

Learnability and language change: A usage-based approach

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Sources of crosslinguistic frequency asymmetries?

- Constraints on **processing**?
- Constraints on **memory**?
- Constraints on **learnability**?
- Constraints on **articulation**?
- Constraints on **perception**?
- Genetically-determined **Universal Grammar**?
- What about constraints on **social interaction**?

But how do these constraints translate into language structure?

Is there a **direct** mapping between cognition or physiology and language structures, or is this connection mediated somehow, and if so, by what?

An underappreciated aspect of Greenbergian typology

What mediates between cognition/physiology and language structures is **language change**.

An observation

Some languages are more complex (in quantifiable ways) than others...

Phonology

Morphology

Syntax

Lexical structure

(McWhorter 2004; Dahl 2004; Parkvall 2006; Miestamo 2006, 2008; Sinnemäki 2008, 2014; Ehret & Szmrecsanyi 2016, and many more)

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How does this relate to language change?

Lupyan & Dale (2010) found that languages with more speakers tended to have simpler inflectional morphology.

Linked to the number of adult L2 learners, and speculated that this may be because adult L2 learners have a hard time mastering particular types of morphological complexity.

In particular, phenomena like agreement introduce **redundancy** into language.

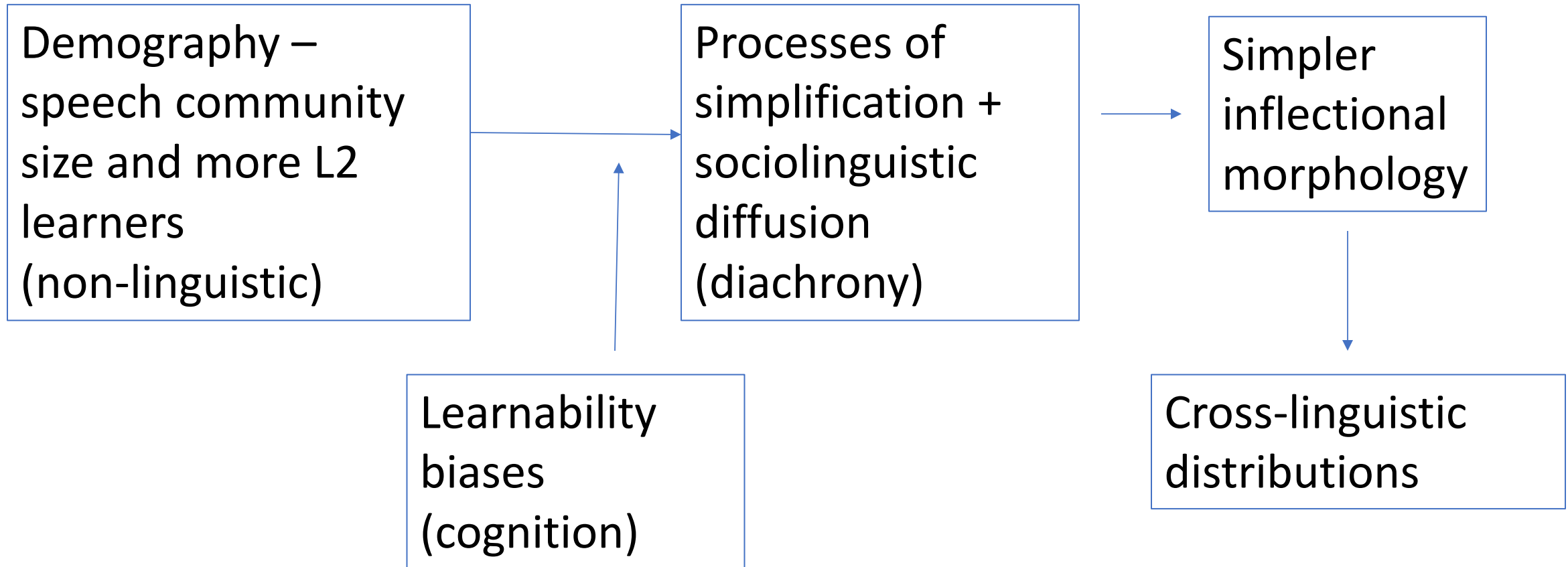
From an information-theoretic point of view, data compression, i.e. the entropy rate of a source, can also be interpreted as a measure of complexity, and in fact is very similar to measures of complexity used by linguists.

How does this relate to learnability?

Lupyan & Dale suggested that redundancy does not benefit adult learners.

But also suggested that it may benefit L1 child learners, since morphological complexity is often retained in smaller communities without many L2 learners.

The causal chain



So...

Is this true?

Does redundancy benefit learning?

Is there a difference between child and adult learners, such that redundancy benefits child learners but not adult learners?