

# An Argument for Symmetric Coordination

## A Replication Study

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### COORDINATION

#### Asymmetric

- **Bouquet/Stanford** (Universal Dependencies):

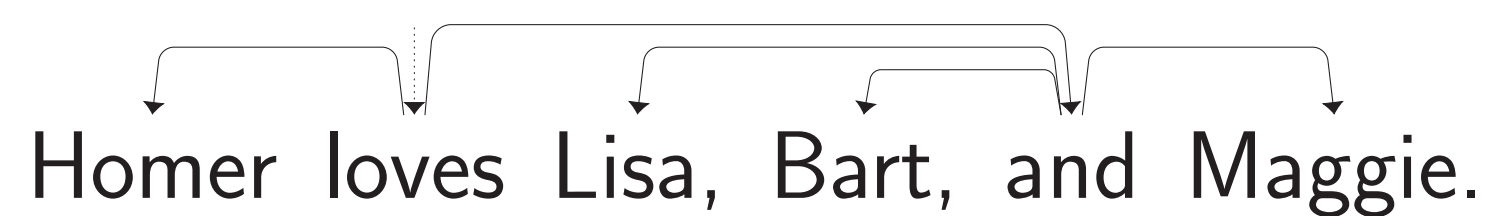


- **Chain/Moscow**:



#### Symmetric

- **Conjunction-headed/Prague**:



- **Multi-headed/London**:



### OUTLINE

#### Aim

Provide an **argument for symmetric structures of coordination** in English.

#### How

- Confirm that **left conjuncts tend to be shorter**.
- Show that **this tendency grows with length difference** between the conjuncts...
- ... **but** only when the governor is on the left or absent...
- **not** when the governor is on the right.
- Assume the principle of **Dependency Length Minimization** (DLM; see below).

#### Data

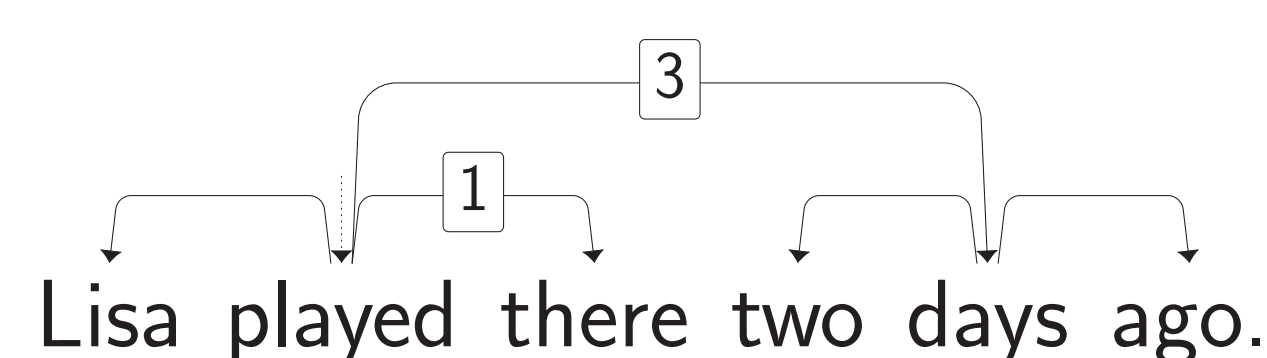
- large parts of **Corpus of Contemporary American English** (COCA)
- automatically **parsed with Stanza**.

#### DLM

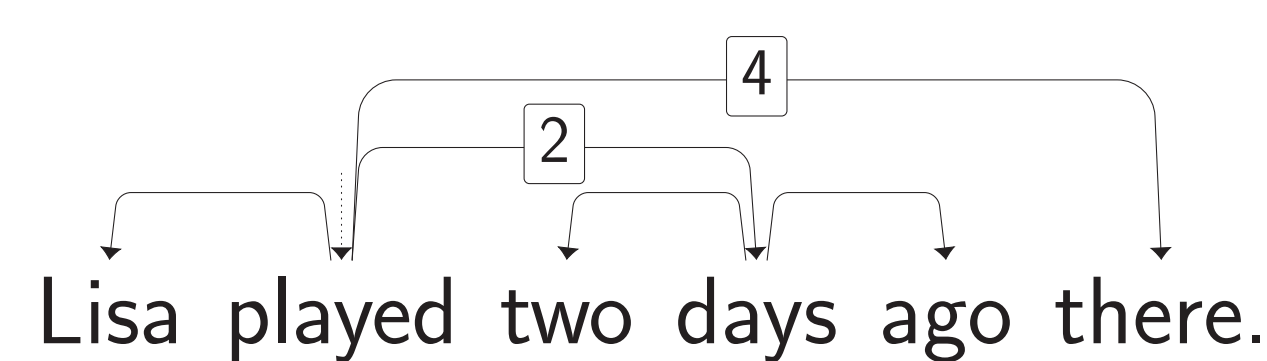
#### Illustration

Natural languages prefer structures which minimize lengths of dependencies.

