



DFG Deutsche Forschungsgemeinschaft


NOMINAL MODIFICATION

GOETHE UNIVERSITÄT FRANKFURT AM MAIN

How much is too much?

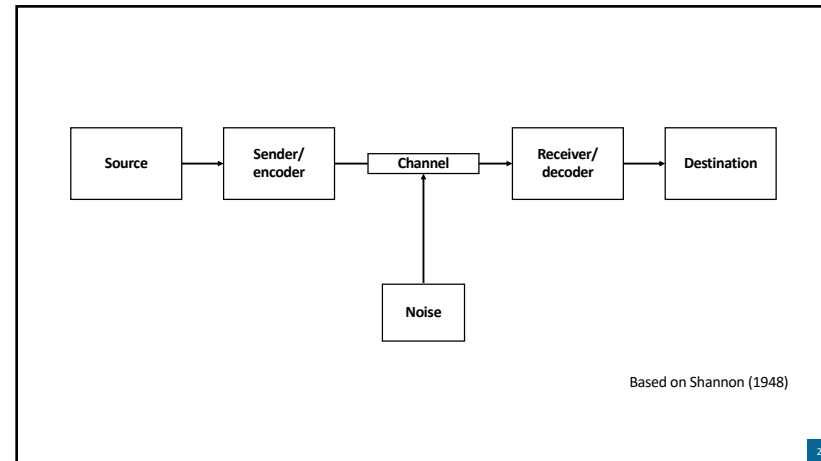
The impact of redundancy on syntax

Giacomo Presotto
Goethe University Frankfurt

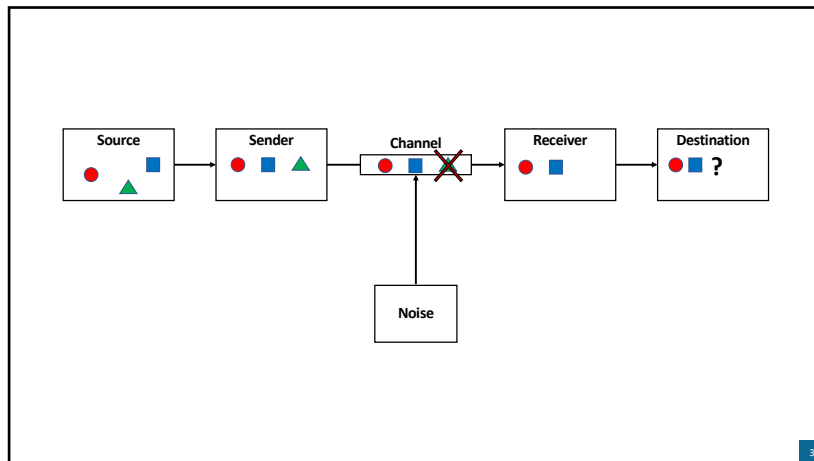


16/03/23 Giacomo Presotto 1

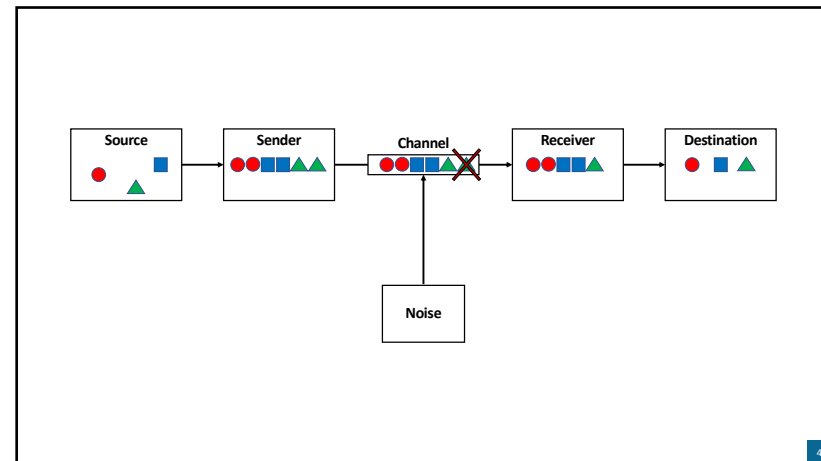
1



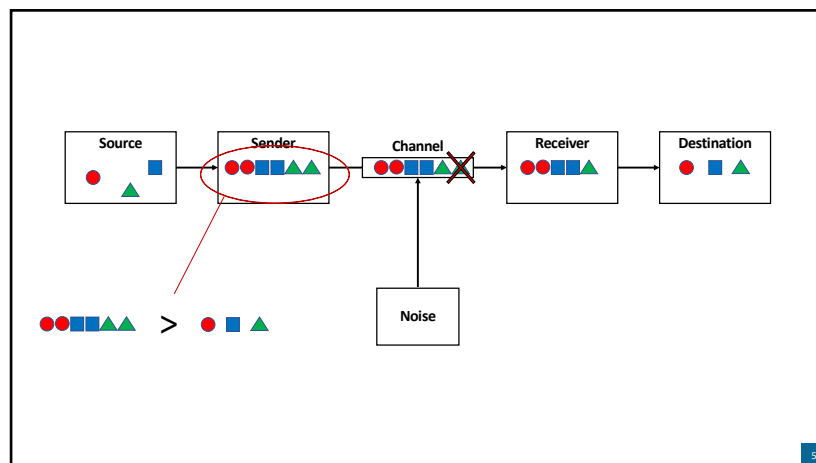
2



3



4



5

There is no consensus on whether redundancy is beneficial or not for human language

- Redundancy ensures robustness against information loss (Levshina 2020 a.o.) and supports learnability (Tal and Arnon 2022 a.o.)
- Redundancy is not economical (Dahl 2004 a.o.) and disadvantageous to learners (Trudgill 2011 a.o.)

These perspectives produce conflicting predictions on the role of redundancy in language acquisition

6

RQ1
Which perspective is better supported by child language acquisition data?

RQ2
What is the impact of deficient information (i.e. opposite of redundancy) on the (child) parser?

To answer the above, I tested Spanish children's comprehension of ORCs to see if and how redundant and deficient disambiguating cues assist their parser

7

ORCs are problematic structures for children (Lau and Tanaka (2021) for a review)

This has been shown for many languages, and Spanish is no exception

Because ORCs are difficult, children are *a fortiori* expected to:
rely on anything that helps the parser, and
avoid anything that weighs on it

In our case, to either prefer or avoid **redundant cues**

Condition	Accuracy
ORC	~0.1
SRC	~0.9

4-6 yo Spanish monolinguals struggle with ORCs

8



A cue is a grammatical property whose presence or absence implies that a given XP is either the subject or the object of a given clause

