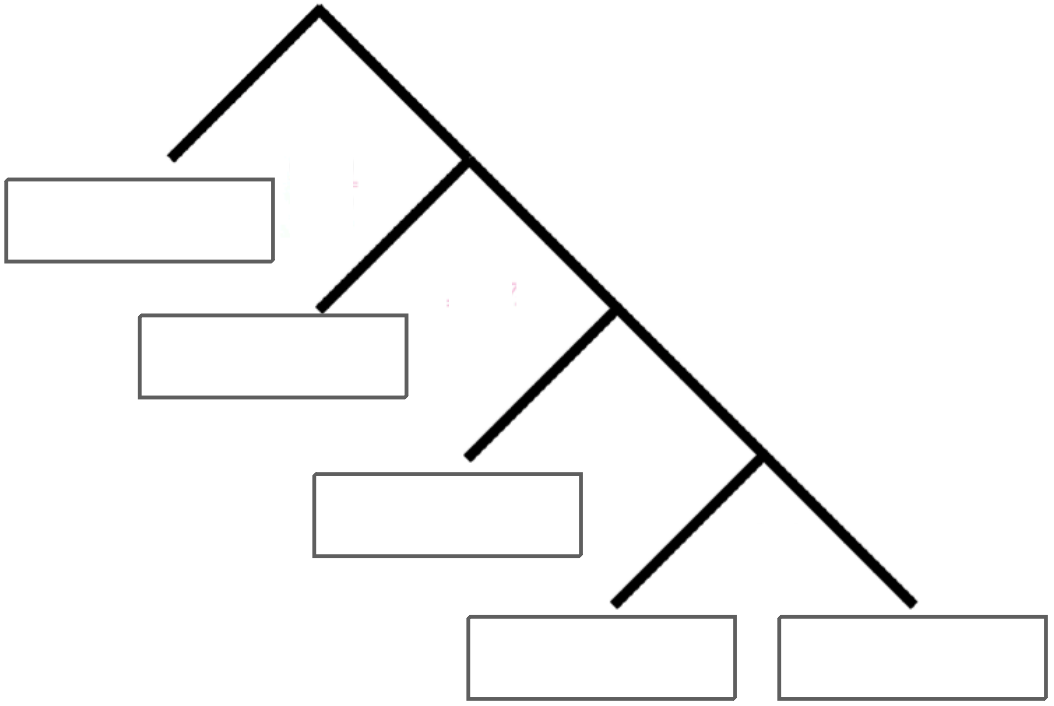
Frank & Christiansen, 2012

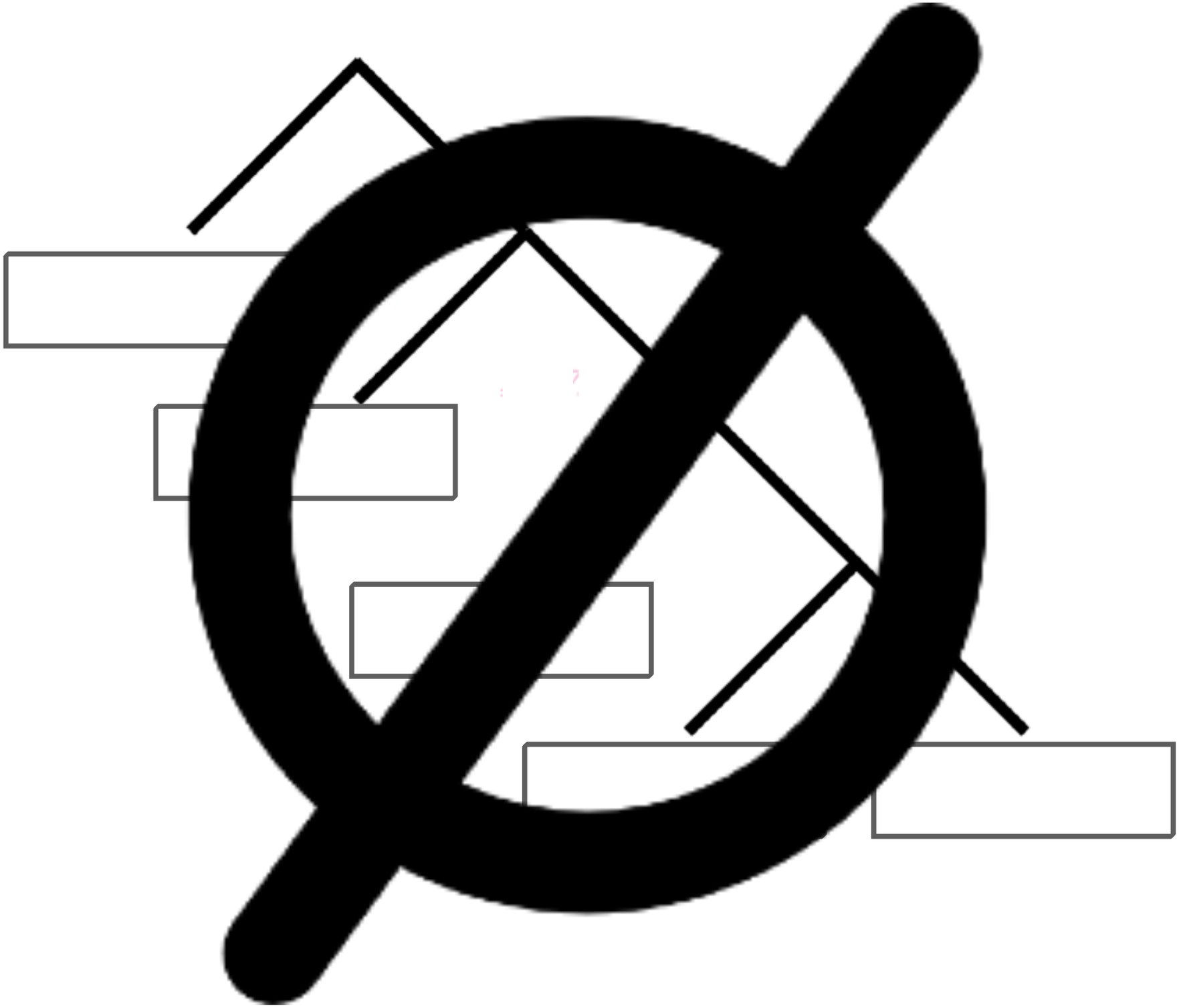
Gold et al., 2018



Brennan & Hale, 2019

Nelson et al., 2017

Ding et al. 2016



| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

44

processing is fundamentally sequential in nature, rather than hierarchical.

### (b) *Evidence from psycholinguistics*

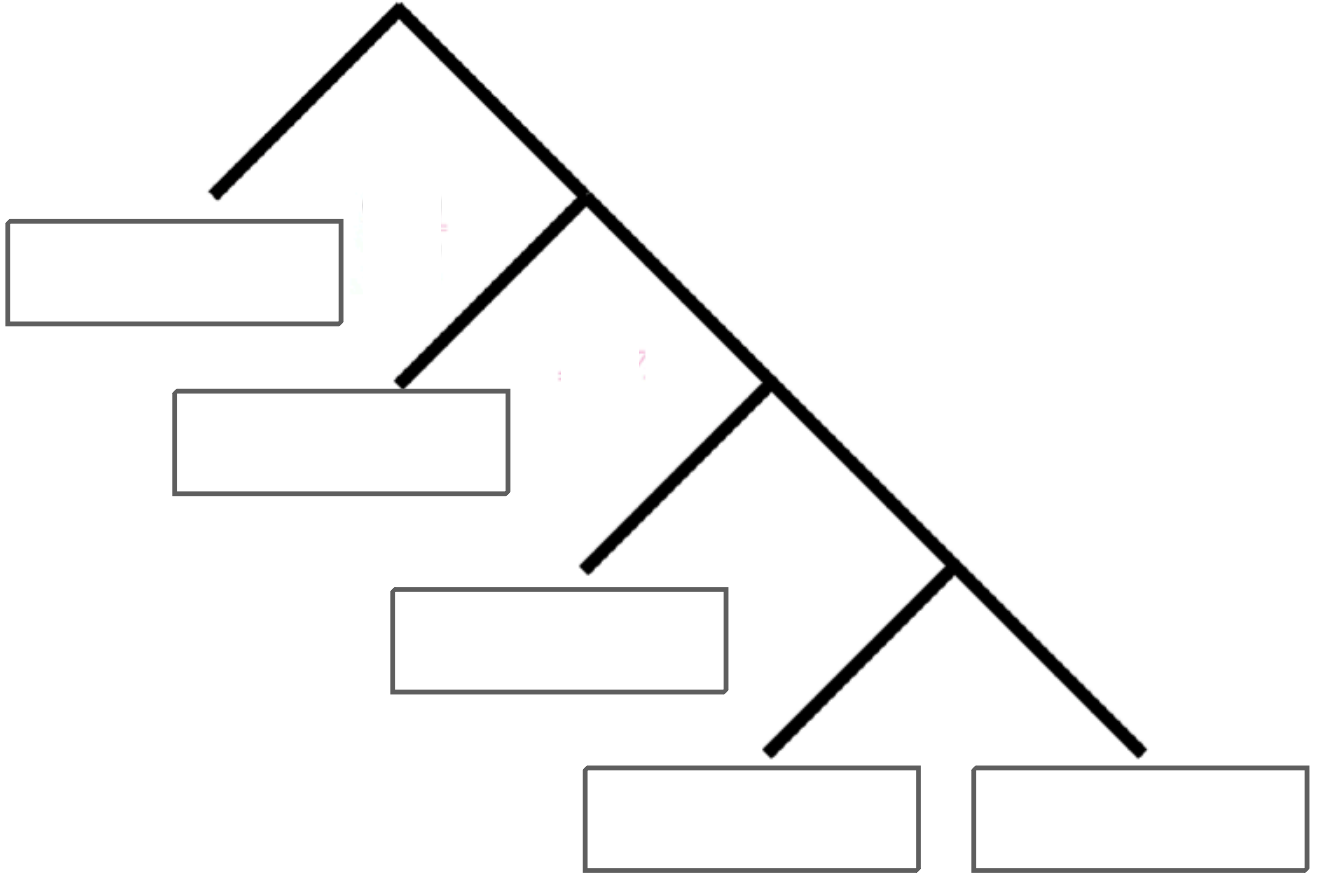
A growing body of behavioural evidence also underlines the importance of sequential structure to language comprehension and production. If a sentence's sequential structure is more important than its hierarchical structure, the linear distance between words in a sentence should matter more than their 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*** . . .