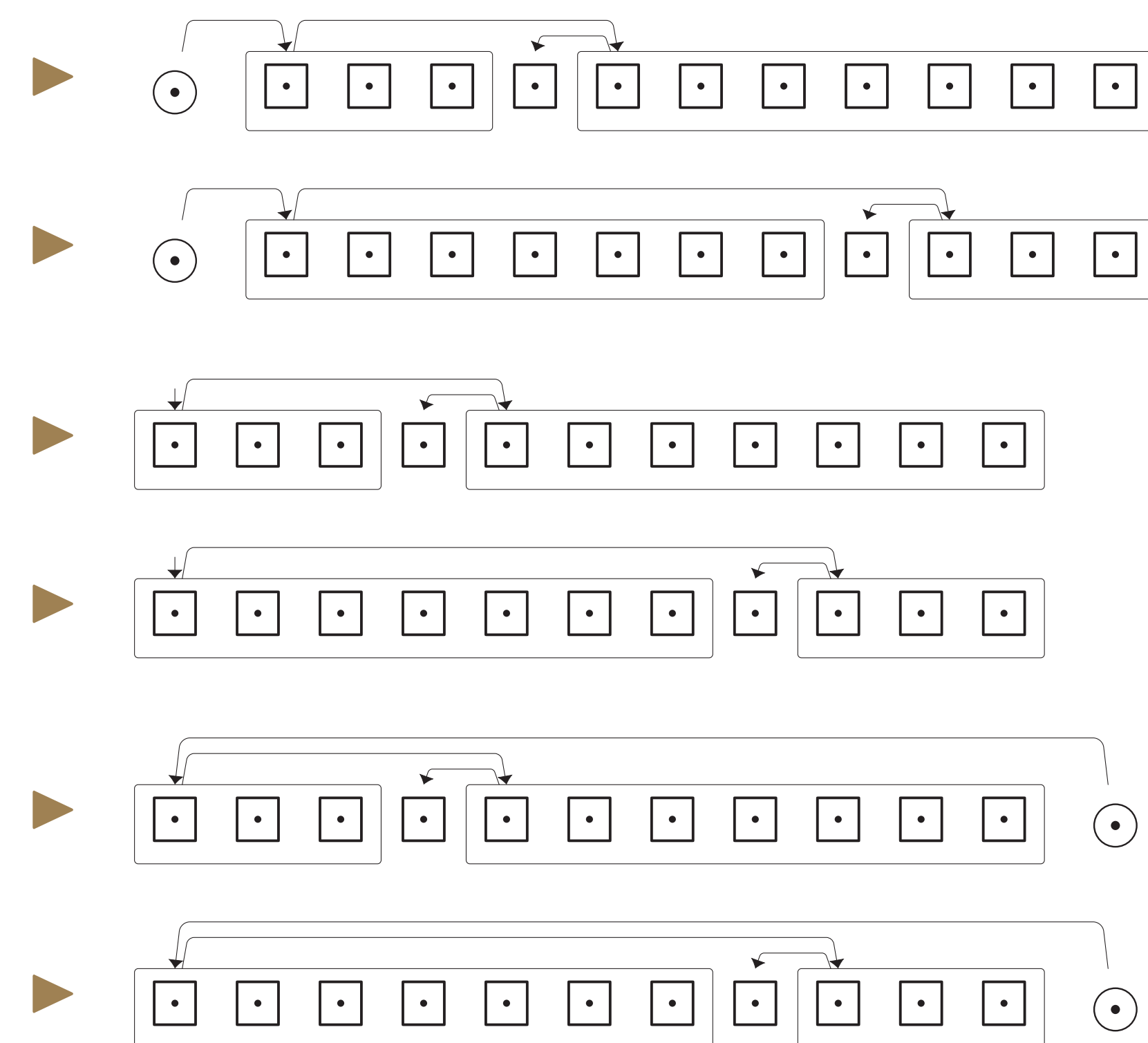
**Better:**



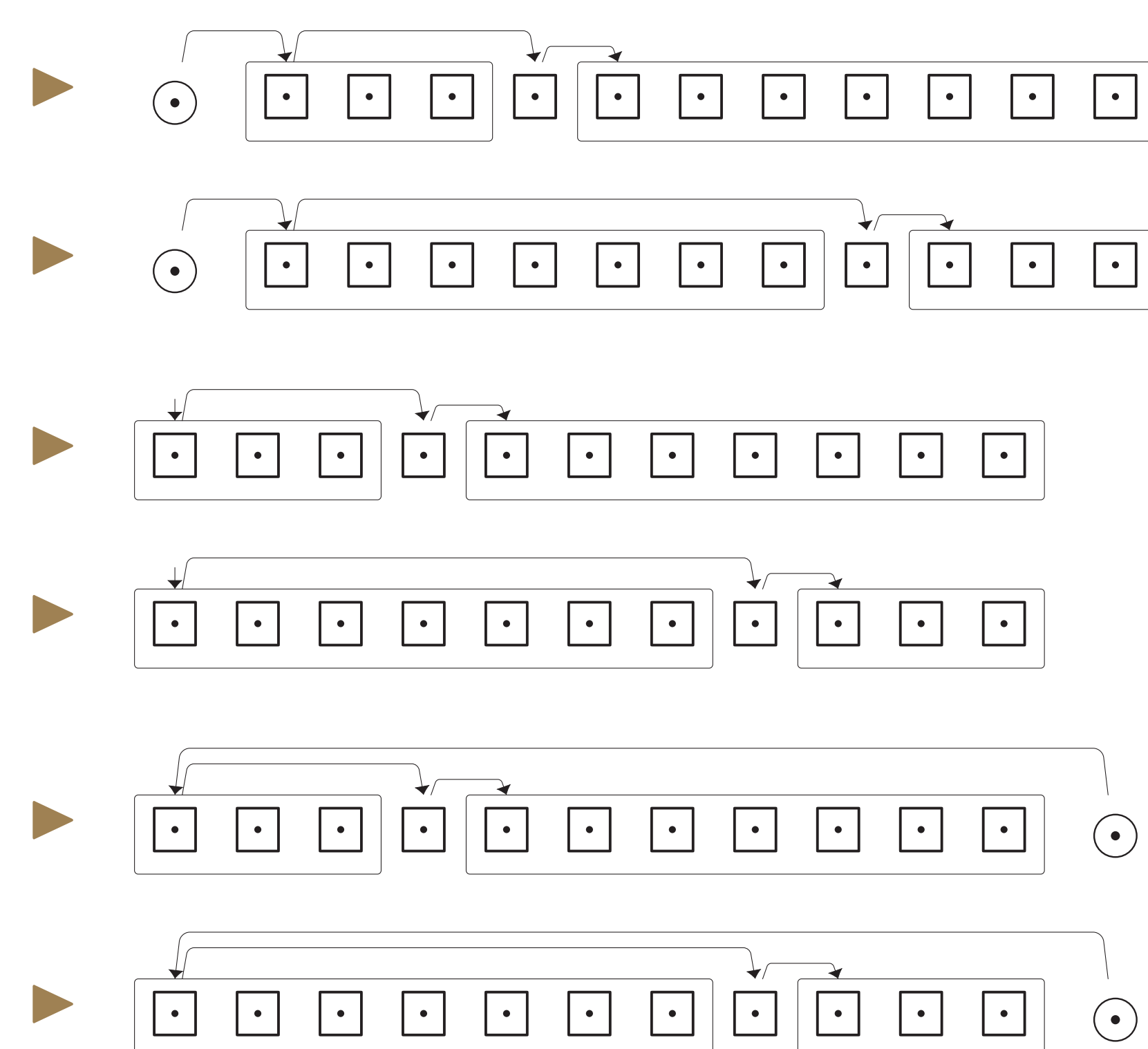
