## Both (of) the variants show a couple (of) different patterns: Social conditioning of of—variation across multiple linguistic environments

A longstanding question in sociolinguistics is whether social evaluation of a variant is consistent across linguistic environments. It is traditionally assumed that external factors (such as social evaluation) and internal factors (such as linguistic environment) do not interact in the conditioning of variation (Labov 1993, 2001:28, 2010:265), but this has largely gone untested (Maddeaux & Dinkin 2017). In this paper, we report on a study of a single variable alternation in English – between *of* and Ø – that is instantiated in several distinct linguistic environments. We find that its social patterning differs by environment, suggesting a counterexample to the proposed independence of external and internal constraints.

Variation between of and Ø ("of-variation") has been documented in a variety of linguistic environments: in prepositional phrases with out (1) and off (2), with certain quantifiers (3–6), and in inverted degree constructions (7). Though variationist studies of of-variation in isolated environments exist (e.g. Estling 1999, 2000; Nylund & Seals 2010; Vartiainen & Höglund 2020), no study has yet examined the patterning of of-variation across multiple environments.

We examine *of*-variation in environments (1)–(7) in the Philadelphia Neighborhood Corpus (Labov and Rosenfelder 2011). The corpus consists of sociolinguistic interviews with speakers of Philadelphia English from a variety of economic, educational, and ethnic backgrounds. Corpus data was collected between 1973 and 2012. Tokens were identified with Python scripts. After omitting environments with low token counts (*off*: n=178, *both*: n=38, *half*: n=131, inverted degree constructions: n=9), we ultimately analyze *of*-variation after *all* (n=1492), *couple* (n=546), and *out* (n=401) using mixed-effects logistic regression in R. To assess whether social conditioning differs across environments, we modeled data from all three environments together and tested the significance of by-environment interactions.

The three environments significantly differ in variant rates, with *out* showing the highest rate of the *of* variant (72%), followed by *couple* (30%), and then *all* (3%). Additionally, two demographic predictors significantly interact with environment: speaker year of birth and speaker years of schooling. *All* shows no effect of year of birth, and *out* does not significantly differ from this; however, *couple* does (p=0.037), showing change in apparent time away from *of*. Concerning schooling, *all* shows increased *of* use among more educated speakers (p=0.022), *out* does not significantly differ from this, and *couple* shows the opposite pattern (p=0.022).

Taken together, the results demonstrate different social patterning of of-variation after all versus couple. This is underscored by evidence from prescriptive grammars: after all, the of variant is denounced by prescriptivists; after couple, it is the Ø variant that is seen as nonstandard (Bernstein 1977, Garner 2022). This suggests that, contra Labov (2001:28), social sensitivity to of-variation shows linguistic sensitivity. The environments do not constitute a unified linguistic variable, despite the surface similarity of of-Ø variation across them (cf. Dinkin 2016). We close by proposing future perception work that can shed more light on the differing social evaluations of of-variation across environments, and by recognizing the implications that of-variation has for the syntax and semantics of the environments involved.

- (1) Of-variation after out
  - a. Today, you can't even put your head **out of your door** at night without fearing that someone's going to come in and hurt you. (PH12-2-10)<sup>1</sup>
  - b. You look **out your door** and if you need any help, you can holler. (PH84-1-4)
- (2) Of-variation after off (omitted from study due to low token counts)
  - a. He's been knocked **off of his bike** and stuff. (PH84-1-2)
  - b. Like if he fell **off his bike** he'd say, "You see him wreck out on his bike?" (PH74-0-8)
- (3) *Of*-variation after *couple* 
  - a. She was fine for a **couple of months**. (PH90-2-5)
  - b. He was working there for a couple months. (PH00-1-3)
- (4) Of-variation after all
  - a. I mean we were always respectful, respect all of our neighbors and stuff. (PH10-1-2)
  - b. They want to be able to know all their neighbors. (PH82-1-10)
- (5) Of-variation after both (omitted from study due to low token counts)
  - a. **Both of my parents** were very much that way. (PH84-1-1)
  - b. **Both my parents** were born in America. (PH06-2-4)
- (6) Of-variation after half (omitted from study due to low token counts)
  - a. **Half of the time**, he wouldn't be there. (PH81-0-3)
  - b. And half the time, it's still sitting there in the morning. (PH81-3-1)
- (7) Of-variation after inverted degree constructions (omitted from study due to low token counts)
  - a. It shocked me **how big of a deal** it was in high school. (PH94-2-7)
  - b. How large a family did you come from? (PH73-5-6)

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<sup>&</sup>lt;sup>1</sup> Numbers in parentheses are speaker ID numbers from the corpus.