There is a lot of evidence showing that cues ameliorate the comprehension of ORCs by children

eg

- Gender agreement in Hebrew (Friedmann et al. 2009)
- Case marking in Greek (Guasti et al. 2012)
- ...

9

In this study, I consider two cues

Differential Object Marking (DOM)

[animate; specific] Direct Objects (DOs) are marked with the morpheme “a”

Pedro saluda **al** chico
 Pedro greet.3SG DOM.the boy

El chico **al** que Pedro saluda
 the boy DOM.the that Pedro greet.3SG

Word Order (WO)

In Spanish ORCs, the XP that precedes the verb within the RC must be the subject

El chico **al** que **Pedro** saluda
 the boy DOM.the that Pedro greet.3SG

10

(1) El niño que saluda el futbolista the boy that greet.3sg the footballer <i>The boy that the footballer greets</i>	DOM is absent ⇒ <i>el futbolista</i> must be the subject I dub this <i>in-absentia</i> DOM cue
(2) El niño al que saluda el futbolista the boy the.DOM that greets the footballer <i>The boy that the footballer greets</i>	DOM before <i>que</i> ⇒ the relative head must be the object I dub this <i>in-praesentia</i> DOM cue (or simply DOM)
(3) El niño que el futbolista saluda the boy that the footballer greets <i>The boy that the footballer greets</i>	El futbolista is preverbal ⇒ it must be the subject I dub this Word Order cue (or simply WO)
(4) El niño al que el futbolista saluda the boy the.DOM that the footballer greets <i>The boy that the footballer greets</i>	WO + DOM

11

Experimental conditions	Predictions
1) DOM <i>in-absentia</i> Deficient	If redundancy assists child processing, then 4 is better than 2 and 3
2) DOM } 3) WO } Non - redundant	
4) DOM + WO Redundant	If redundancy obstructs child processing, then 2 and 3 are better than 4
	1 is the most burdensome condition, because <i>in-absentia</i> cues are not robust enough (cf. Biberauer and Roberts 2012)

