

The Diachronical

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Hear ye, hear ye! Final devoicing reduced word-form ambiguity

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Vienna. Linguists claim to have found a resolution for the phenomenon of final devoicing in past tense forms, a diachronic process which is well described but has so far remained unexplained.

The shape phenomenon

Irregular DEVOICING of PT /d/ in monosyllables after Middle English:

brennede > *burnt*
meanede > *meant*
y-spylde > *spilt*

The “wishful thought”

Wordform shapes signal the MORPHOLOGICAL STRUCTURE of an item:

Final /nt/ ↔ complexity

Final /nd/ ↔ lexicality

Historical background

After SCHWA LOSS both simple and complex words came to end in SON+/d/ and SON+/t/ sequences:

/ld/ in *fold* or *drill-ed*
 /nt/ in *mint* or *burn-t*

Unfortunate development: Middle English schwa loss creates ambiguity

1. ONE FORM → MANY FUNCTIONS: one cluster type contains simple and complex instances, e.g. /nd/ in *send* and *sign-ed*

2. ONE FUNCTION → MANY FORMS: past tense may be expressed by final /nd/ or /nt/, e.g. *moan-ed* or *mean-*

Researchers assume that many first guesses would lead up garden paths if the language did not react.

On measuring the ambiguity of a sign

Researchers make use of the so-called PHI COEFFICIENT of a 2-by-2 contingency table to operationalize the ambiguity of a sign. **The smaller the strength of association between signifiants and signifiés, the larger ambiguity, they claim.**

	complex	simple	sum	$\phi = \frac{n_{11}n_{22} - n_{12}n_{21}}{\sqrt{n_{1\circ}n_{2\circ}n_{\circ 1}n_{\circ 2}}}$ ambiguity = 1 - φ
/Ct/	n_{11}	n_{12}	$n_{1\circ}$	
/Cd/	n_{21}	n_{22}	$n_{2\circ}$	
sum	$n_{\circ 1}$	$n_{\circ 2}$	n	

The linguistic *oraculum*: what do we gain from looking at virtual language stages?