➡ an active role of hierarchical syntactic structures in real time semantic processing

➡ linear distance only plays a marginal role.

# Conclusion



# Conclusion

- ➡ an active role of hierarchical syntactic structures in real time semantic processing
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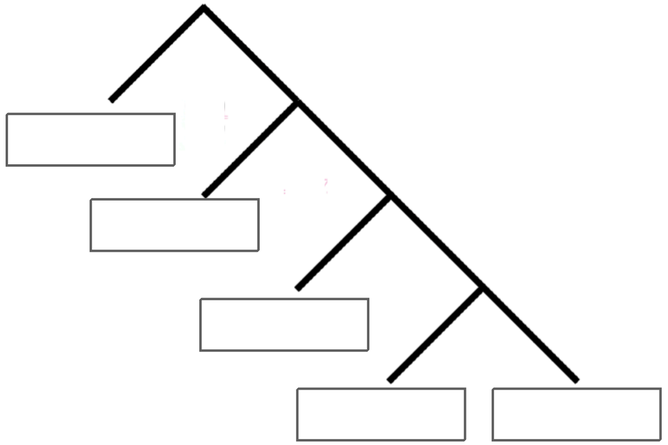
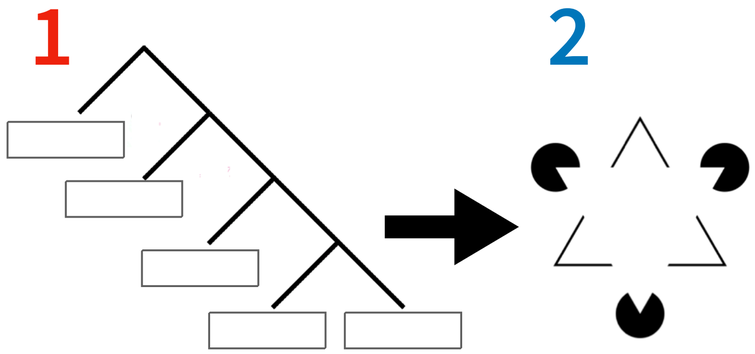


Brennan & Hale, 2019
Nelson et al., 2017
Ding et al. 2016



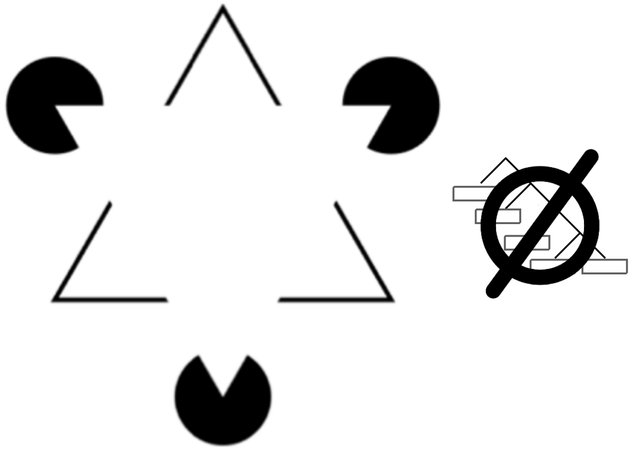

Frank & Christiansen, 2012
Gold et al., 2018

**Extend to semantic processes previous studies presenting correlates of syntactic structures** (Brennan & Hale, 2019, Ding et al. 2016, Nelson et al. 2017)




Frazier & Fodor, 1978 ;
Friederici, 2002

MacDonald et al., 1994;
Hagoort et al., 2003
Townsend & Bever, 2001 ;
Bever & Poeppel, 2010



Ferreira, 2009;
Pylkkänen, 2019