

That-Omission Beyond Processing: Stylistic and Social Effects

The observation that stylistic effects tend to mirror social effects (Labov, 1982; Bell, 1984) is a core principle of variationist sociolinguistics: when a variable shows evidence of stylistic conditioning, we expect social conditioning to be present also. However, while there is clear evidence that rates of *that*-omission differ in speech and writing, there has been debate over whether this variable is socially conditioned (Adamson, 1992; Sigley, 1997, 1998), making it difficult to tell if this variable is socially meaningful. We present a large-scale corpus study of optional *that*-omission in complement (1a) and relative (1b) clauses and show that while there is a clear effect of gender, no other social factor seems to influence *that*-omission.

- (1) a. I believe [_{Complement Clause} (*that*) we've pretty much summed everything up].
b. I mean everything_i [_{Relative Clause} (*that*) you spray ___i, you know, out in the field].

We extracted 4,500 complement and 3,700 relative clauses with optional *that* from the Switchboard corpus of informal American speech. All clauses were automatically annotated for all processing factors known to affect *that*-omission (see, e.g., Race & MacDonald, 2003; Jaeger et al., 2005; Roland, et al., in press), and for the available speaker social information. Separate sets of multi-factor binary logistic regression analyses for complement and relative clauses were conducted including social factors (gender, education, age) and dialect region. After controlling for processing factors, we found that only gender has a significant effect on *that*-omission: women omit *that* less often than men (e.g. women are about 1.5 times as likely to omit relativizer *that*, $p < 0.001$). We also found that the non-significance of the other social factors was *not* due to colinearity with processing factors or with gender.

While some processing factors are correlated with gender, controlling for these factors strengthened the gender effect. For example, women produce fewer disfluencies, which discourage *that*-omission. This would lead us to expect women to omit more than men, but they omit less despite this, demonstrating that the effect is robust.

This gender effect is unlikely to be due to the convergence of the social and the stylistic. While *that*-omission shows an effect that could be interpreted as stylistic, this effect goes in opposite directions for complement and relative clauses: complement clauses show less *that*-omission in writing than in speech (Biber et al., 1997; Huddleston and Pullum, 2002); relative clauses show more *that*-omission in writing (Jaeger & Wasow, 2005). Gender, however, patterns the same way for both clause types, and no other social factors affect *that*-omission. The fact that social factors do not form an interpretable pattern with style here is consistent with Sigley (1997, 1998) and Tagliamonte et al. (2005), who show no social effects on *that*-omission, but not with Adamson (1992), who argued for class conditioning of zero relatives.

We conclude (a) that the speech vs. writing effects on *that*-omission are more likely register effects than true style effects, and (b) that the gender effect is not driven by social meaning, but possibly by processing and/or discourse pressures.