**Worse:**



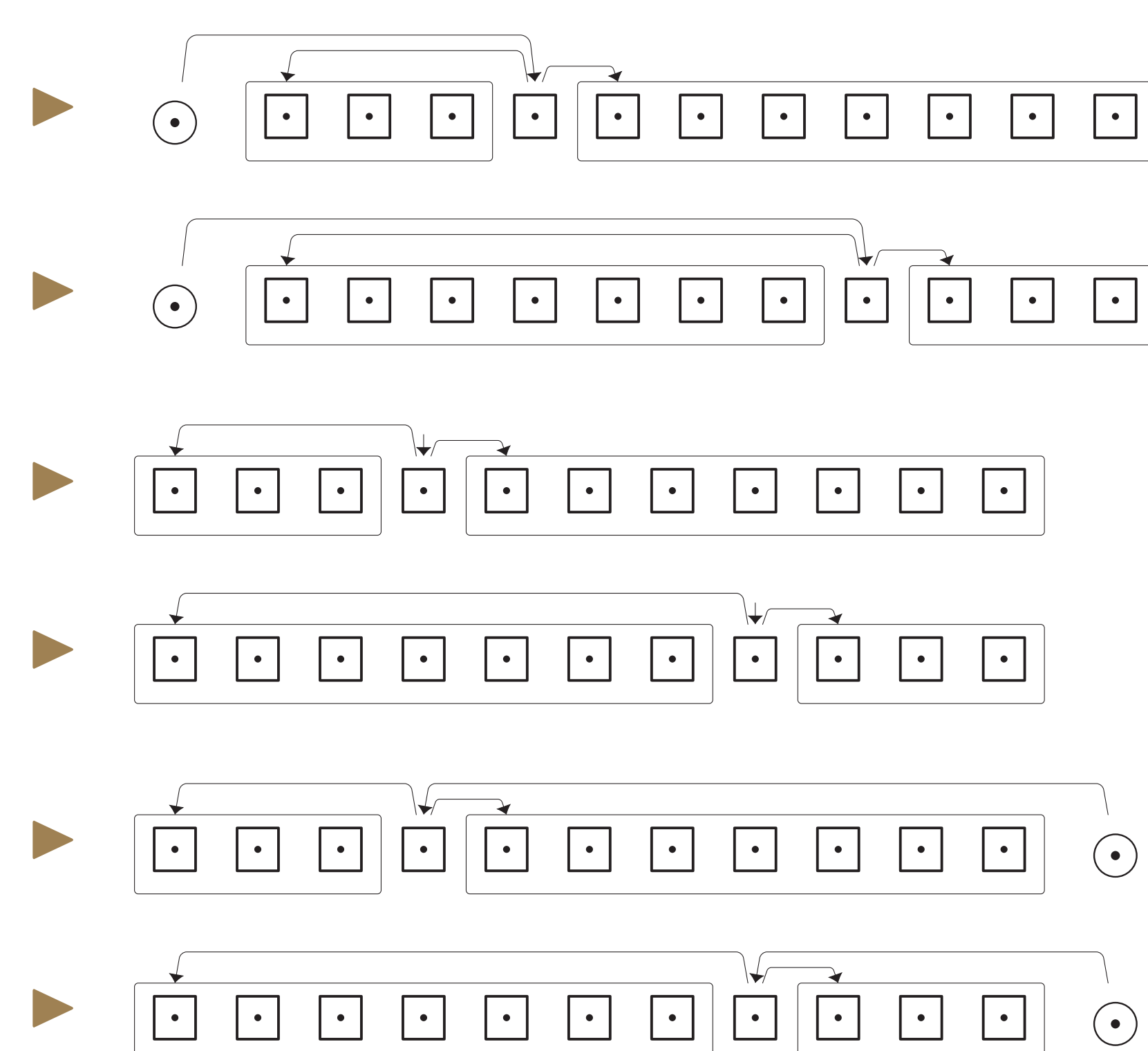
