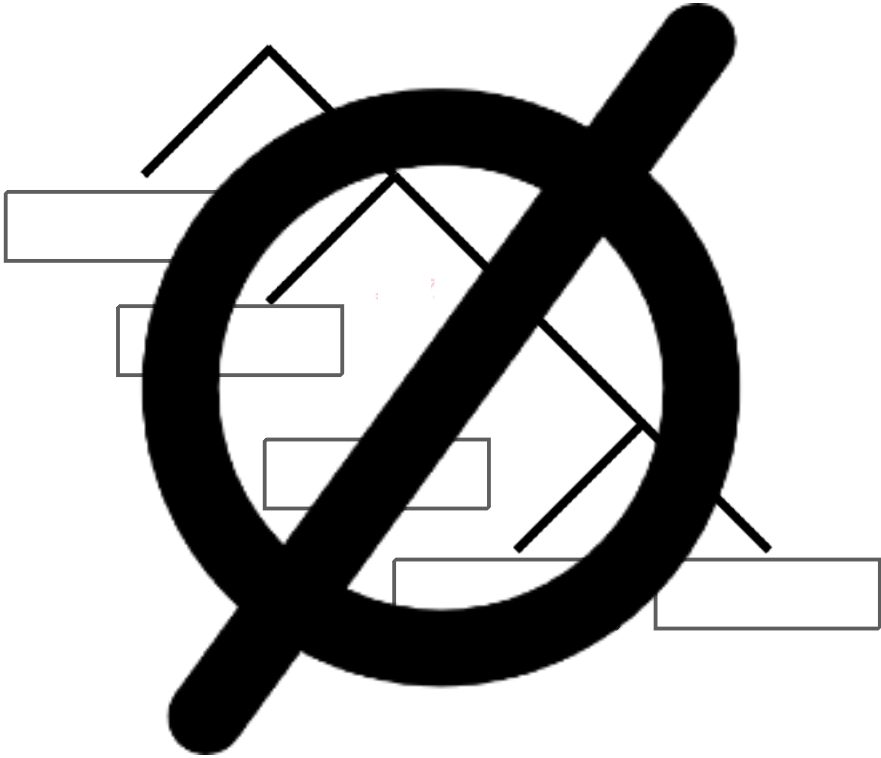
Nelson et al., 2017

Ding et al. 2016

THE NATURE OF THE INTERACTION BETWEEN SYNTACTIC AND SEMANTIC

PROCESSES IS HIGHLY CONTROVERSIAL IN PSYCH-NEUROLINGUISTICS

# THE INVERTED HIERARCHICAL STRUCTURE





1

2

3

4

5

3

3



language, it would seem plausible that syntactic processing is fundamentally sequential in nature, rather than hierarchical.

**(b) Evidence from psycholinguistics**

A growing body of behavioural evidence also underlines the importance of sequential structure to language comprehension and production. If a sentence's sequential structure is more important than its hierarchical structure, the linear distance between words in a sentence should matter more than their relationship within the hierarchy. Indeed, in a speech-production study, it was recently shown that the rate of subject-verb number-agreement errors, as in (3), depends on linear rather than hierarchical distance between words [37,38].

- (3) \*The coat with the ripped cuffs by the orange balls  
were ...

