

Elaborating extragrammatical effects on variation

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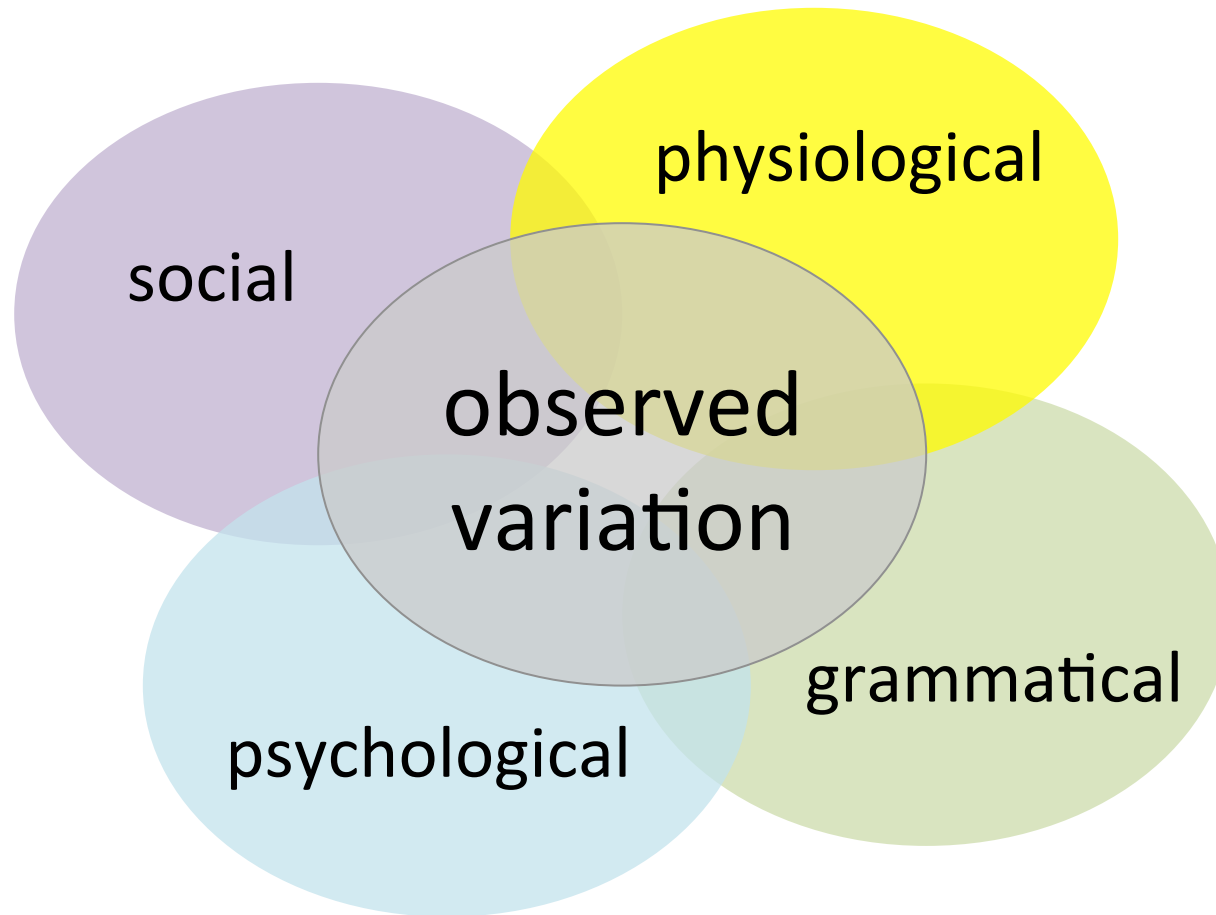
University of Manchester

Symposium: The Locus of Linguistic Variation

<http://lignos.org/locus>

LSA 2014 Annual Meeting – Minneapolis – Jan 3

Introduction



Our proposal

Surface variation not monolithic

Two cross-cutting distinctions:

- **Early** versus **late** loci of variation
- **Internal** versus **extragrammatical** conditioning of variability

Outline

1. **Early** vs. **late** loci of variation
2. **Internal** vs. **extragrammatical** conditioning
3. Putting it together
4. Future directions