### Bouquet/Stanford



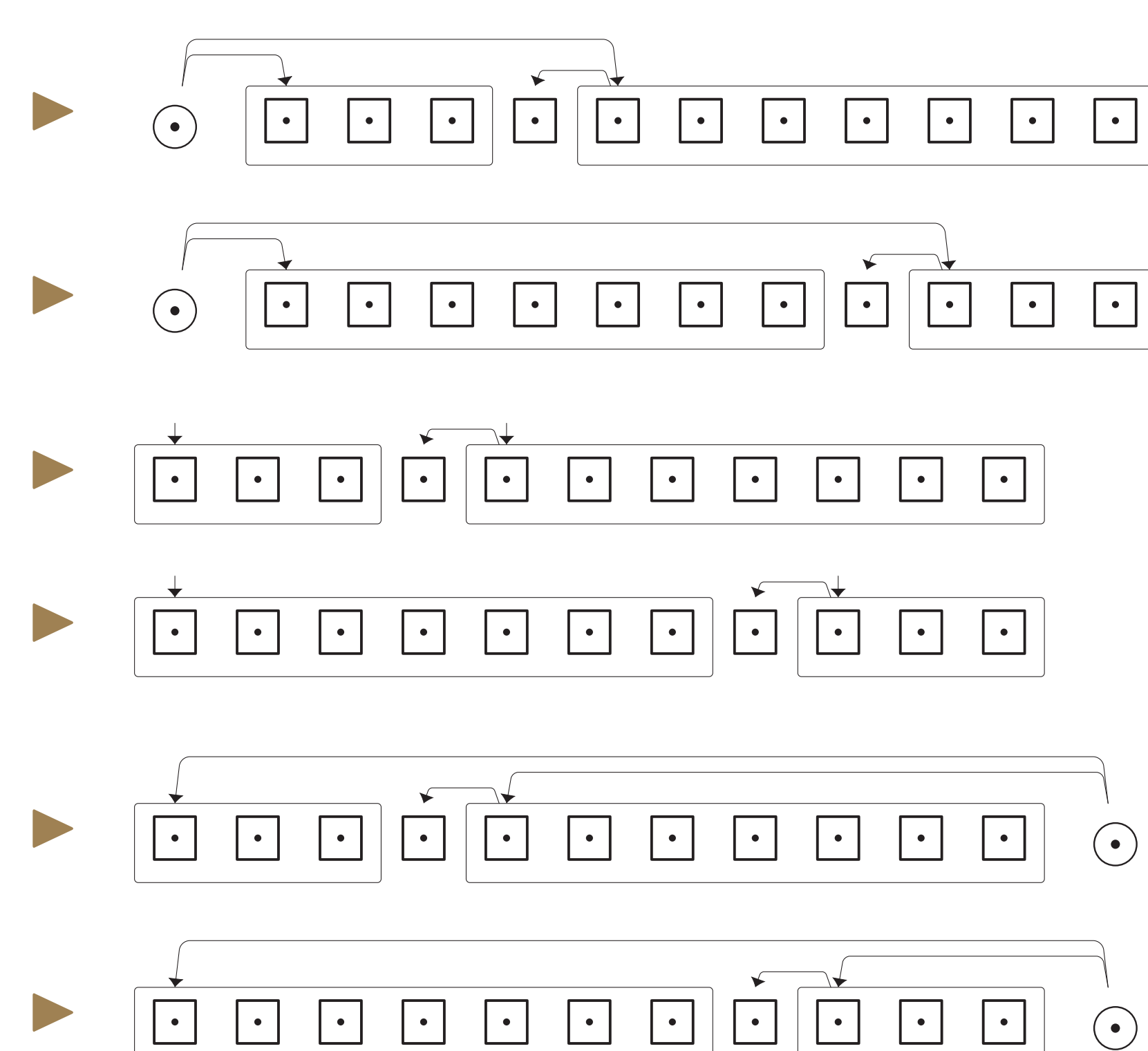
### Chain/Moscow



