The influence of experience on processing of dialectal and conventional structures
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Can readers learn to read dialectal variants like native users?
➢ Evidence for rapid expectation adaptation to altered frequencies of known, familiar structures
➢ But what about totally unfamiliar structures?

Probabilistic models predict increasing expectations for one variant should reduce expectations for another

What about a new dialectal form with the same meaning?
➢ Expectations at form level: Impairs processing of old form
➢ Expectations at meaning level: No change

PITTSBURGH MODAL
Syntactic construction used in Ohio, western Pennsylvania

“The copier needs recycled because it can’t be fixed.”
means:
“The copier needs to be recycled…”
(copier is being recycled)

But without knowledge of Pittsburgh modal, “The copier needs recycled…” must be interpreted as including a modifier of an upcoming noun:
“The copier needs recycled paper to comply with our environmental policy.”
(paper is being recycled)

Results in garden path effect when disambiguating region disambiguates sentence to Pittsburgh modal.

MATERIALS & METHOD
Simulated e-mail stimuli, 3-4 sentences each
➢ Next-to-last sentence contains Pittsburgh modal
➢ 15% of total sentences
“I checked with Jessica about the fourth floor copier. It just needs recycled because it can’t be fixed. We’ll have to purchase a new one.”

Task: Word-by-word self-paced reading
Measure: Reading time at disambiguation
➢ Disambiguation = Two words after the participle

Subjects: Web-based with specific geographic areas targeted
➢ Post-experiment questionnaire assess familiarity with Pittsburgh modal
➢ Lure questions about other structures to avoid bias

EXPERIMENT 1: PRIOR LANGUAGE BACKGROUND
Compare participants:
➢ Previously unfamiliar with Pittsburgh modal (Colorado)
➢ Previously familiar with Pittsburgh modal (OH, PA)

Long-term exposure to Pittsburgh modal matters
➢ Familiar participants faster in disambiguation
But, unfamiliar participants adapt
➢ Group difference declines after early trials

EXPERIMENT 2: EXPOSURE PARADIGM
All participants previously unfamiliar; manipulate exposure

EXPT. 2A: FINAL TEST IS PITTSBURGH MODAL
Disambiguation: Two words after participle
➢ Exposure phase: Pittsburgh modal initially more difficult than conventional
➢ Test phase: Prior exposure to Pittsburgh modal beneficial vs. seeing it for the very first time

EXPT. 2B: FINAL TEST IS CONVENTIONAL MODAL
Disambiguation: “to be”
➢ Exposure phase: No applicable comparison; Pittsburgh modal group doesn’t see “to be”
➢ Test phase: Prior exposure to Pittsburgh modal does not impair processing of conventional modal

CONCLUSIONS
Rapid adaptation to totally unfamiliar syntactic structures
Exposure to Pittsburgh modal doesn’t slow conventional
➢ Expectations may be at meaning level rather than form level

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