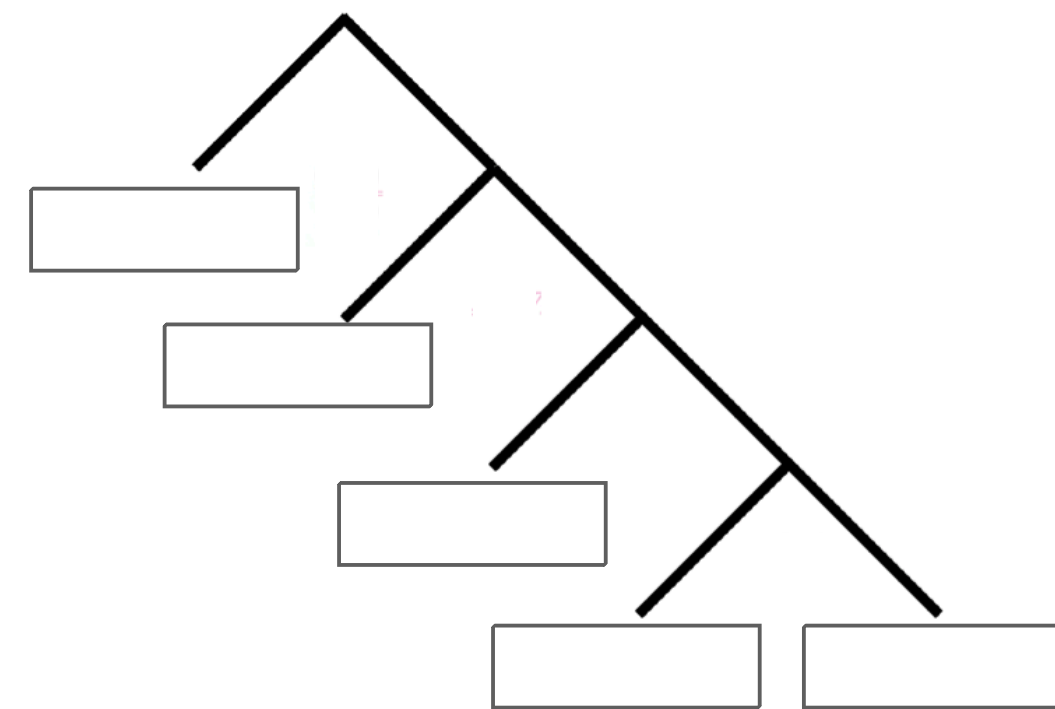




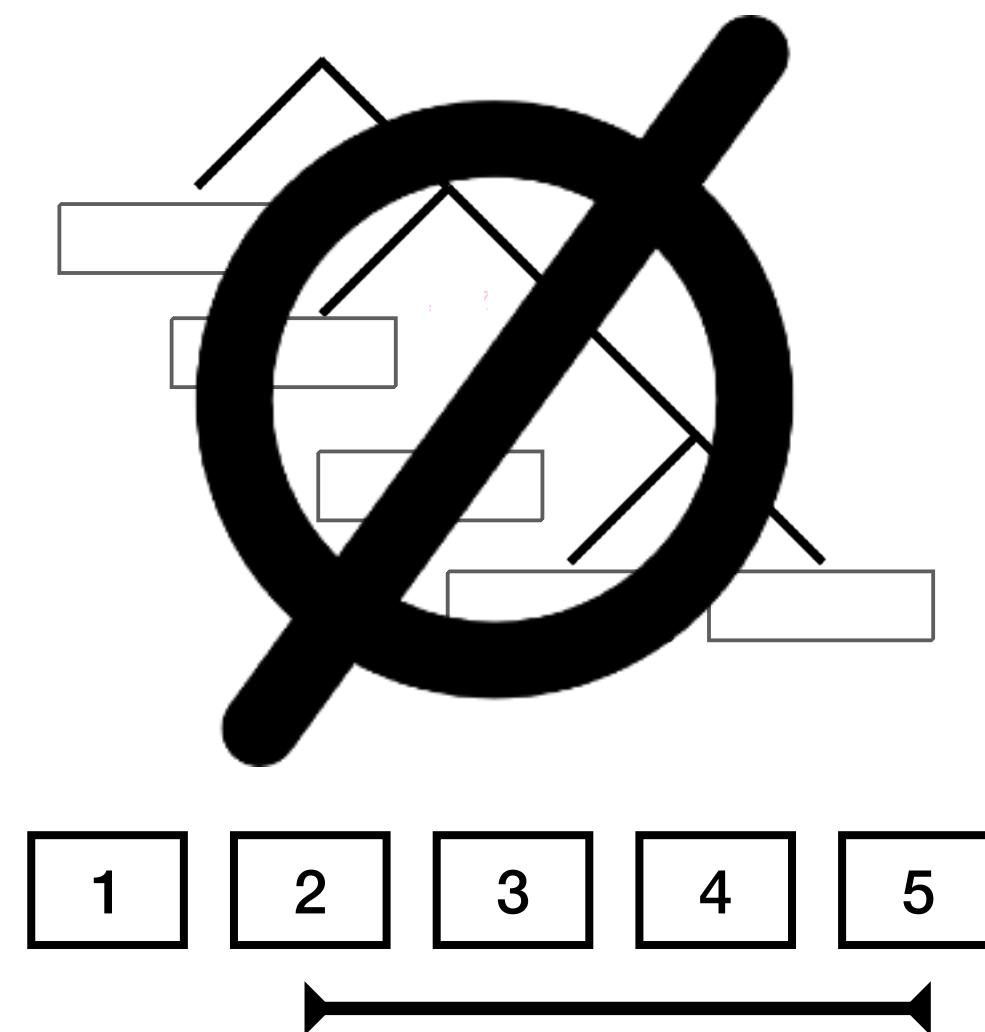


# THE NATURE OF THE **INTERACTION** BETWEEN **SYNTACTIC** AND **SEMANTIC** PROCESSES IS HIGHLY CONTROVERSIAL IN PSYCH-NEUROLINGUISTICS

## ➔ THE INVOLVEMENT OF HIERARCHICAL STRUCTURES



Brennan & Hale, 2019  
Nelson et al., 2017  
Ding et al. 2016



Frank & Christiansen, 2012  
Gold et al., 2018

THE NATURE OF THE **INTERACTION** BETWEEN **SYNTACTIC** AND **SEMANTIC** PROCESSES IS HIGHLY CONTROVERSIAL IN PSYCH-NEUROLINGUISTICS

➡ THE INFLUENCE OF SYNTAX ON SEMANTIC PROCESSING

1

2