### Conjunction-headed/Prague

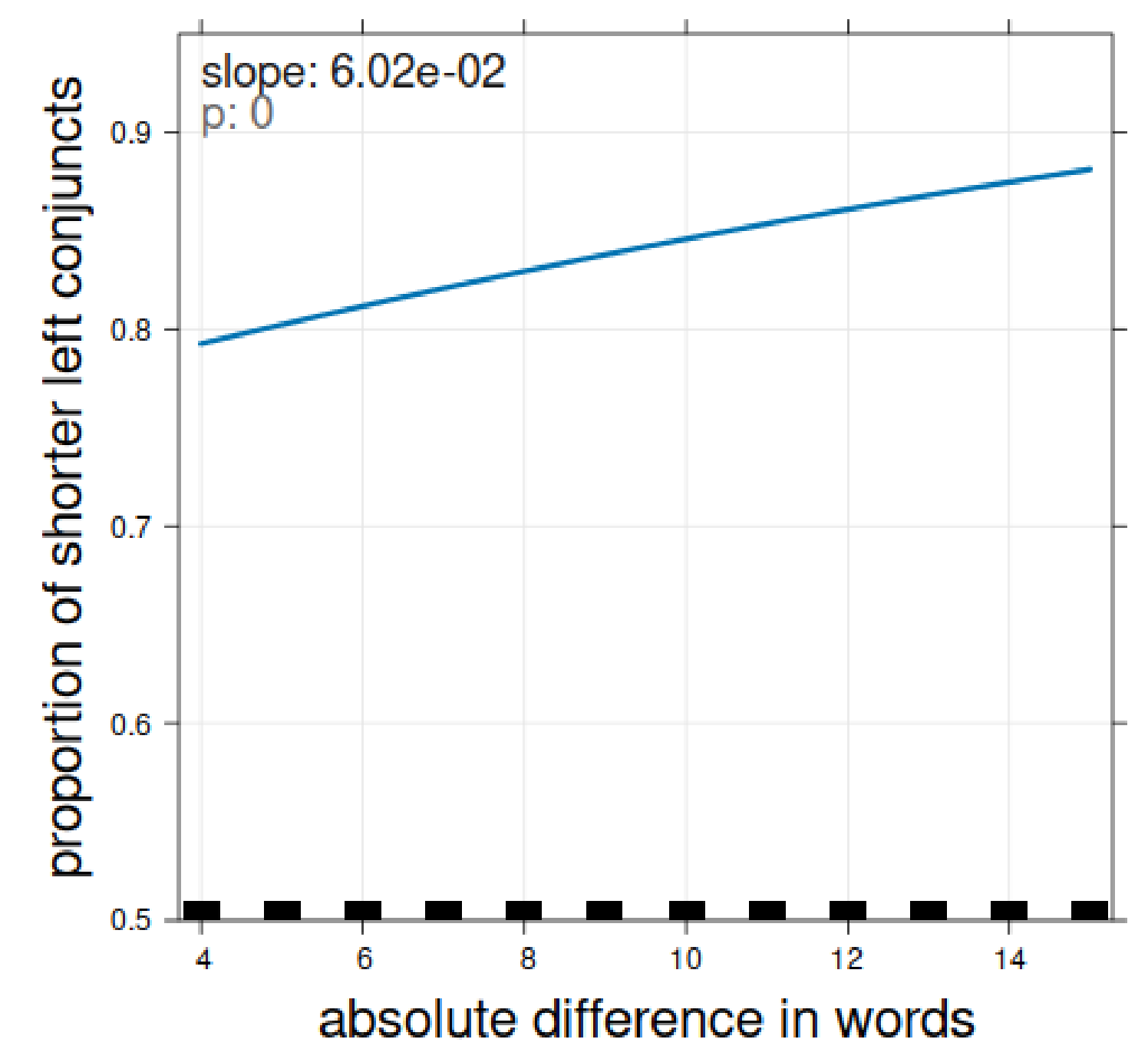