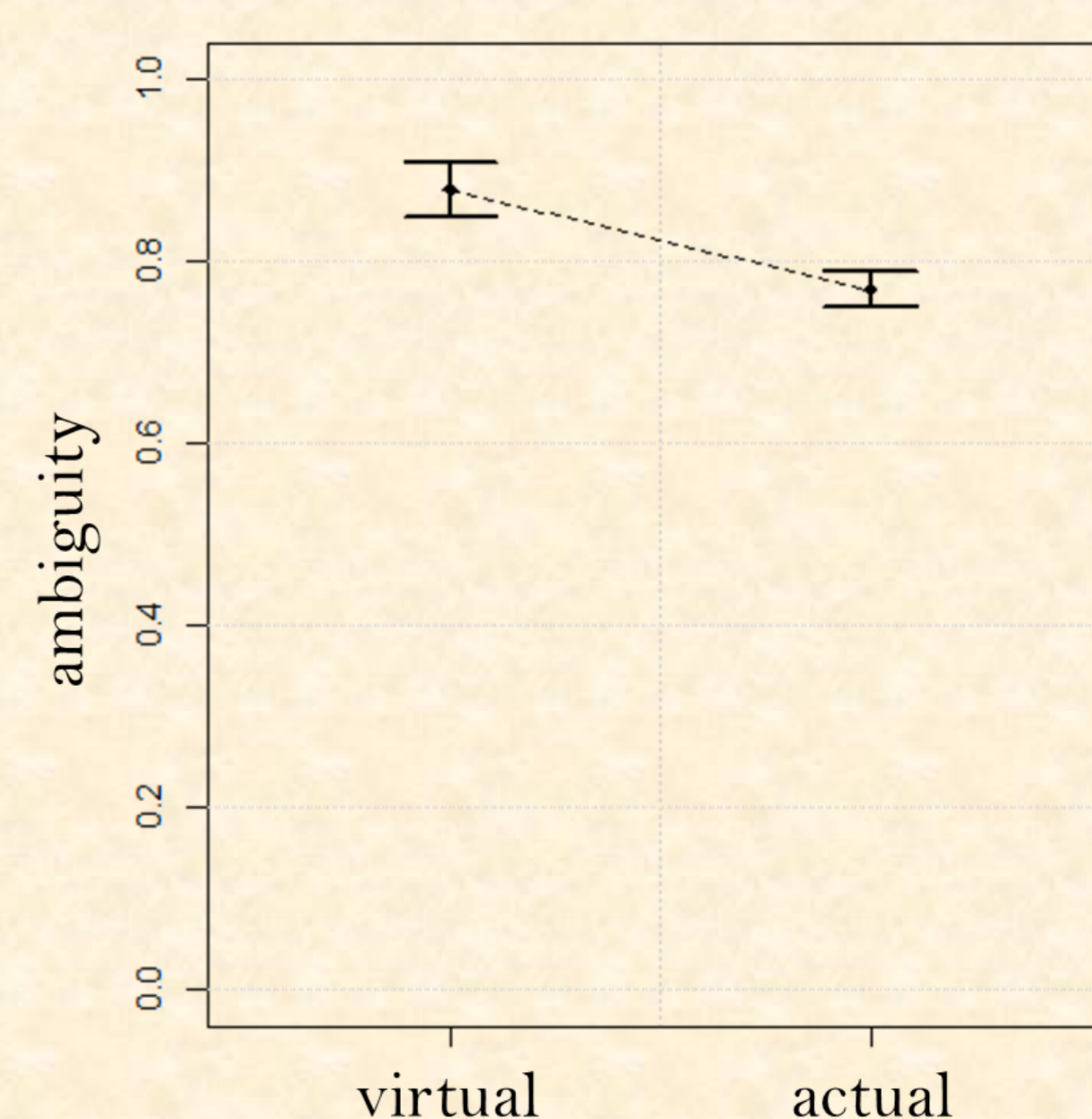
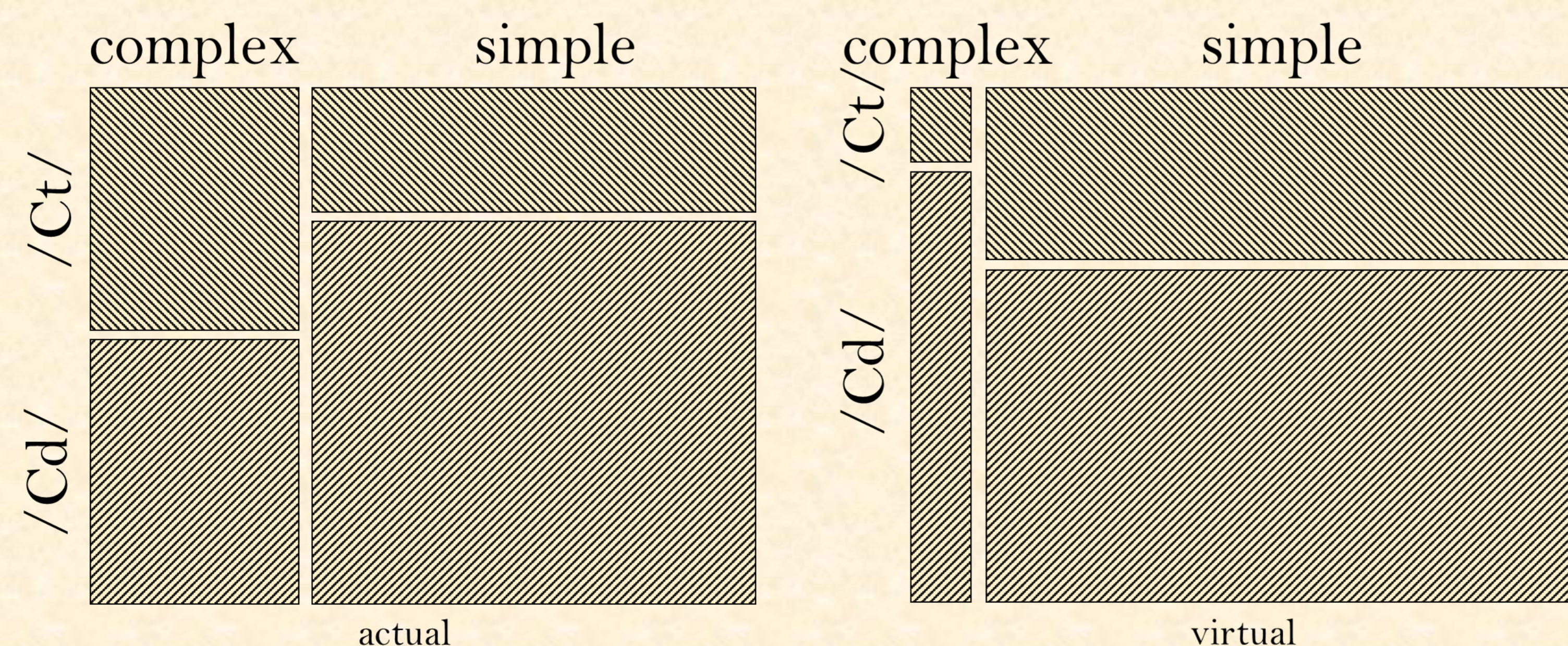
Historical linguists apply schwa loss—and only schwa-loss—to Early Middle English pre-schwa loss data.

Thus, they create a VIRTUAL EModE post-schwa loss stage, which can be compared to ACTUAL EModE.

If the latter two stages **differ significantly, then repair processes might have been at work**, experts assume.

Language reacts to ambiguity created by schwa loss

Great Britain. Final devoicing improves the chances for speakers to guess the correct morphological build-up of a word. Researchers report this week that “actual EModE is less ambiguous than virtual EModE”, and final devoicing can therefore be considered as “a repair process which was successfully implemented after schwa loss”.



Distributional patterns. Viennese researchers based their investigation on data retrieved from the Penn Helsinki Corpora. They compare the VIRTUAL post-schwa loss distribution to ACTUAL Early Modern English.

Comparing ambiguity. The ACTUAL stage is significantly less ambiguous than the VIRTUAL one.