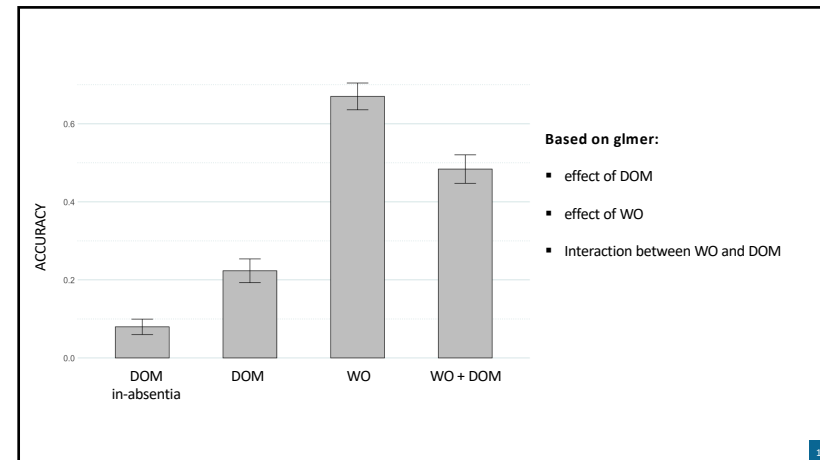
12

Participants: 47 Spanish monolinguals aged 4 - 6

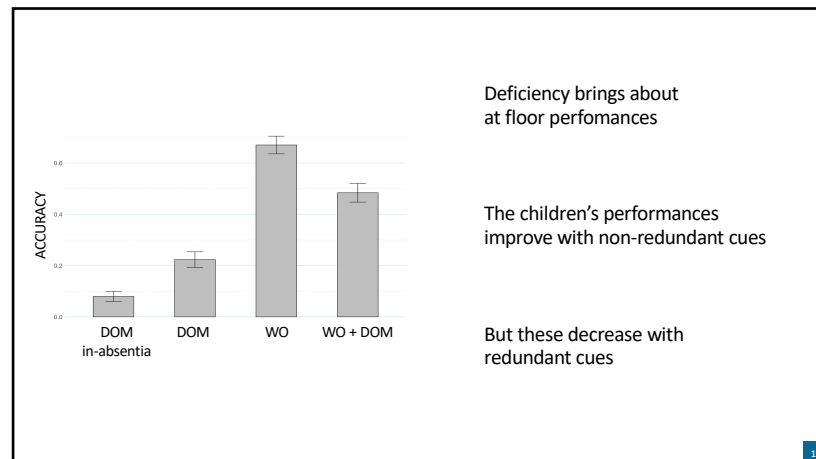
Method: sentence-picture-matching task

© alicelipparini.com

13



14



15

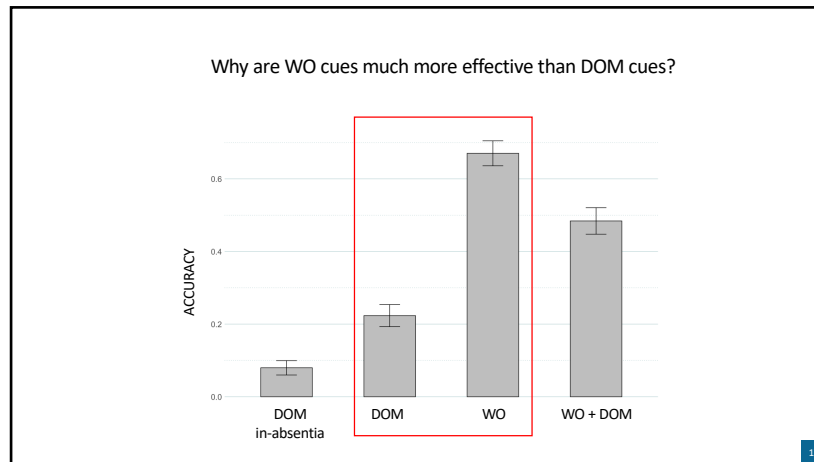
RQ1 + RQ2

What is the role of redundancy/deficiency in child language processing?

The child parser is supported by neither redundant nor deficient cues

Rather, it seems to benefit from a trade-off between "too much" and "too little" information

16



17

GOETHE
UNIVERSITÄT
FRANKFURT AM MAIN

Thank you

Giacomo Presotto
presotto@em.uni-frankfurt.de

DFG Deutsche Forschungsgemeinschaft

MINIMAL MODIFICATION

18