### Multi-headed/London

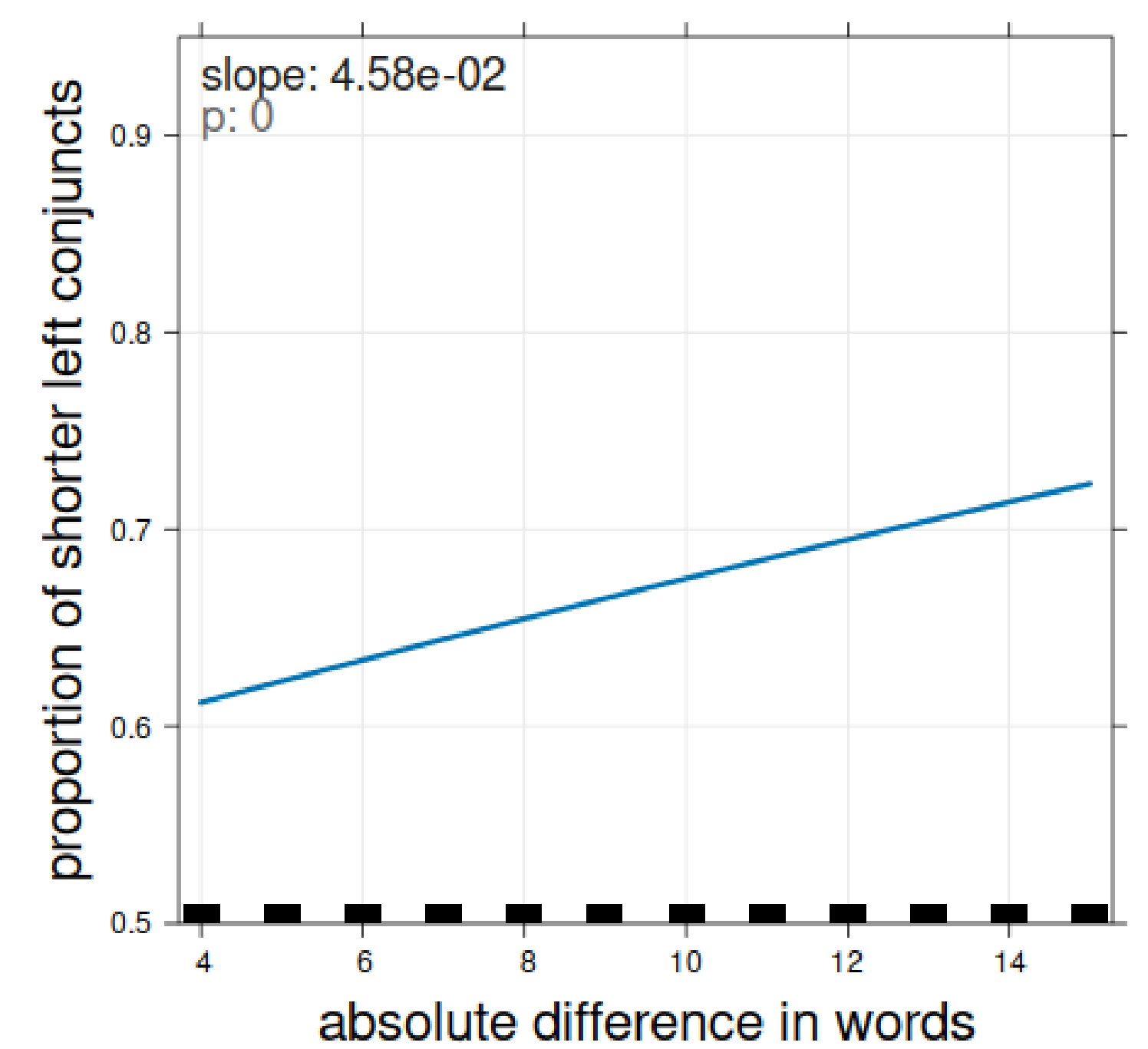


### OBSERVATIONS