Outline

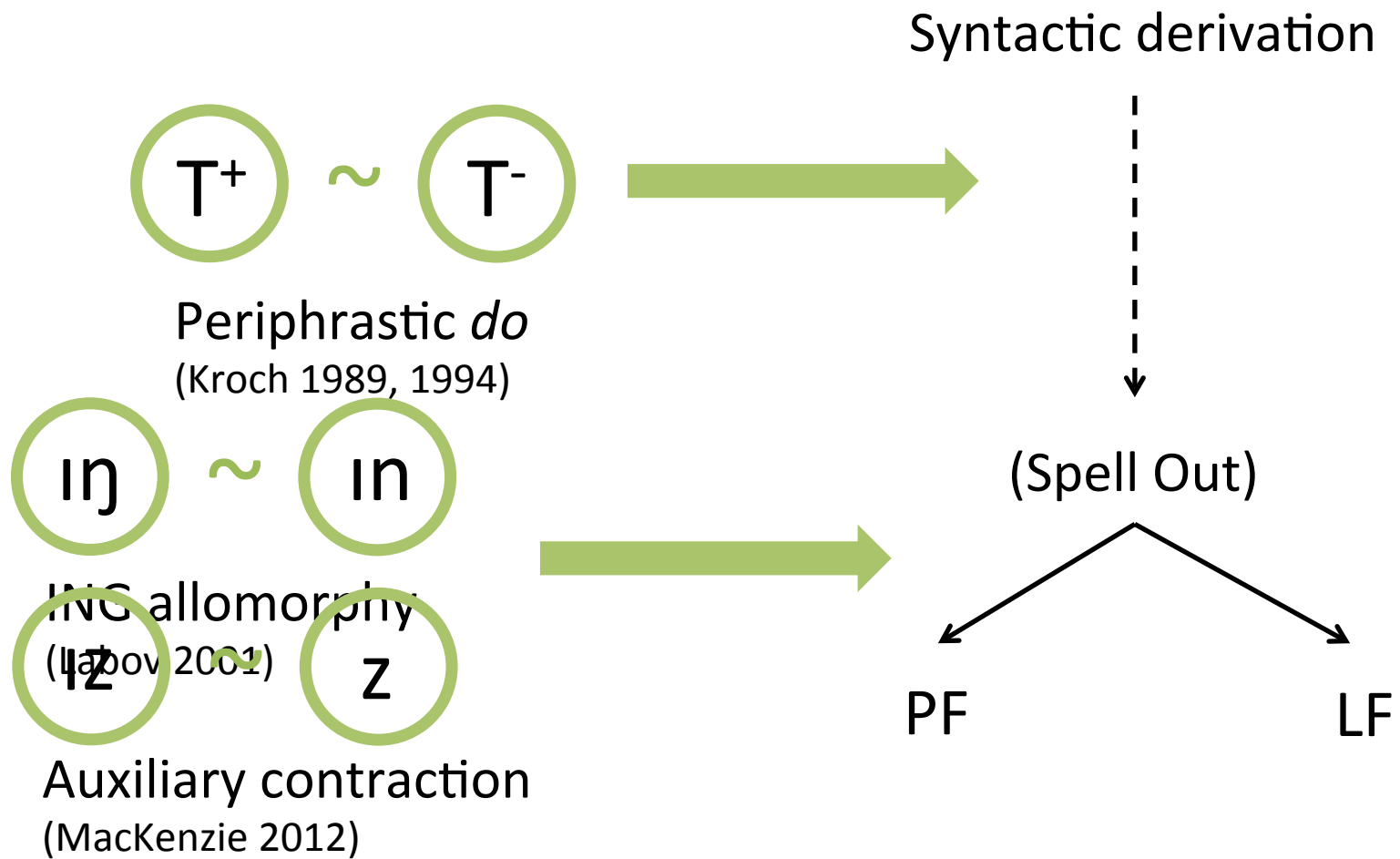
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Early loci of variation

Variation in selection of linguistic units

- Choice between functional heads
- Choice between stored phonological forms

Early loci of variation



Late loci of variation

Manipulation of linguistic units selected earlier

- Discrete phonological processes
 - t,d-deletion (Guy 1980)
 - h-lenition (MacKenzie 2012)
 - r-sandhi (Foulkes 1997)
 - schwa-epenthesis (MacKenzie & Yang 2013)
- Gradient phonetic implementation
 - vowel target (Fruehwald 2013)
 - vowel trajectory (Jacewicz, Fox & Salmons 2011)
 - pitch (Levon 2007)
 - coarticulation (Zellou 2012)

Late loci of variation

- variable coronal stop deletion

/ læst nait/

- variation in pitch

[həto^υ]

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Internal vs. extragrammatical

MacKenzie & Tamminga 2013:

Internal factors attested in categorical alternations

Extragrammatical factors could not trigger a categorical alternation

- Style
- Priming
- Production planning
- Speech rate

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Intersection of loci & conditioning

Variation with both early and late loci can be internally and extragrammatically conditioned

But: not all extragrammatical factors affect early- and late-loci variables equally

Consider predictions for differential sensitivity to extragrammatical factors

Style

Sensitivity to elements of the social context

- Social setting
- Interlocuters
- Topic
- Stance-taking
- Audience design
- Politeness

Speaker aware of stylistic demands prior to and during production

↳ Style may affect **early** or **late** loci

Production planning

Linguistic elements (syntactic nodes, prosodic words) planned in short-term memory buffer

Limits of short-term memory impose constraints on application of linguistic operations

Planning units determined early in a derivation



Planning may affect **early** or **late** loci

Intersection of loci & conditioning

Differential sensitivity of early- and late-loci variables to extragrammatical factors

Style

- no obvious divergence

Planning

- no obvious divergence

Priming

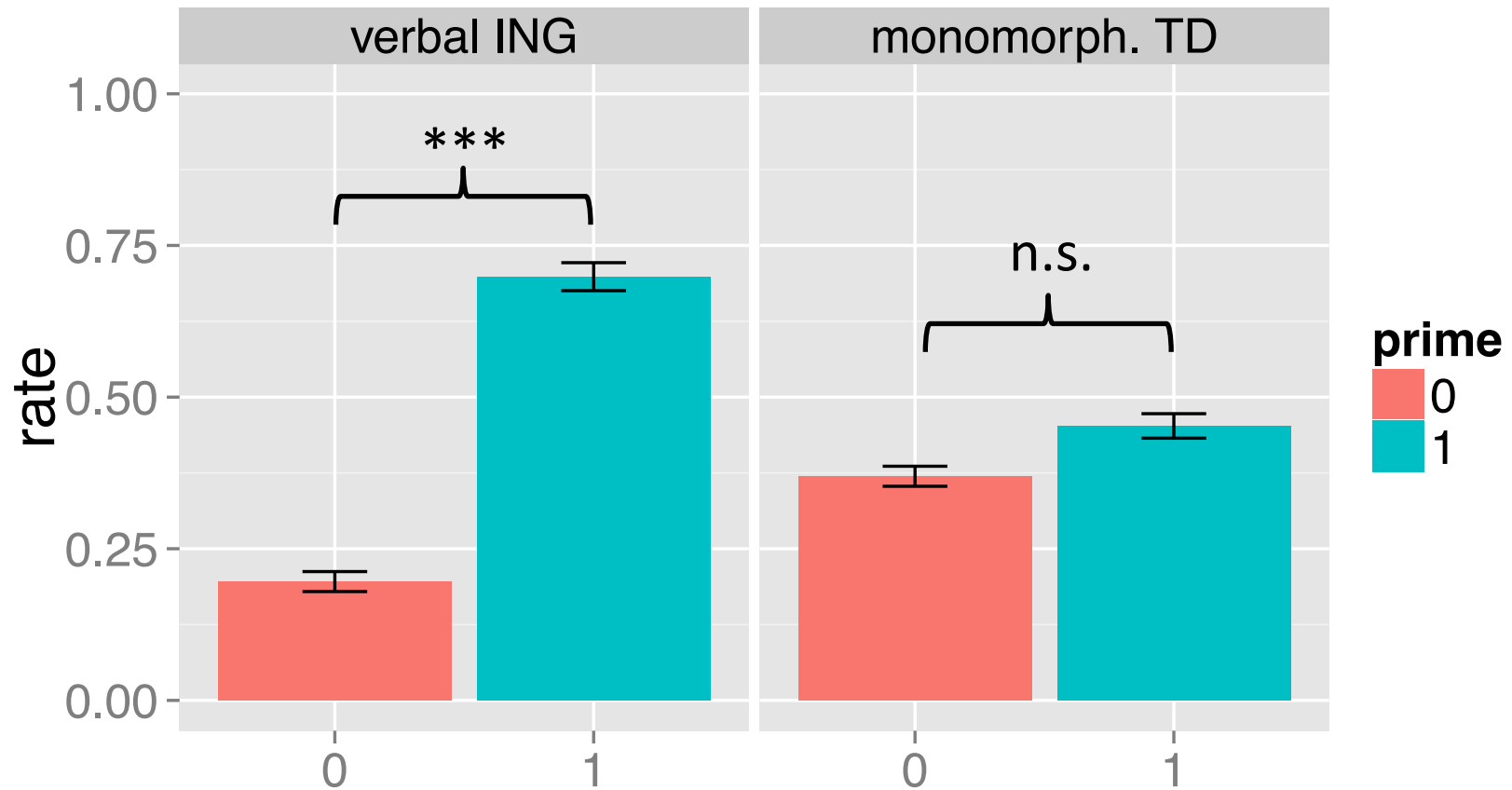
Tendency towards repetition of recently-processed linguistic forms