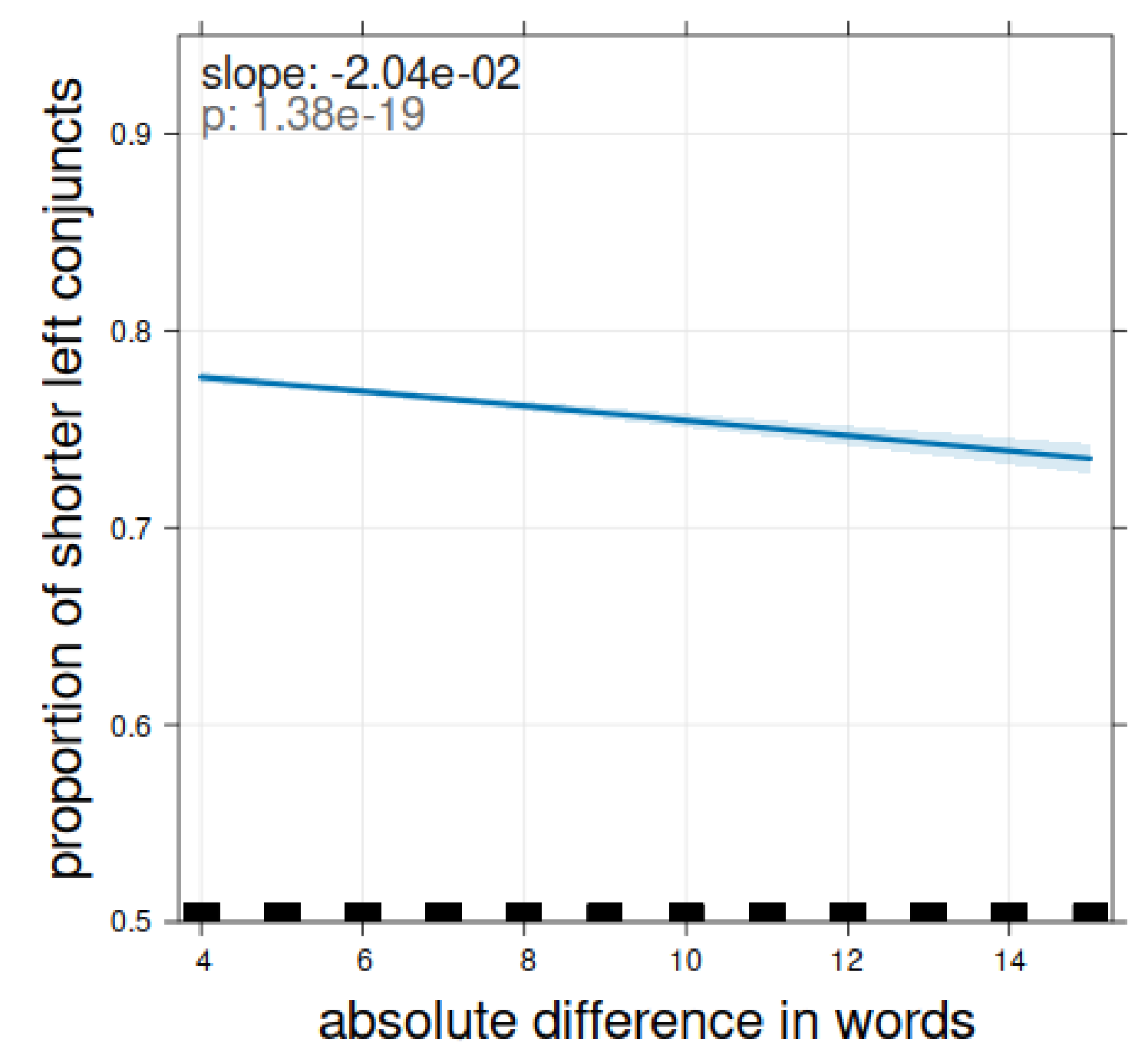
Governor on the LEFT (length in WORDS)