May be due to activation or implicit learning

Priming requires stored objects to host activation

 Priming should only affect **early** loci

Priming



Effect of previous token on (ING) and /t,d/-deletion

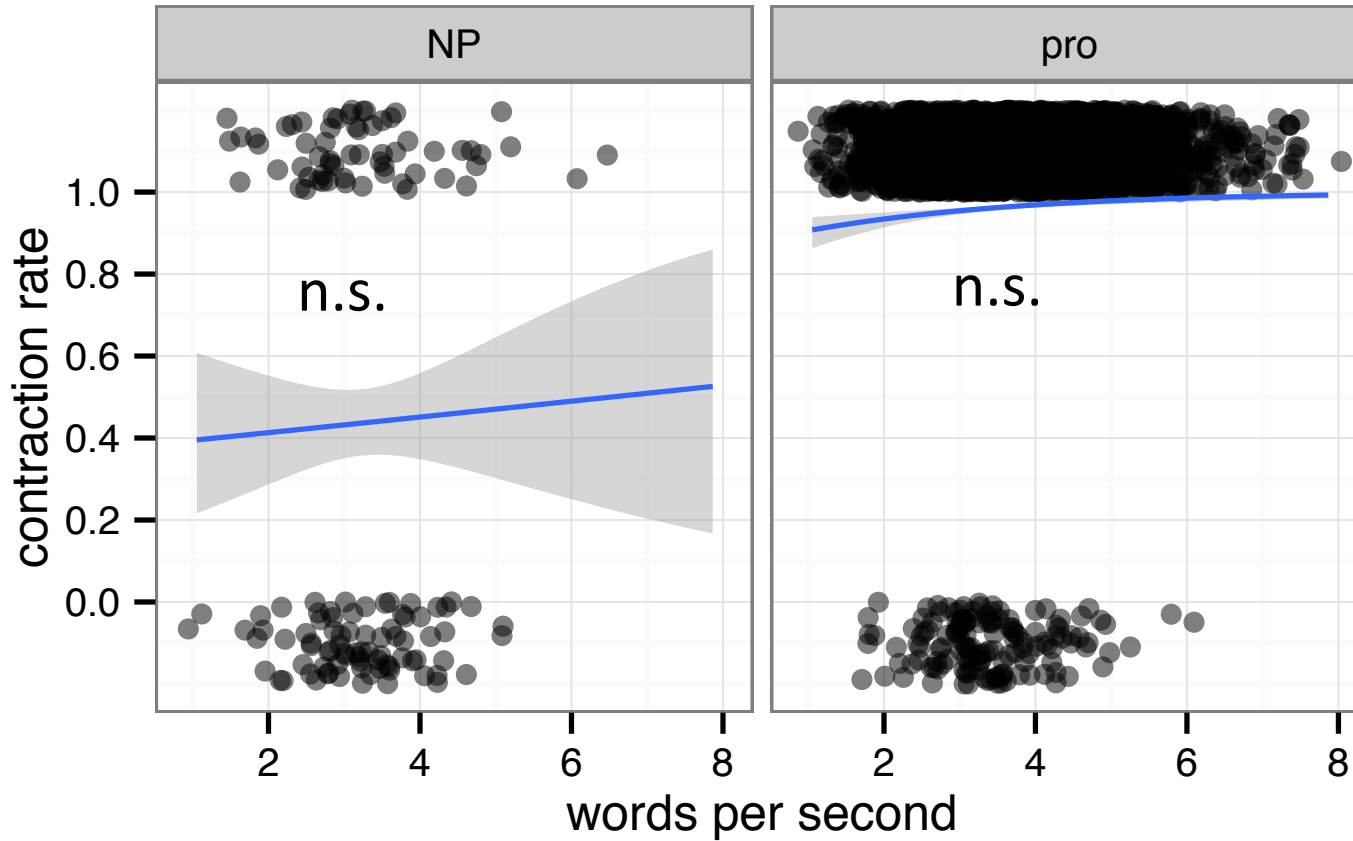
Speech rate

The speed at which speech is produced implicates the physical movement of the articulators

Speech rate comes into play in implementation and articulation

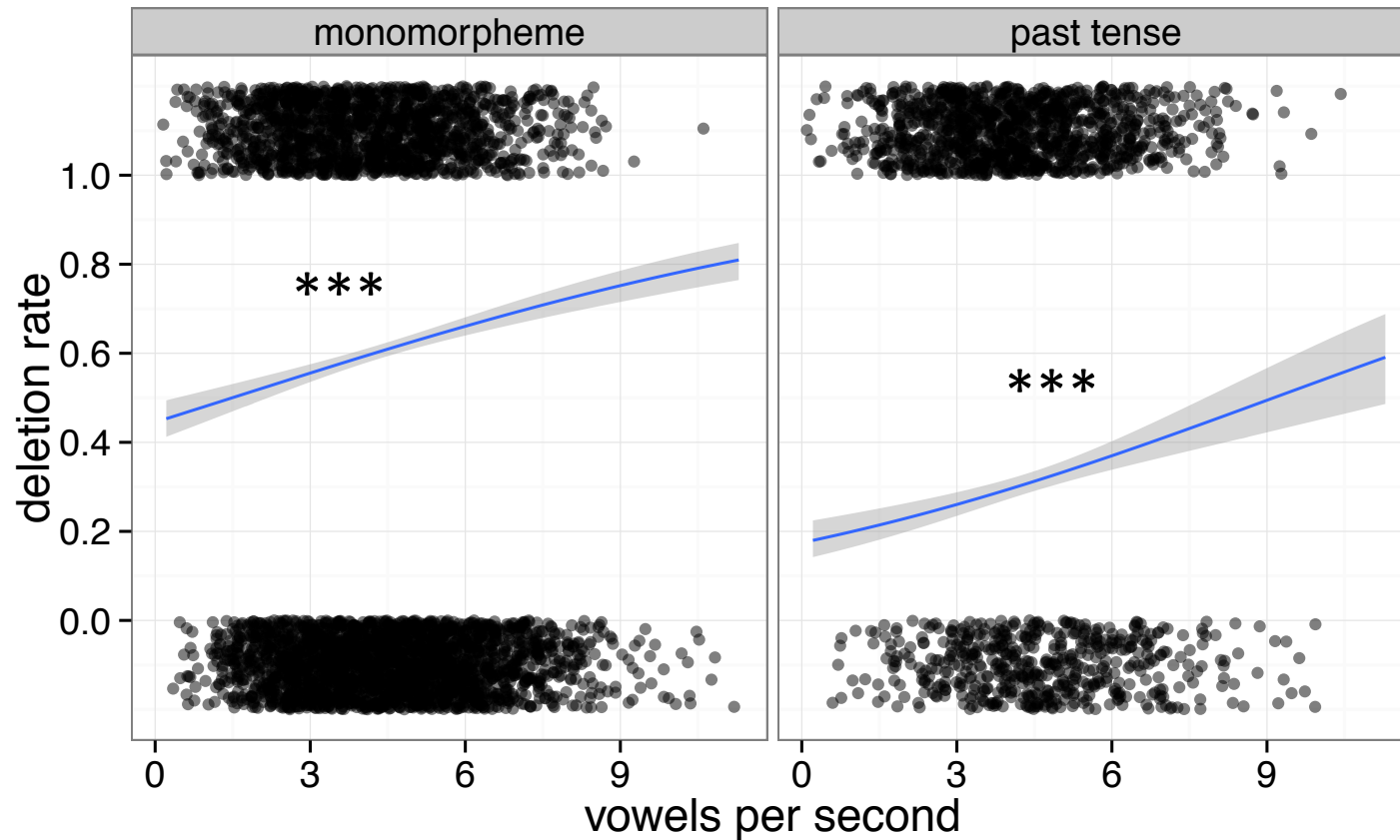
 Rate should only affect **late** loci

Speech rate







Effect of speech rate on auxiliary contraction

Speech rate



Effect of speech rate on coronal stop deletion

Priming vs. speech rate

Priming	Speech rate
 verbal -ɪŋ ~ -ɪn <ul style="list-style-type: none">• allomorphy• early locus	 aux. contraction <ul style="list-style-type: none">• allomorphy• early locus
 /t,d/-deletion <ul style="list-style-type: none">• lenition process• late locus	 /t,d/-deletion <ul style="list-style-type: none">• lenition process• late locus

Intersection of loci & conditioning

Differential sensitivity of early- and late-loci variables to extragrammatical factors

Style

- no obvious divergence

Planning

- no obvious divergence

Intersection of loci & conditioning

Differential sensitivity of early- and late-loci variables to extragrammatical factors

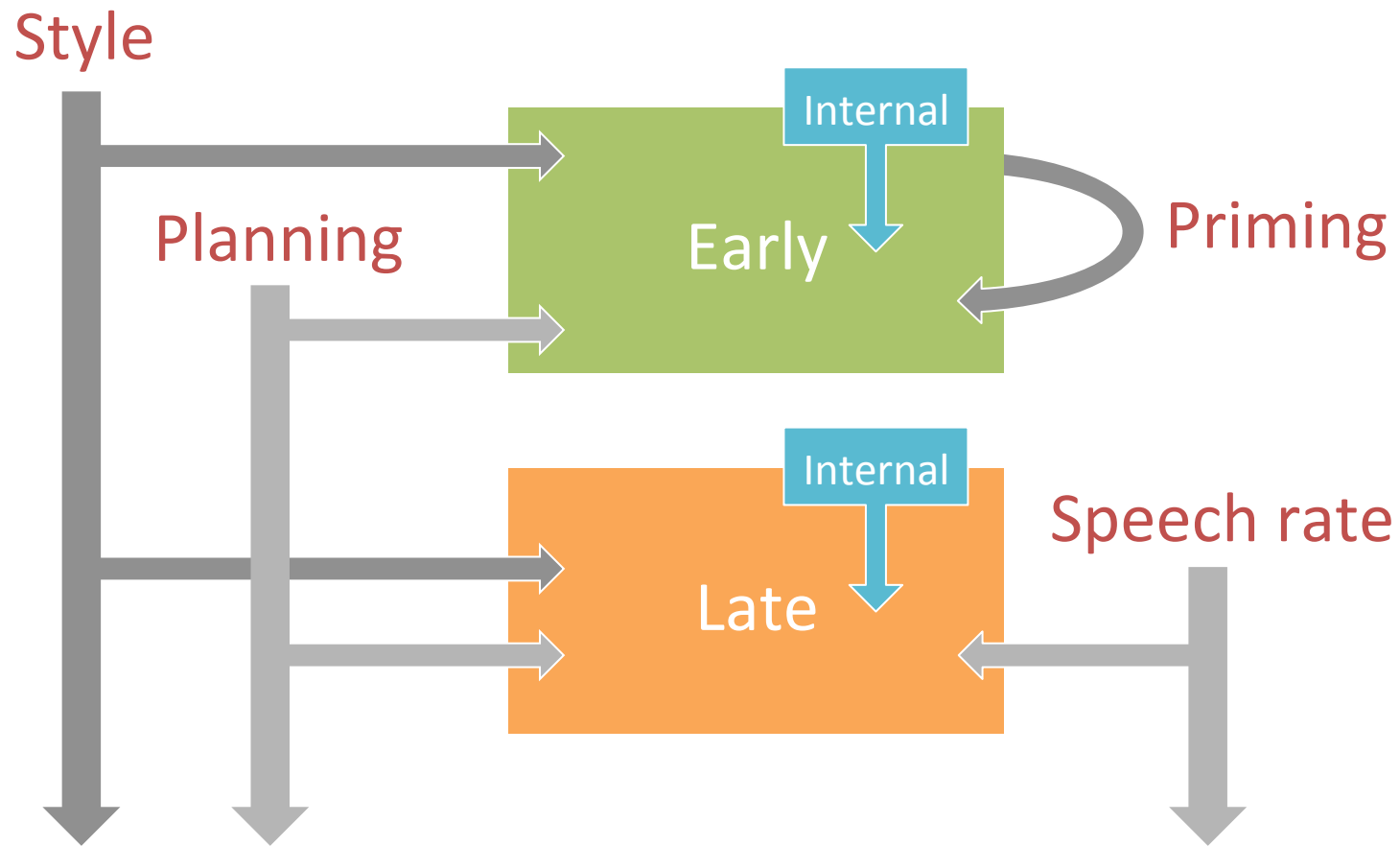
Priming

- affects only early-loci variables

Speech rate

- affects only late-loci variables

Summary



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What's next?

This framework sets up a range of predictions:

- Effects within individuals?
- Universality vs. learnedness?
- Internal/extragrammatical interactions?
- Early-internal vs late-internal dependencies?

Thank you!

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Feel free to get in touch...

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