NO governor (length in WORDS)



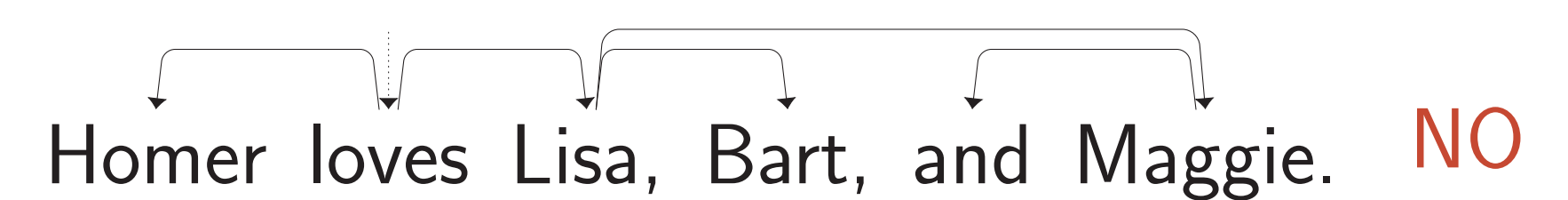
Governor on the RIGHT (length in WORDS)



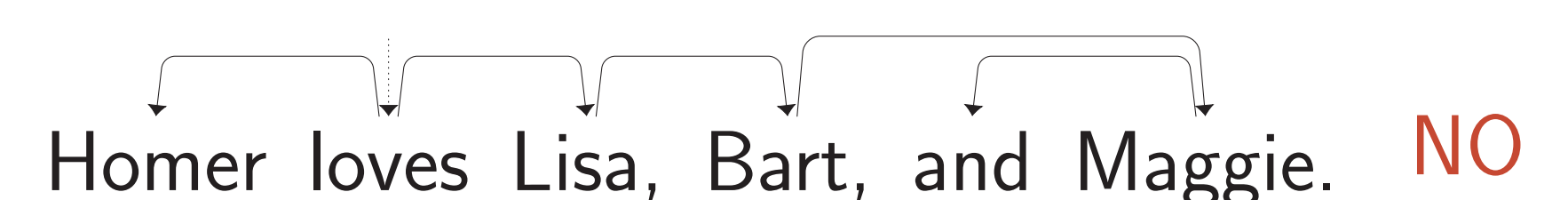
### CONCLUSIONS

#### Asymmetric

- **Bouquet/Stanford** (Universal Dependencies):



- **Chain/Moscow**:



#### Symmetric

- **Conjunction-headed/Prague**:



- **Multi-headed/London**:

