

Competing constraints and hypercorrect *whom*:
Syntactic uncertainty meets linguistic insecurity

by

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Ryan: What I really want — honestly, Michael — is for you to know it so you can communicate it to the people here, to your clients, to whomever.

Michael: Oh, okay...

Ryan: What?

Michael: It's whoever, not whomever.

Ryan: No, it's whomever...

Michael: No... whomever is never actually right.

Jim: Well, sometimes it's right.

Creed: Michael is right. It's a made-up word used to trick students.

Andy: No. Actually, whomever is the formal version of the word.

Oscar: Obviously, it's a real word, but I don't know when to use it correctly.

Michael (to the camera): Not a native speaker.

Kevin: I know what's right, but I'm not gonna say because you're all jerks who didn't come see my band last night.

Ryan: Do you really know which one is correct?

Kevin: I don't know.

Pam: It's whom when it's the object of the sentence and who when it's the subject.

Phyllis: That sounds right.

Michael: Well, it sounds right, but is it?

Stanley: How did Ryan use it, as an object?

Ryan: As an object...

Kelly: Ryan used me as an object.

Stanley: Is he right about that?

Pam: How did he use it again?

Toby: It was... Ryan wanted Michael, the subject, to, uh explain the computer system, the subject—

Michael: Yes!

Toby: —to whomever, meaning us, the indirect object... which is the correct usage of the word.

Michael: No one asked you anything, ever, so whomever's name is Toby, why don't you take a letter opener and stick it into your skull?

“Money,” *The Office*, season 4: episode 4.

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Abstract

In Modern English the distribution of the prestige form *whom* is highly restricted. It only occurs with any frequency as complement of P, yet grammarians and linguists have long noted its usage in non-standard syntactic contexts, e.g. as subject of a clause embedded by a pushdown V (“We feed the children *whom* we think are hungry”) (cf. Quirk et al. 1985) and as subject of a complement clause of a P (“I place trust in *whomever* seems genuine”). For many speakers, these constructions are acceptable and therefore demand a more systematic explanation than past literature can offer.

Bennet (1994) argues that first of the above uses of *whom* is licensed by an *acc + fin* construction that evolved parallel to ECM; however such case assignment is ungrammatical in other environments (“*Justices expected [*him* would be in court]”). Lasnik and Sobin (2000) posit extra-grammatical viruses to account for hypercorrect use of *whom* for an underlying subject. They speculate that such viruses are not sensitive to governing relationships but to word order, yet these rules are clumsy and unnecessarily complex. These and other studies (Emonds 1986, Boyland 2001) assume that hypercorrect usage is motivated by the linguistic insecurity of speakers combined with a variable understanding of the prescriptive rules.

Empirical results from a survey suggest that the most important independent variable is whether *whom* is preceded by a governor, followed by its gap function (subject vs. object). A k-means clustering analysis isolated 3 groups of individuals that exhibit different means ($P = 0.001$) of *whom* responses across 3 oppositional environments (subject of a finite CP, subject of infinitival IP, and object). The individuals in each group appear to follow different systems of rules. The 12 members of cluster 1 consistently hypercorrect; 17 others in cluster 2 adhere to prescriptive guidelines; and the remaining 51 are hesitant to use *whom* at all. Cluster 1 members were most likely ($P < 0.05$) to strongly agree with the statement “I place great value on speaking correctly,” followed by cluster 2 members. The *whom*-hesitant were most likely to respond neutrally. This third group has the highest scores for linguistic insecurity.

This analysis of the results from the survey indicates that a particular speaker’s *whom* usage is determined by the interplay of variables on different levels, including the competing cues of linear position vs. gap function, as well as the pervasive influence of the value system that promotes “correct” grammar, relying on the authority of prescriptive rules. I conclude that different speakers exhibit varying hierarchies of such variables, attested by the systematic distribution of *whom* for a subject in “object territory.”

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1 Introduction to the *who/whom* puzzle

1.1 Background

Who is the only relative pronoun in Modern English which maintains different case endings, with *who* in the nominative, *whose* in the genitive, and *whom* in the accusative. *Who* and *whose* occur with some frequency both as relative and interrogative pronouns with one or more persons as their antecedent. Relative pronoun *whose* can also have an inanimate antecedent (e.g. a lesson *whose* time has come), but this construction is markedly formal and therefore less common. The accusative form *whom* is even less attested—current usage of the word is limited to frozen sayings and formal styles such as writing. The only position in which it consistently occurs with any frequency is directly following fronted prepositions (e.g. *to whom* it may concern), a construction which is formal in itself.¹ Its highly restricted distribution means that many speakers are uncertain when to use *who* versus *whom* in complex sentences, a fact that results in much variation both across and within individual speakers.

Despite the confusion, *whom* refuses to disappear from the Modern English lexicon because of the social status associated with the word. Many speakers rely on its prestige and perpetuate its existence by applying (and often over-applying) the prescriptive rules for its usage. Its distribution is best understood by teasing apart all of the factors that have an effect on the choice to use *whom*. At the linguistic level these include the competing grammatical constraints that affect case assignment: the grammatical function of the word vs. its linear position in the sentence. At the level of the individual are speakers' varying rules for *whom* usage (often based on their conception of the relevant prescriptive rules), as well as their linguistic insecurity and tendency to self-correct. On a higher, social level, the connotations of *whom* and the value attached to 'correct' grammar also influence its usage. This paper concludes that the relationship between the linguistic variables and sociolinguistic factors is only meaningful in light of the larger value system in which language use and its rules are embedded.

1.2 Syntactic uncertainty

Speakers' uncertainty about when to use *whom* reflects neither individual incompetence nor a failure of the educational system—the cause is rooted in modern English itself. Grammar teachers often tell their students that the distribution of *whom* is parallel to that of other accusative pronouns, but this paper argues that *whom* behaves differently because it no longer occupies a productive paradigm. It is an example of something that the grammar produced normally at one time, but which no longer has a place in the since-evolved operative grammar of modern English. Linguist Nicholas Sobin (1999) suggests, “Historically, the objective form *whom* seems to have been dropped from the language closer to the time that English stopped showing nominative/objective case differences on normal noun phrases... Real pronouns did not

¹ See Arnold M. Zwicky, “Whom shall I say [___ is calling]?” *Language Log* posting. 23 Jan. 2007. <<http://itre.cis.upenn.edu/~myl/languagelog/archives/004084.html>>.

lose their case forms at that time and still display case distinctions” (30). Sobin and fellow linguist Howard Lasnik (2001) enumerate four ways that *whom* behaves differently from accusative forms of “real” personal pronouns. First, while the *who* paradigm lost the accusative and dative forms in common use, it retained the genitive form *whose*, which is parallel to what happened with non-pronominal nouns that do not exhibit case forms other than the genitive affix 's. Second, in other pronouns, prescriptive rules attempt to maintain the more prestigious nominative forms (i.e. *I* vs. *me*).² But between *who* and *whom*, prescriptive rules attempt to preserve the accusative form. Third, relative *whom* is suspendable and entirely optional, as in “I know the woman (*whom*) you kissed,” which is not the case for accusative personal pronouns. Finally, all *wh*-words behave differently than personal pronouns, because they move to a non-argument position ([Spec, CP]), while pronouns are argument positioned.

The rules that license *whom* often come into conflict at various levels of the grammar. In (1) and (2), there is discord regarding the case assignment of the relative pronoun:

- (1) We feed the children *whom* we think are hungry.
- (2) This is the prize for *whomever* gets the highest score.

In (1), *whom* functions syntactically as subject of *are hungry* but is extracted to a position at the front of a higher clause where its linear adjacency to the transitive verb *think* makes it seem like it is in ‘object territory’.³ Arnold M. Zwicky (2007) calls *whom* in this construction the “extracted subject of an object clause” (ESOC). In (2), *whomever* is the subject of *gets*, yet its linear position following the P *for* makes it seem like it the object, even though the entire clause *gets the high score* is the actual object. Zwicky characterizes *whom* in (2) as the “in-situ subject of an object clause” (ISOC).

The fact that (1) and (2) are acceptable to some speakers means that the subconscious rules dictating the use of *whom* and *whomever* in Modern English are more complex than the normal pronominal case assignment rules. In fact, at least three binary syntactic variables interact to determine the *wh*-pronoun’s case

- (3) a. linear position: whether or not it directly follows a governing V or P
- b. syntactic function: whether it is underlyingly a subject or object
- c. syntactic position: whether it is in-situ or extracted

A number of other non-syntactic factors also influence its distribution, including the sociolinguistic capital (i.e. prestige) associated with *whom*, and the linguistic insecurity of some speakers, manifested on both a conscious and subconscious level. Linguist Dennis Baron (1984) argues that linguistic insecurity results from the combination of two major cultural forces: “the ranking of social and geographical dialects as superior and inferior, and an educational system based on a doctrine of correctness and purity in language that invariably conflicts with the observable facts of English usage” (228).

² Note that overextension of nominative forms into accusative environments (between you and *I*) is longstanding. For centuries prescriptivists have argued for the accusative in conjoined NP objects such as “between you and *me*.”

³ In contrast with ‘subject territory,’ cf. Quirk et al. (1985) 367.

1.3 Linguistic insecurity

Speakers concerned that their grasp of English is inferior suffer from what I call “grammatical anxiety.” Their speech is more likely to contain prestige forms such as archaic *whom* because the use of such words offers an easy way to attempt to emulate educated speech. Some such speakers overgeneralize *whom*, and the word appears in non-standard syntactic contexts such as (1) and (2) above. According to author Rosemarie Ostler (2007), the more opaque the environment and underlying function of the *wh*-pronoun, the more likely an insecure speaker is to choose *whom* over *who*. This is an example of *grammatical hypercorrection*, which occurs when linguistically insecure speakers are so concerned with avoiding errors and adhering to the prescribed rules of their language that they overcompensate and violate descriptive rules within the grammar in their attempts to speak correctly. Sometimes, they produce constructions that are often less-than-acceptable for some people:

- (4) *Whomever* controls language controls politics.⁴
 (5) I really don't care *whom* you claim your ancestor was.⁵

Sentence (4) features a pronoun in the subject position but in the accusative case. This is predicted to occur because *whomever*'s accusative case is less transparent than that of *whom*,⁶ and less transparency makes it more prone to overuse in the form of hypercorrection. In (5) *whom* functions as an extracted predicate nominative, yet the accusative form is used because it is the marked prestige variant among the pair *who/whom*. In these awkward, stilted constructions, *whom(ever)* is generated by a prestige rule whose strong connotations can outweigh syntactic constraints and prevail over speakers' grammatical intuitions.

1.4 Hypercorrection and theoretical issues

Whom is not the only form prone to hypercorrect usage. Polite and prestige forms such as *I* and *myself* are used in non-standard syntactic positions when speakers misconstrue and overgeneralize prescriptive rules that code for them. Other common types of grammatical hypercorrections occur in response to avoiding stigmatized constructions characteristic of informal speech. Note the following hypercorrections and their motivations:

- (6) NOM case pronouns in coordinate NPs in object position (let's keep it between [NP you and *I*]); use of NOM is motivated by (over)avoidance of impolite 1st position ACC case *me* in coordinate subject NPs ([NP *me* and Lauren] went first) (cf. Grano (2006); Angermeyer & Singler (2003))
 (7) Untriggered 1st person singular reflexive pronoun (Join Simone and *myself* for dinner). There is no anaphor, so the reflexive pronoun *myself* is used as an alternate pronoun to *I* and *me*. *Myself* sounds 'weightier' and more formal (cf.

⁴ cited by Mark Liberman in “Whomever controls language controls politics,” *Language Log* posting, 22 Oct. 2005. <<http://itre.cis.upenn.edu/~myl/languagelog/archives/002568.html>>.

⁵ Fusco Brothers comic strip, 13 April 2004. <<http://www.gocomics.com/thefusco brothers/2004/04/13/>>.

⁶ Probably because of the extra phonological material that follows.

Parker et al. 1990) than *me*, which can be impolite and informal, and it has more force than hyper-polite *I*

- (8) Untriggered subjunctive *were* in indicative *if*-clauses (I wondered if dinner *were* ready) caused by avoiding the casual-sounding indicative *was* in subjunctive *if*-clauses (If I *was* you...) and over-applying the more prestigious form *were* (cf. Ryan 1961)
- (9) Adverbs instead of adjectives after linking verbs (I feel *terribly*⁷) as an over-application of the prescriptive rule “adverbs follow Vs” (I did *terribly*), which arose in avoiding the stigmatized construction of V + adjective (I did *terrible*)

Previous accounts have suggested that the nonstandard constructions in (6)-(9) are simply variants linked to prestige English or polite/formal registers, yet this paper offers a more systematic explanation—at least regarding hypercorrect usage of *whom*. A written survey that elicited *who* and *whom* in various syntactic environments generated a distribution of *whom* responses indicative of competing systems of rules and/or constraints at work. These systems of rules vary in their respective hierarchies of syntactic variables and rules that elicit or block *whom*. Which system is predominant depends on the speaker, and any one individual may shift from one system to another on a synchronic scale, based on context (e.g. register), or on a diachronic scale.

The prescriptive system based on underlying grammatical function requires *whom* for underlying objects. Another system based on linear position requires *whom* any time the *wh*-pronoun directly follows P or V. Even more speakers use a third system that only allows fronted P + *whom* in idioms and markedly formal styles. Plus a handful of speakers overgeneralize the prescriptive rules for *whom*, over-applying the word in environments where *who* would be the correct and ‘natural’ sounding variant. In any case, the use of *whom* seems to be influenced by a number of variables, both at the linguistic level (syntactic function, linear position, complexity of the construction, context), and at the level of the speaker (internalization of rules, degree of linguistic insecurity, value placed on correctness, and self-consciousness with respect to ‘editing’ towards a ‘correct’ target). These variables interact in such a way that individuals form ‘clusters’, and each cluster is associated with a different hierarchy of the above variables. However, it remains unclear how the above rules are implemented and how they constrain each other.

It also remains unclear what the level of consciousness is when speakers use *whom* in speech (this paper only considers *whom* in a written survey). Is there empirical evidence that the choice to use *whom* is more conscious than regular process of case assignment within ‘grammar proper’? And by what mechanism do speakers monitor and self-correct their speech?

⁷ If taken literally, this means that my fingers and sensory organs are not providing me with appropriate sensory input.

2 Prescriptive rules vs. actual usage: A diachronic account

2.1 Evidence of longstanding confusion

Confusion regarding the distribution of *whom* is nothing new, as speakers and writers have been using the forms variably since the sixteenth century. Prescriptive rules in grammar handbooks are based on underlying grammatical function, but they remain mysterious to many students.⁸ The rules mirror the Latin system of case assignment and are meant to correspond with abstract Case.⁹

The Oxford English Dictionary (1989 ed.) defines the pronoun *whom* as “The objective case of WHO: no longer current in natural colloquial speech.”¹⁰ In formal registers such as writing, however, *whom* is used ‘acceptably’ both as an interrogative and as a relative pronoun in either an independent question (def. 1):

- (10) **1842** John Ruskins’ *Letters Addressed to a College Friend* (1894) 129 To whom should I write if not to the only one of my friends whom I cannot see?

or in “a dependent question, or clause of similar meaning” (def. 2):

- (11) **1848** Charles Dickens’ *Dombey and son* vi. Not that he cared to whom his daughter turned, or from whom turned away.

In both independent and dependent questions and clauses, *whom* functions in its underlying position (hereafter GAP FUNCTION) either: (a) as indirect object; (b) as complement of a P (including *than*); or (c), as direct object (in the accusative case).

Next on the list is the “ungrammatical” use of *whom* “for the nominative WHO, esp. as predicate in a dependent clause (being erroneously taken as object of the verb in the principal clause; sometimes app. from confusion with the Latin acc. and inf.)” (def. 3). The OED provides the following early examples of this type of construction, along with their attested dates:

- (12) a. **c1000** *Ags. Gosp. Matthew 16:13* Hwæne secgeað menn □æt sy mannes sunu
 b. **1526** Tindale’s *The New Testament* Matthew 16:13 Whom do men saye that I the sonne of man am? *Ibid.* 16:15, But whom say ye that I am?
 c. **c1530** Lord Berner’s *The history of Arthur of little Britain* x. (1814) 20 I cannot thinke whome it should be.

⁸ It is no wonder students are confused: 18th century grammarian Bishop Lowth (1762) cryptically suggests, “The relative is the nominative case to the verb, when no other nominative comes between it and the verb: but when another nominative comes between it and the verb, the relative is governed by some word in its own member of the sentence...” (100).

⁹ Cf. Joseph Emonds (1986) 263.

¹⁰ “whom, *pron.*” *The Oxford English Dictionary*, 2nd ed. 1989, *OED Online*, Oxford University Press, 20 March 2010 <<http://dictionary.oed.com/cgi/entry/50285017>>.

- d. **1592** Shakespeare's *Romeo & Juliet* I. i. 205 (Qo. 1) Tel me in sadnes whome she is you loue.
- e. **1654-66** Earl of Orrery's *Parthenissa, a romance* (1676) 574 The Horse seem'd to know whom 'twas he carri'd.
- f. **1817** William Beloe's *The Sexagenarian* II. 227 Whom is it you mean?
- g. **1861** Mrs. Henry Wood's *East Lynne* III. i. Not having the least idea of whom Afy might be.

The existence of such constructions in reputable texts leads many bewildered students to wonder why they must avoid “mistakes” that even William Shakespeare frequently made.¹¹ When consulting grammar books, they find rules of PRESCRIPTIVE GRAMMAR, which Quirk et al. (1985) define as “a set of regulations that are based on what is evaluated as correct or incorrect in the standard varieties” (14). Yet the absence of an Academy of the English Language means that there exists no one authoritative producer of regulations; instead, as Quirk et al. explain, “evaluations are made by self-appointed authorities, who, reflecting varying judgments of acceptability and appropriateness, often disagree” (14). The popular and expert ideologies rarely coincide; for this reason, speakers must deal with contradicting rules of usage, and their confusion is reflected in their speech and writing.

2.2 Prescription for *whom*: A grammatical headache

Even the first language authorities acknowledged that certain constructions, including those with *whom*, are subject to different standards of correctness depending on the register and how “natural” something sounds.¹² Early grammarian Bishop Lowth (1762) insists on the strict construction “*whom* is this for?” instead of “*who* is this for?” while his contemporary Joseph Priestly (1769) disagrees, favoring “*who* is this for?” as the more ‘natural’ way of speaking. 19th century grammarians added little to the debate, only noting that *whom* was being used less and less, with Richard Grant White (1870) arguing that the objective case pronoun *whom* was “visibly disappearing.” Only a half century later, anthropologist and linguist Edward Sapir (1921) contends,

It is safe to prophesy that within a couple of hundred years from to-day not even the most learned jurist will be saying “Whom did you see?” By that time the “whom” will be as delightfully archaic as the Elizabethan “his” for “its.” No logical or historical argument will avail to save this hapless “whom.” (167)

Eighty-nine years after Sapir’s prediction, *whom* continues to be used in writing and formal settings such as court according to the grammatical function-based rules prescribed in grammar books. Like traditional grammars, most handbooks of English usage suggest assigning the *wh*-pronoun in its extracted position the same case-marking it was assigned in its underlying

¹¹ See “whom” in *Merriam-Webster’s Dictionary of English Usage* (1995) for a number of quotations in which Shakespeare uses *who* for an object (957) and *whom* for a subject (958).

¹² For a detailed diachronic account of various prescriptive guidelines, see the *Merriam-Webster dictionary of English usage* (1995) 958.

position. Such rules state that *whom* is used as an accusative form for the object of V or complement of P (fronted or stranded) and for the subject of a non-finite clause¹³ while *who* is used elsewhere.

2.3 Linguistic realities and stylistic (in)compatibility

The above prescriptive rules compete with what linguists Walsh and Walsh (1989) call the descriptive rule, which “is based on position within the sentence and states that *whom* is used immediately after prepositions, *who* elsewhere, that is, for subject of a tensed [i.e. finite] verb, for a predicate nominative, for the object of a verb or [stranded] preposition, and for the subject of an infinitive” (285). The prescriptive and descriptive rules only intersect at two points: each requires *who* for subject of a finite V and *whom* for the object of a fronted P.¹⁴ Therefore, when prescriptive rules call for *whom* and descriptive ones require *who*, disparities arise in the following environments:

- (13) extracted object of a stranded P (*who(m)* did you give the letter to?)
- (14) extracted object of a V (*who(m)* did you elect to the overseeing committee?)
- (15) extracted subject of a non-finite V¹⁵ (He attacked the enemy *who(m)* he saw cross¹⁶ the river)

At first glance, (13) and (14) seem to require the vernacular variant *who* in colloquial registers and more prestigious *whom* in formal settings. However, the use of *whom* in (13) would produce what Quirk et al. (1985) call a “stylistic incompatibility,” since the word is “rather formal,” yet the stranded P construction is informal. A parallel stylistic incompatibility is present in the sentence “This is the person to *who* you spoke,” since the fronted P is a formal construction, while using *who* rather than *whom* as prepositional complement is characteristic of informal speech. Whenever the P is fronted, the construction becomes decidedly formal and requires *whom*, the more “stylistically compatible” (368) form. As a result the following distribution emerges, with the more commonly attested constructions shaded:

(16)

	<u>stranded P</u>	<u>fronted P</u>
informal style	<i>who...to</i>	to <i>who</i> ¹⁷
formal style	<i>whom...to</i>	to <i>whom</i>

¹³ See Marda Dunsky’s language-skills handbook *Watch your words* (2006). Dunsky advises readers that “the subject of an infinitive verb takes the objective case” (16), which she notes is an exception to the rule that subjects take the nominative case. But since when are objective and nominative cases comparable?

¹⁴ Note that the object of P is not always *whom* when the PP is in-situ instead of fronted, as in echo questions (e.g. “You gave it to *who*?!”). However, the informal register of echo questions is predicted to preclude use of the prestige variant in the first place.

¹⁵ The grammarians behind the prescriptive rules consider this construction analogous to the Latin *acc + infinitive*. Note that *whom* can only head a non-finite RelCl if the clause is embedded.

¹⁶ This form of the V *cross* is actually the bare stem.

¹⁷ Including echo questions; cf. footnote 14.

Google searches¹⁸ comparing frequencies of “P + *who*” to “P + *whom*” search support this analysis:

(17)

<u>P</u>	<u>“P + <i>whom</i>” hits</u>	<u>“P + <i>who</i>” hits</u>	<u>proportion of P+<i>whom</i> to P+<i>who</i></u>
with	41,000,000	3,170,000	12.93 ¹⁹
from	9,700,000	1,300,000	7.46
to	58,000,000	7,980,000	7.27
of	69,300,000	14,800,000	4.68
for	22,800,000	6,270,000	3.63
in	9,300,000	2,600,000	3.58

2.3.1 “Social pied-piping”

“Pied-piping” occurs when a phrase larger than the *wh*-word is also extracted to the fronted position. Pied-piping of a N is necessary when the *wh*-word is a determiner such as *which*:

- (18) a. [Which book]_i did he choose *t*_i?
 b. *Which_i did he choose *t*_i book?

But when a *wh*-word is the complement of a P, pied-piping is optional:

- (19) a. [To whom]_i did you give the letter *t*_i?
 b. Who_i did you give the letter to *t*_i?

Lasnik and Sobin (2000) refer to the tendencies illustrated in (16) as “social pied-piping,” according to which speakers tend to make a whole structure consistently prestigious or informal.

Case assignment in (15) is more opaque: the pronoun functions as subject of the bare stem *cross* and is hence assigned accusative case (i.e. he saw *her* cross the river). However, the use of *whom* in (15) is restricted to writing; it would sound unnatural in speech since Walsh & Walsh’s descriptive rule only allows *whom* immediately after Ps.

2.4 Nominative *whom*?

Walsh & Walsh’s (1989) analysis fails to account for the other constructions in which the *wh*-pronoun functions as a subject of a finite V or as a predicate nominative yet is assigned

¹⁸ Retrieved on March 23, 2010

¹⁹ Perhaps *with whom* occurs more frequently than other Ps + *whom* for semantic reasons.

accusative case by some other mechanism. In the following constructions *whom* is often (mis)used as a prestigious variant of *who*:

- (20) for a predicate nominative (Who I am now is *whom_i* I've always wanted to be *t_i*.)²⁰
- (21) for a subject of a finite V:
 - a. simple subject (And *whom* is speaking?)
 - b. extracted subject of object clause (ESOC) embedded by what Quirk et al. (1985) call a PUSHDOWN clause (368) such as “should I say” in the sentence “And *whom_i* [should I say [*t_i* is speaking]]?”
 - c. in-situ subject of object clause (ISOC), when the whole clause functions as complement of a P (This is the prize for *whomever* gets the highest score.)

The use of *whom* in (20) results from a misanalysis of predicates that is parallel to the variable distribution seen among other personal pronouns. Prescribed rules based on an analogy with Latin case assignment demand the more prestigious nominative form (It was *I*) be used for subject predicates, while the operative grammar would assign the default accusative form (it was *me*). Between *who* and *whom*, the accusative form carries more prestige and is therefore overgeneralized into opaque predicate constructions where the nominative is actually prescribed. Certain speakers might use *whom* in (21b) and (21c) because its linear position puts the pronoun in “object territory” (cf. Quirk (1985) 358) of the matrix verb even though *whom* functions syntactically as subject of the relative clause (RelCl).

2.5 A taxonomy of *whom* in subject position: ISOC & ESOC

In his 2007 *Language Log* post “Whom shall I say [___ is calling]?” (cf. footnote 1) Arnold M. Zwicky argues that uncertainty regarding *who/whom* usage arises because there are two different (and often competing) systems that can assign case to the extracted interrogative or relative pronoun. According to one system, the extracted *wh*-pronoun “inherits” the case it was assigned in its underlying position (gap). Pure inheritance, he explains, produces the Prescriptive System, where subjects of finite V_s have the form *who*, and all objects of V_s and P_s (even stranded) and subjects of infinitival V_s²¹ should have the form *whom*. He differentiates the prescriptive system from another model in which *wh*-pronouns bear a case appropriate to the focus they receive in their extracted position. He calls this the Standard System, which should produce default *who*, and *whom* only after fronted P_s, since the whole PP gets the focus (e.g. [in *whom*] do you trust?). Zwicky argues that English has (had) both systems, and their interaction further obscures the two opaque environments seen in (21b) and (21c) above.

In (21c) *whom* functions as the ISOC. It immediately follows a governor P and could therefore easily be mistaken for its object even though the whole clause is the object. Zwicky

²⁰ Word order is relevant; if the predicate is extracted to an initial position as in “*Who(m)* I am now...” *whom* sounds marked and is much less acceptable.

²¹ This set also includes non-finite V_s such as bare stems

provides the following recent examples of ISOC *whom*, with the object clauses in brackets and ‘____’ representing the gap position of the *wh*-pronouns (*wh*-pronouns are mine):

- (22) This is not a picture of a political tide running in one direction. It is a picture of voters venting their frustration on [*whomever* happens to be in power].²²
- (23) ...So now as you argue / as to *whom* shall be first / I will walk off with the setting sun.²³
- (24) This month's social has an Academy Awards theme and two prizes will be given away. One prize will be awarded to [*whomever* successfully predicts the most winners for this year].²⁴
- (25) ATHENS, Ga. - Authorities are searching for *whomever* [posted a long list and description of supposed sexual encounters between dozens of high school students on the online networking site MySpace.com].²⁵

These sentences are analogous to the constructions in the OED's examples of hypercorrect usage of *whomever*, when it is "Misused for *whoever* as subject of relative clause preceded by a preposition" ("whomever" def. 1).

Zwicky characterizes (21b) as the ESOC, where the underlying subject of embedded IP is extracted to a position at the front of a higher clause. This construction involves what generative grammarians call LONG MOVEMENT,²⁶ which obscures the relative pronoun's underlying function. Zwicky explains, "the gap of extraction immediately follows the governor (most often, a V)," thus placing the pronoun in a position where some languages would allow the governor to assign case to it. Zwicky provides the following recent examples of ESOC *whom*, with the extracted pronoun's gap position indicated by ____ :

- (26) In a restrictive relative:
- a. The answer, shaped in the National Security Council, is for the American military to make targets of Iranians [*whom* they believe [____ are fueling attacks]], a decision that Mr. Bush made months ago that was disclosed only last week.²⁷
 - b. Bobby Hodges, a former Texas Air National Guard general [*whom* "60 Minutes" claimed [____ had authenticated the memos]], says that when he was read them over the phone he assumed they were handwritten and wasn't told that CBS didn't have the originals.²⁸

²² "Voters send clear warning to both parties' incumbents." Editorial, *USA Today*. 5 Nov. 2003. <http://www.usatoday.com/news/opinion/editorials/2003-11-05-our-view_x.htm>.

²³ Ray Brown, "They Argued as to Whom should be First." *Poetry by Ray Brown*. WordPress Blog, 14 Oct. 2009. <<http://raybrown.wordpress.com/2009/10/14/who-is-on-first/>>. Why *Whom* is capitalized is beyond me.

²⁴ e-mail to the QUEST (Queer University Employees at Stanford) mailing list, 22 Feb. 2006.

²⁵ AP story reported by Gary Detman, "Sex lives of high school students posted online subject of investigation." *Firstcoastnews.com*, 1 Oct. 2006. <<http://www.firstcoastnews.com/news/topstories/news-article.aspx?storyid=66022>>. NB: the *Washington Post* version had *whoever*.

²⁶ See Lily Haegeman (1991) 370 for further discussion.

²⁷ From David E. Sanger, "Opening a New Front in the War, Against Iranians in Iraq." *The New York Times*. 15 Jan. 2007. <http://www.nytimes.com/2007/01/15/washington/politicsspecial/15strategy.html?_r=2>.

²⁸ From "I'd Rather Be Blogging." *Wall St. Journal*. 14 Sept. 2004. <<http://www.opinionjournal.com/diary/?id=110005611>>.

- (27) In a non-restrictive relative:
- a. Now there's antiwar Connecticut Senate candidate Ned Lamont, [*whom* Moulitsas predicts [___ will defeat Joe Lieberman in the party primary]]. He'll lose. And there's Montana's senatorial candidate Jon Tester, [*whom* Moulitsas predicts [___ will beat incumbent Senator Conrad Burns in November]].²⁹
 - b. The 77-year-old Chomsky, [*whom* Chavez mistakenly thought [___ was dead]], is famous as a linguist and as an opponent of U.S. foreign policy.³⁰
- (28) In a main question:
- a. So, for example, if we were to ask, "Whom do you believe is responsible for California's energy problems," the informed respondent would most likely have a rather limited list of possibilities to draw from...³¹

The intervening V that seems to govern the relative pronoun heads what linguist Randolph Quirk et al. (1985) call a PUSHDOWN clause (368). Though they and other grammarians consider the use of a subject *whom* in a pushdown construction to be hypercorrect—if not entirely incorrect—some linguists have defended its usage. Danish linguist Otto Jespersen (1954) argues for the use of *whom* in (1), "We feed the children *whom* we think are hungry" because inserting *we think* "can and does change the relation between the relative pronoun and its verb" (Part III, 200). He claims a subject need not always be in the nominative because "the speech instinct would be bewildered by the contiguity of two nominatives, as if it were two subjects in the same clause (199). Yet in the sentences

- (29) a. They elect he who is best qualified to lead them.
 b. He, I think, will win the nomination.
 c. He who hesitates is lost.

the two nominatives *he who* in (29a) and (29c) strike me as slightly stilted, but they certainly do not bewilder my speech instinct. Sentence (29b) presents no problems in parsing, because the second nominative pronoun is parenthetical and marked off by commas. Either way, grammarian Howard (1986) writes more recently that such usage of *whom* (as in (1)) "is now normal and becoming 'correct' to write" (127).

2.6 Social attitudes and linguistic responses

Despite the availability of grammar and usage handbooks, the guidelines regarding *who* and *whom* still perplex many. Their confusion arises from competing case assignment systems (prescriptive vs. standard) combined with unreliable and contradictory input, as well as conscious social cues that *whom* is in itself "seen as old-fashioned, very formal, serious, and

²⁹ From Ben Shapiro's column. "Daily Kos-mania." *Townhall.com*. 14 June 2004.
 <http://townhall.com/columnists/BenShapiro/2006/06/14/daily_kos-mania>.

³⁰ From the AP article "Chomsky Still Best Seller." *USA Today*. 27 Sept. 2006.
 <http://www.usatoday.com/life/books/news/2006-09-27-chomsky_x.htm?csp=34>.

³¹ From Marilyn B. Brewer and William D. Crano (2006), *Principles and methods of social research* (2nd edition, Mahwah, NJ: Lawrence Erlbaum Associates) 279.

emphatic” (Zwicky 2007). However, their speech need not be discounted as being entirely haphazard and variable—it may even be analogous to a system attested in another language. Zwicky explains that people “struggle to discern system and meaning,” causing them to

thrash about and make mistakes, but mostly what we see is an attempt to find a system in what they're confronted with. People come up with systems that are possible as languages...but are not, in fact, necessarily the predominant systems of other speakers around them. Then those systems can spread.

In Modern English, case assignment systems based on both inheritance and linear position influence the distribution of *whom*. This paper hypothesizes that among prestige-conscious speakers and writers in formal registers, *whom* is more likely to be used instead of *who* as an extracted subject or in another non-standard syntactic position under:

- (30) ISOC conditions – in-situ subject of a complement clause with a finite V
 - a. Give it to [*whomever* deserves it].
- (31) ESOC conditions – extracted subject of embedded object clause with finite V
 - a. I demand to know *whom*_i you said [*t*_i skipped class today].

Both conditions place the *wh*-pronoun in “object territory” (cf. Quirk (1985) 358) even though it functions syntactically as a subject in its gap position. My study considers the frequency of speakers’ use of *whom* under conditions in (30) and (31) as compared to the conditions in (32), (33), and (34), in which *whom* is the prescribed form:

- (32) all object conditions - extracted and in-situ objects
- (33) subject of a non-finite V
 - a. “He attacked the enemy [*whom*_i he saw [*t*_i cross the river]]”
where *saw* is a bare stem; acc case assignment based on prescriptive analogy with Latin construction (cf. footnote 15)
 - b. “He awaited the enemy [*whom*_i he expected [*t*_i to cross the river]]”
where *to cross* is an infinitival V in an ECM construction
- (34) subject of a small clause
 - a. The woman *whom* you find [_{sc} *t*_i beautiful] is my sister.

My study correlates participants’ usage of *whom* under syntactic conditions (30) – (34) with their scores on the dimensions of linguistic insecurity stated above. But before discussing the survey, it is necessary to evaluate some theoretical syntactic explanations proposed by linguists that assess the interplay of grammatical function, linear position, and explicitly instructed prescriptive rules.

3 Previous explanations: Is the system infected?

3.1 Boyland's frequency-based analysis

Joyce Tang Boyland addresses the *who/whom* puzzle in her 2001 article, "Hypercorrect pronoun case in English? Cognitive processes that account for pronoun usage," which explores the larger issue of prestige forms appearing in non-standard syntactic contexts. Boyland argues that the frequency of a prestige form in its original syntactic context can predict when the form will spread to non-standard syntactic contexts. Speakers' uncertainty of when to use *whom* is based on a conflict over case assignment by competing cues: one rule at the linear level provides *who* as the default and requires *whom* after Ps, while the other prescriptive rule based on gap function requires *who* for subjects and *whom* for objects (397). The cues competing within speakers' grammars are "phenomenologically experienced as uncertainty and behaviorally expressed as variability" (401). Boyland's corpus results suggest that the strength of each of the competing cues "is related to the frequency with which each cue is associated with each particular form [*who* vs. *whom*]" (402). More specifically, she concludes that when a RelCl contains a pushdown clause, speakers will "almost certainly use *whom* rather than *who* as the subject relative; when there is no pushdown clause, speakers are only 1/10 as likely to use *whom* as subject relative as they are to use *who*" (400).

A shortcoming in Boyland's analysis is that it does not take into account speakers' awareness of their uncertainty about when to use *whom*. Boyland accounts only for phenomena that occur at a level below consciousness, arguing that speakers pick up frequently encountered constructions and add them to their grammar through the mechanism of priming. Frequency is crucial to her explanation:

- (35) FREQUENCY-BASED OVEREXTENSION: All other things being equal, the more frequent a construction or pattern, the more likely it is to be overextended.

A higher frequency promotes syntactic priming. Each time a prestige speaker processes a construction involving *whom* in subject position "that construction is primed and activation increases, and it becomes more natural sounding to that speaker, and they become more likely to produce it" (390). Even if this explanation is psychologically feasible, it takes into account neither speakers' awareness of their uncertainty nor their conscious application of prescriptive rules (not to mention the interplay of these two factors). Boyland suggests that prescriptive rules enter among competing cues, but only subconsciously. Moreover, she ignores the possibility of self-correction, a behavior which this analysis suggests plays a robust role in the distribution of *who* vs. *whom*.

3.2 Emonds' ad-hoc transformation rules

In his 1986 article "Grammatically Deviant Prestige Constructions," Joseph Emonds uses the backdrop of variation in pronoun case (especially in conjoined NPs) to isolate two differing systems of case assignment, Normal Usage and Prestige Usage, which adhere to different systems of rules. Normal Usage (NU) refers to the 'natural' distribution of pronouns, which "is

fully systematic and in accord with universal grammar” (243). Prestige usage (PU) is determined by local ad-hoc transformations that code for “grammatically deviant” prestige forms and apply independently of the internalized grammar—hence PU is reproduced only socially by vehicles such as grammar handbooks. The transformations result from a (failed) attempt to internalize the explicitly instructed rules, which comprise “an unnatural social code that can be mastered in writing only by conscious use of explicit but unlearnable (= not internalizable) principles of grammar” (266). Guidelines of PU “claim that the case on pronouns in Modern English corresponds to that of old English,” (246), and thereby ascribe to English the same universal theory of abstract grammatical case used to determine pronoun case in morphologically transparent languages such as German. But because English lacks morphological transparency, the PU of pronouns “is not reproduced by an internalized use of abstract case” (263), implying that *whom* would not be internalized with the abstract object case.

Emonds argues that PU is not a grammatical construct but instead “an extra-grammatical deviation imposed in certain, especially written forms of language *exclusively* through paralinguistic cultural institutions of the dominant socio-economic class: exclusive and higher education, standard reference handbooks...etc.” (235). He progressively advocates suppressing the instruction of PU and instead redirecting teaching towards “an explicit linguistic formulation and appreciation of the differences in *natural language* class and ethnic group dialects” (266). I agree that PU is artificial; however, I contend that Emonds’ *a priori* distinction between NU and PU fails to capture the variability that characterizes speakers’ usage of *whom*. Instead, his model predicts two separate dialects based on differing rules. According to this theory, people who employ normal usage should have consistent usage patterns and prestige users should also be as consistent as possible. The results of my survey instead suggest more than two patterns of usage, which are characterized by more variance than consistency.

3.3 Bennet’s *accusative and finite* proposal

In his 1994 article “A Case of Syntactic Change in English,” linguist William Bennet argues that subject *whom* occurs in an *accusative and finite* (*acc + fin*) construction, which evolved as “a parallel for the intuitively well-known *accusative and infinitive* or *ECM*³² construction.” *Acc + fin* occurs under ECM verbs such as *expect* that can govern NPs (36a), finite clauses (36c), and non-finite clauses (36b):

- (36) a. We expect [_{NP} a blizzard].
 b. We expect [_{INFIN} him to arrive soon].
 c. We expect [_{FIN} he will arrive soon].³³
 d. ECM: A defendant, [[whom_i] [justices expected [_{INFIN} *t*_i to be in court]],³⁴ was unable to attend.
 e. *acc + fin*: A defendant, [[whom_i] justices expected [_{CP} [e³⁵] [_{FIN} *t*_i would be in court]]], was unable to attend.

³² Exceptional case-marking; cf. Chomsky (1986) 190.

³³ The complementizer *that* (as in “We expect *that* he will arrive soon”) is entirely optional.

³⁴ Note that Bennet uses commas as punctuation markers of clause boundaries.

Bennet assumes that in (36d), the ECM verb eliminates the boundary created by the embedding clause in order to assign accusative case to the subject of the embedded infinitival clause. He argues that the governing relationship between an ECM verb and the clause it embeds “is paralleled in the case of finite clause government [36e]” (34). But this paper alleges that the covert complementizer [e] should block the governing access of *expect* across the CP in (36e). Bennet allows verbs such as *expect* “to delete the following brackets and thereby to gain governing access to the NP1 of the dependent clause” (34), but what mechanism would enable bracket-deletion and governing across [e]? Furthermore, if *acc + fin* were a legitimate structure, then *expect* should also be able to erase brackets and assign accusative case as in (37), but the ungrammaticality of (38) suggests otherwise.

(37) ECM: Justices expected [_{INFIN} him to be in court]].

(38) *acc + fin*: *Justices expected [_{FIN CP}[e] him would be in court].

Furthermore, I disagree with Bennet’s claim that the construction in (36e) has a “twilight status” in modern English and his observation that such structures “are frequent in everyday educated usage” (35). He suffers from the FREQUENCY ILLUSION, a selective-attention effect that Arnold M. Zwicky (2005) defines thus:

Once you've noticed a phenomenon, you think it happens a whole lot, even all the time. Your estimates of frequency are likely to be skewed by your noticing nearly every occurrence that comes past you. People who are reflective about language -- professional linguists, people who set themselves up as authorities on language, and ordinary people who are simply interested in language -- are especially prone to the Frequency Illusion.³⁵

In fact, these *acc + fin* constructions are strikingly *uncommon*. Bennet remarks, “in the context of British English, the structure, though aberrant in its case-marking, is used by influential sources of written language” (37). But this is too limited a corpus to merit the invention of an otherwise unattested structure. In effect, Bennet establishes a framework for a construction that is far too variable and rare to merit the type of bracket erasure and governing access which *acc + fin* would entail.

3.4 Sobin and Lasnik’s grammatical viruses

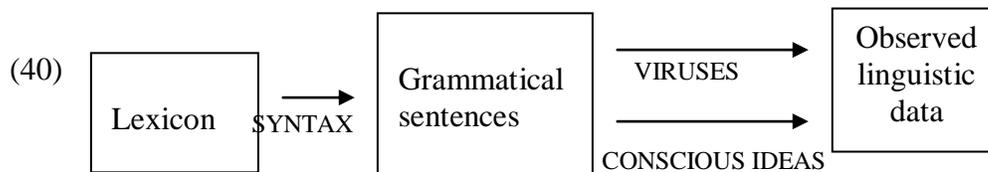
In his 1997 article “Agreement, Default Rules, and Grammatical Viruses,” Nicholas Sobin introduces the notion of grammatical viruses (GVs). GVs are a grammar-external variant of the local transformations that Emonds (1986) speculates license linguistically deviant constructions such as (36e). GVs operate differently than “the principles that govern the proper devices of a grammar” (319) and are instead parasitic on the grammar. Sobin argues that GVs form a “structurally coherent group exhibiting signature characteristics” such as:

³⁵ Here empty category [e] represents the covert complementizer *that* governing [_{FIN...}]

³⁶ See Arnold M. Zwicky’s “Just Between Dr. Language and I.” *Language Log* posting. 5 Aug. 2005
<<http://itre.cis.upenn.edu/~myl/language-log/archives/002386.html>>.

- (39) a. LEXICAL SPECIFICITY: a virus “strongly involves particular lexical items” (329) i.e. *whom*
- b. DIRECTIONALITY: applies in one direction, i.e. check acc case on *whom* to the RIGHT of a preposition (see ‘basic *whom* rule’ below)
- c. OVEREXTENSION: prone to over-application in non-prescribed environments
- d. UNDEREXTENSION: “a virus appears unable to affect all the items affected by the normal grammatical process that it mimics” (331)
- e. NONLOCALITY: insensitivity to nonlexical hierarchic constituents, “resulting in rules’ applications involving nonlocal constituents” (331)
- f. DELAYED ACQUISITION: GVs are characteristic of adult, not child, language and must be explicitly taught

But what are the consequences of speakers’ “capacity to ‘edit’ or ‘tinker with’ certain grammatical forms to achieve socially prescribed norms, a capacity that is surprising in light of the grammatical system’s considerable resistance to manipulation” (335)? If Virus Theory is legitimate, it entails that speakers must have access to use of Case. Since Case assignment is a central operation of the unconscious grammatical system, this notion threatens to compromise the entire Minimalist Program. Perhaps GVs allow a different kind of Case manipulation at a level above the syntax, wherein speakers ‘learn’ to say *whom*. In her dissertation, Sarah Felber (2004) proposes the following derivation model that depicts the order of application of rules in syntax proper, GVs, and conscious ideas about language:



In their 2000 article “The *who/whom* puzzle: On the preservation of an archaic feature,” Howard Lasnik and Nicholas Sobin posit two GVs which “check a case feature of *whom* when it follows a Case-assigning head [V or P]” and thereby monitor the “prestigious overtly Case-bearing *wh*-form” (354) into formal speech. They argue that *whom* is composed of *who*- “with its full set of formal features, including a Case feature which must be checked” and the suffix *-m*,³⁷ whose “additional ACC Case feature” (354) requires independent checking by another mechanism—a GV. They argue that such a GV “is sensitive to the sequential arrangement of elements and applies at a point in the derivation where the order of over elements is fixed, most likely at ‘spellout’” (355). Since this stage of derivation occurs post-rotationally, it is closer to a ‘conscious’ level than any underlying structure of the sentence would be.

The ‘basic *whom* rule’ checks ACC case on *whom* when it directly follows a V or a P:

- (41) If: [V/P] *who*- *-m*
 [ACC] [ACC]

³⁷ This morphological analysis ascribes a morphological transparency to *whom* that I doubt all speakers possess. Speakers who do use it as an ACC form usually do it with personal pronouns *him/her* in mind.

features of the core system” (369). In sum, GVs are useful in predicting the linear environments where prestige speakers are most likely to use *whom*. However, GVs cannot explain the full range of nonstandard usage patterns, including the variability that individual usage exhibits, on both synchronic and diachronic axes. Perhaps a more diverse notion of GVs can account for this variability by exploring how a GV evolves.

3.5 Virus Theory: An evolutionary model

Linguist David H. Fournier (2006) addresses complaints that GVs are too heterogeneous³⁸ to be conflated into one group by arguing that each is in a different stage of development. His diachronic account necessitates some sort of evolutionary model for the lifetime of a GV. His ‘evolutionary’ schema is depicted below:

(45) **Stage 1:** inception - a virus emerges as the result of prescriptive pressures and/or avoiding stigmatized forms and constructions →

Stage 2: virus is unnatural, conscious in speech; extremely specific; provides an alternative construction to the natural one already instantiated in the grammar; will exhibit properties such as lexical specificity, directionality, and insensitivity to nonhierarchical lexical constituents →

Stage 3: virus becomes a stronger presence in many speakers’ grammar, yet usage is inconsistent across and among speakers; autonomous variability; overextension and underextension →

[**Stage 3’:** evolution into a natural process; rare]

Stage 4: new viral form is welcomed prescriptively as the preferred/prestigious variety; false sense of grammaticality and delayed acquisition →

Stage 5: deterioration and disappearance because virus was incapable of becoming standard.

But where would Lasnik and Sobin’s ‘basic *whom* rule’ and ‘extended *whom* rule’ fit into this model? Individuals exhibit too much variability in their use of *whom* for the GVs to be ascribed to any single stage. Furthermore, the distribution that viruses account for has been fairly stable for the past 500 years—why haven’t the viruses already evolved to the final stages for all speakers?

At its best, Virus Theory can provide a mechanism through which synchronic language variability results in syntactic change. Fournier argues that “much of how languages evolves is due to viruses” (8). He also suggests that more historical linguistics research should be done to study “how these phenomena have developed throughout the course of time” (10). Only with a diachronic perspective in mind can we make sense of the distribution of *whom* and its roots in the earlier grammars of English.

³⁸ See Sobin (1997) for other GVs that check

- a. nom Case in coordinate NPs: the “...and I...” rule and the “...that she...” rule (328)
- b. nom Case in nonlocal NPs: “the “...than I” rule and the “it is I” rule (337)
- b. plural agreement in expletive constructions (ECs): “there are...” rule (333)

Furthermore, recognizing that a virus is at work will prevent devising unnecessary explanations and modifying theories of grammar. Bennet's *acc + fin* construction, for example, would require introducing other rules to restrict its application and prevent over-generalization. But the extra-syntactic GVs present no challenge to Case theory to account for the distribution of *whom*. They do, however, complicate accepted notions regarding the unconsciousness of speech production.

4 Survey: Filling in the 'correct' word

4.1 Methodology

4.1.1 Setting a standard of high linguistic capital

Data was collected through surveys that were administered to 82³⁹ volunteers from the Yale University community. Such a sample is not representative of the general population, but it was necessary to restrict my pool of informants to a social context where mastery and fluency of one's language carry great prestige—within the academic realm of a university. According to sociologist Pierre Bourdieu (1977), individuals who adhere to the accepted prescriptive rules (including those eliciting *whom*) produce a 'correct,' standardized, yet artificial dialect and thereby exemplify one dimension of his notion of *linguistic competence*.⁴⁰ This grants them *linguistic capital*, a type of social capital embodied by the individual in her place in society.

With this in mind, I designed a survey that would explicitly heighten participants' attention to the linguistic capital in the responses I was eliciting. In the header (43) I explicitly request the word that would be 'correct' in a formal register, thus setting a standard of high symbolic capital:

- (46) Header: I am interested in how speakers build complex sentences and questions in a formal register. Please fill in the blanks in the sentences below with the correct word that you would use when speaking in a formal style (for example, in writing).

See **Appendix A** for an example of part I of the survey.

³⁹ 2 of the 82 did not finish the survey.

⁴⁰ Bourdieu critiques Chomsky's abstraction of linguistic competence because Chomsky fails to consider context. Bourdieu highlights the additional levels of 'situation competence' and 'practical competence' (647) required to use language as coherently and pertinently as possible. He writes, "Practical mastery of grammar is nothing without mastery of the conditions for adequate use of the infinite possibilities offered by grammar" (646).

4.2 Independent variables

4.2.1 Independent syntactic variables

There are a number of variables that determine whether an informant will supply *who* or *whom*, some of which are based on syntactic function, and others which relate to the surface position of the *wh*-pronoun. The variables within the syntactic domain include:

- (47) GAP FUNCTION: whether the *wh*-pronoun is underlyingly a
 - a. subject
 - b. object/complement
- (48) RELCL FUNCTION: whether the RelCl containing the *wh*-pronoun is a
 - a. subject clause
 - b. object clause of V
 - c. complement clause of P

If the *wh*-pronoun functions as an object, then the following variable in (48b) and (48c) becomes relevant:

- (49) GOVERNOR:
 - a. P
 - b. V

If the *wh*-pronoun is not an object, it may either be the subject or predicate [nominative] of the relative clause. The following variables would then affect whether *whom* will be elicited:

- (50) EMBEDDING: whether the RelCl is
 - a. embedded (i.e. by a pushdown clause), meaning the RelCl functions as an object
 - b. not embedded
- (51) TYPE OF EMBEDDED CLAUSE (if (50a) is true):
 - a. finite CP⁴¹
 - b. infinitival IP⁴²
 - c. bare stem⁴³
 - c. small clause (tenseless)⁴⁴

Note that there is considerable overlap among the conditions (47)-(51). For example, whenever the RelCl is embedded by a V (50a), it will function as an object clause (48b).

⁴¹ Finite CPs may be embedded by a P, bridge V (*think*), inherently negative V (*doubt*), or question V (*wonder*)

⁴² An infinitival IP would be embedded by an ECM V such as *consider* in "...*whom* you consider *t* to be guilty"

⁴³ A bare stem would be in a clause embedded by a perception V such as *see* in "...*whom* you saw *t* leave"

⁴⁴ Matrix V varies

4.2.2 Independent linear position variables

The linear position (i.e. position in the surface structure of a sentence) of the *wh*-pronoun is also predicted to play a role in determining whether *who* or *whom* will be elicited:

- (52) LINEAR POSITION (w.r.t. GOVERNMENT): whether the *wh*-pronoun directly
- a. follows a governor (P or V)
 - b. does not follow a governor (extracted)

If (52a) holds, then the *wh*-pronoun can but need not be the object of the P or V preceding it. In the sentence “There has been some speculation as to *whom* the fifth representative from South Africa was,” the P *to* directly precedes the extracted predicate nominative yet does not govern it. In other instances the governing relationship depends on whether the *wh*-pronoun’s surface position corresponds to its underlying position. If it does, it is called ‘in-situ’; if not, then the pronoun has been ‘extracted’ to this position. Note all the possible relations between the governor and the *wh*-pronoun that follows it (52a):

- (53) If the *wh*-pronoun is **in-situ**
- a. object/complement of the governor
 - b. subject of the object/complement clause

- (54) if it has been **extracted** to this position
- a. subject of the object/complement clause
 - b. object within an object/complement clause

In the case of (52b), the binary opposition in (54) applies. But in (54a), the RelCl may be either finite or non-finite (48). The conditions in (53) and (54) may be conflated into the following opposition regarding the pronoun’s surface vs. underlying position.

- (55) SURFACE POSITION (w.r.t. MOVEMENT): whether the *wh*-pronoun is
- a. in-situ
 - b. extracted (has undergone movement)

4.2.3 Interactions and motivations

It would be unreasonable to test all the possible combinations of the variables above because they are not equally likely to elicit *whom*. Incorporating some logic and common sense helps to narrow the domain and include only those combinations of conditions that would provide at least one reason for eliciting *whom*. For example, we assume the simple subject of a finite V is unlikely to elicit *whom*:

- (56) **Whom* left?

But more complex constructions include other elements, such as embedding of the RelCl by a pushdown V or a P, and each additional layer of embedding is predicted to increase the likelihood of eliciting *whom*. The more complex the structure, the more variables come into play:

- (57) a. ?Please let me know *whom* left early.

- b. Please let me know *whom* you claim left early.
 c. Please tell me the name of *whomever* you claim left early.

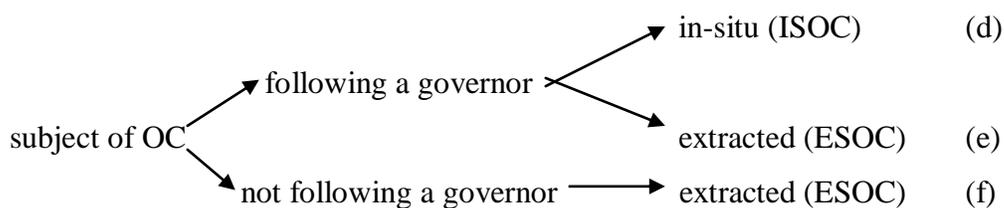
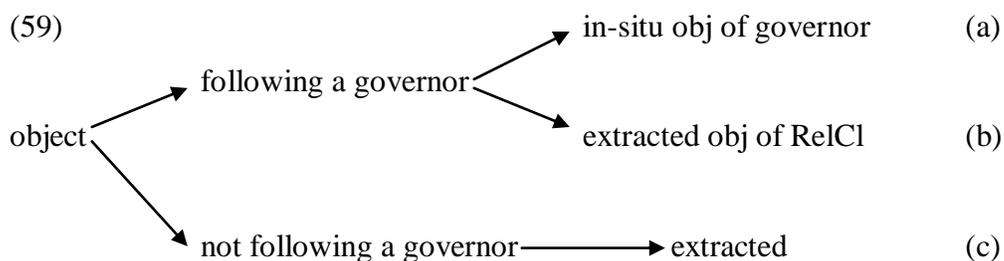
In (57a), the indirect question [*who(m)* left] is the object of the verb *know*, and the subject *whom* is in a post-V position. In (57b) the clause [*whom* you claim left early] is object of the V *know*, and *whom* undergoes extraction and raising to the same post-V position as in (57a). However in (57b) the RelCl is further embedded by [you claim], which offers more incentive to consider *whom* in “object territory.” Sentence (57c) contains the free relative *whomever*, which has been extracted over the embedding of [you claim] into a position immediately post P. But once again the P does not govern or assign accusative case to *whomever* by any syntactic mechanism; instead the linear proximity to P and opacity (w.r.t case) of the free-relative form are the factors predicted to elicit *whom*.

Intuitively, any of the following environments can be assumed to offer some motivation for using *whom* because they place it in “object territory”:

- (58) a. when the *wh*-pronoun is an object
 b. when the *wh*-pronoun is contained in an object/complement clause⁴⁵
 c. when the *wh*-pronoun directly follows a governor (V or P)

Note the considerable overlap across the conditions in (58a-c).

Consider the following schema, which illustrates how some of the variables in (47)-(55) may combine to produce the environments in (58a-c):



⁴⁵ A *wh*-pronoun functioning as a subject DP is unlikely to elicit *whom*, so the survey only contains one stimulus featuring this condition: “The senior class gift is also a competition between the colleges, and _____ever wins in either category will receive a \$10,000 scholarship to award to an incoming freshman.” (Thomas Murdoch Duncan, personal communication, Feb 10, 2010)

NB: (59d-f) assumes (50a), the presence of embedding. In (59b), (59d), and (59e) the governor may either be a P or a V. In addition (59d-f) can all contain either a finite or non-finite V or a SC. If the RelCl is infinitival or if the complement is a SC, the accusative form *whom* is prescribed because the NP is assigned accusative case in English:

- (60) a. I consider [_{IP} him to be lucky]
 b. I consider [_{SC} him lucky]
 c. *I consider [_{IP} he to be lucky].

In order to evaluate the degree to which speakers hypercorrect and provide *whom* for the subject of a finite V, we must first account for their usage of *whom* in its prescribed environments, which include (59a-c) and the non-finite variants of (59d-f). Participants' percentages of *whom* under such conditions provide a baseline for which we can judge their use of *whom* as a subject of a finite object clause.

4.3 Dependent syntactic variable

The dependent syntactic variable is the word that the participant supplies in the blank in each sentence. Each occurrence of *whom* will count towards the individual's percentage of *whom* responses across each of the combinations of conditions described above in (59).

4.4 Other variables

There is one other significant variable that thus far has been mentioned in passing but not discussed explicitly: the typology of the RelCl. Consider the following:

- (61) a. I'll invite the man [_{CP} *who* *t* is your neighbor].
 b. I'll invite [_{CP} *whomever* you choose *t*].
 c. I'll invite [_{CP} *whoever* *t* treats me best].

The head *who* of the RelCl originates in a subject position in (61a) and object position in (61b) and in both cases is raised to Spec, CP of the RelCl. But other RelCls such as the one in (61c) have no heads; hence they are known as 'headless relative clauses' or 'free relative clauses', shorted to 'free relatives' (FRs). The class of English FR pronouns with human antecedents includes *who*, *whom*, *whoever*, *whomever*, *whosoever*, and *whomsoever*. Semantically, FRs may be either definite/specific (62a) or universally quantified (62b):

- (62) a. I'll invite [*whoever* came to my last party].
 b. I'll invite [*whomever* you recommend].

In (62a), brackets set off the FR that has *whoever* as its subject. The frequency of the accusative form *whomever* in such a construction demands a more concrete explanation of whether the matrix V *invite* may have some ability to assign ACC case to *who(m)ever*. If such quasi-governance is possible, then perhaps its frequency provides a vehicle for longitudinal syntactic change.

Free relative clauses exhibit notoriously complicated case properties known as “case matching effects.” In languages such as German, FR pronouns must be assigned the same case by the matrix V as within the RelCl (Riemsdijk 2006). English does not have this restriction, but a FR does require correspondence between the category of the pronoun it selects and the category selected by the matrix clause. The most salient issue related to matching phenomena is whether the link between the relative clause and the matrix is a direct one or an indirect one, but such a question is beyond the scope of this paper.

4.5 Recapitulation

To summarize, part I of the survey contains 64 stimuli in a randomized order, 32 of which elicit *who/whom* from an underlying subject position in the RelCl. Also included among the data are a number of “filler” sentences intended to inhibit participants from detecting patterns across the stimuli, which might affect their responses. In order to establish a baseline of *whom* usage for an extracted object, the data include 16 stimuli that should elicit *whom* according to prescriptive rules: as an object in (59a-c) and as assigned accusative case in the non-finite variants of (59d-f).

The experimental design and distribution of stimuli were admittedly not ideal to test the interplay between as large a number of variables as those outlined above. The schema in (59) corresponds to 14 different environments once we incorporate factors such as the finiteness of the V and whether the governor is a P or V. Preliminary versions of the survey contained 128 stimuli, but logistical considerations necessitated a considerable reduction of the number of sentences presented to informants.

5 Sociolinguistic questionnaire

5.1 Three dimensions of linguistic insecurity

While past accounts of the idiosyncratic distribution of *who* and *whom* have only considered the interaction of syntactic variables and constraints, my study aims to correlate speakers’ usage of *whom* in the conditions above with their self-reported levels of linguistic insecurity on three dimensions.

- (63) INSECURITY: speaker’s level of confidence with respect to her own speech and as compared to others’
- (64) VALUE: the social value that an individual ascribes to speaking ‘correctly’; i.e. individual’s degree of ‘JUDGMENTALISM’

- (65) SELF-CONSCIOUSNESS: speaker's level of awareness with respect to his or her speech; tendency to self-correct and modify register depending on context/circumstances.⁴⁶

In part II, participants completed a questionnaire containing nine statements in a randomized order. Each statement measures the degree to which participants exhibit the traits in (63), (64) or (65) by asking them to rate the statements on a Likert scale of 1 (strongly disagree) to 5 (strongly agree). Higher ratings mean the participant more strongly embodies (63), (64) or (65) which I hypothesize will correlate to a higher overall usage of *whom*.

5.2 Statement and reply format

The instructions are supplied in (66).

- (66) Instructions: Rate the following statements on a scale of 1 (strongly disagree) to 5 (strongly agree)

(67) contains a statement that measures a participant's score on the VALUE dimension according to the Likert scale below:

- (67) I judge others negatively when they make grammatical mistakes.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

The more strongly a participant agrees with statement (67), the more judgmental she is of others' grammar, meaning that she places great VALUE on speaking correctly.

See **Appendix B** for an example of the sociolinguistic questionnaire.

6 Results: Syntactic variables

6.1 Frequency of *whom* responses across all stimuli

When the *wh*-pronoun had a gap function of subject, the distribution of *whom* responses was right skewed, regardless of the finiteness of the RelCl where it started. When the gap function was object, the distribution of *whom* was left skewed but less normal.

See **Appendix C** for bar graphs of these distributions.

⁴⁶ Note that high scores on this dimension—especially the tendency to speak in different styles depending on the formality of the exchange—correspond to Bourdieu's notion of situational linguistic competence.

Each of the sentences designed to elicit *who* or *whom* has a score between 1 and 80 which signifies the number of participants who supplied *whom*. The sentences with the highest *whom* scores are reproduced below, classified according to their independent variables:

(68)

<u>score</u>	<u>sentence</u>	<u>GAP FUNC- TION</u>	<u>LINEAR POSITION w.r.t. GOVERN- MENT</u>	<u>SURFACE POSITION w.r.t. MOVEMENT</u>	<u>FINITE- NESS of RC</u>	<u>EMBEDDED RC?</u>
a 78	For whom are you buying that gift?	obj	P ___	fronted PP		
b 78	To whom it may concern: please abstain from dumping your compost pile directly onto our landing.	obj	P ___	fronted PP		
c 75	Her mother, in whom she often confided, said it wasn't easy for her.	obj	P ___	fronted PP		
d 69	To whom do I owe this great honor?	obj	P ___	fronted PP		
e 69	The ballroom was crowded with attendees, many of whom failed to respond to the invitation.	obj	P ___	in-situ PP		
f 65	They indict whomever they find suspicious.	subj	V ___	extracted	infin (SC)	embedded
g 64	Quentin will work on the project with whomever you suggest.	obj	P ___	extracted		
h 57	We will hire whomever you recommend.	obj	V ___	extracted		
i 55	There was no doubt as to whom he would choose.	obj	P ___	extracted		
j 50	Let the people elect whomever they think is best qualified to lead them.	subj	V ___	extracted subj of obj clause	FIN	embedded
k 48	The detective questioned the subject whom I believe the media opposes.	obj		extracted	FIN	embedded
l 47	To avoid an awkward encounter, start a conversation with whomever among the girls seems the most	subj	P ___	in-situ subj of obj clause		

		uncomfortable.					
m	43	David donates his time to whomever he thinks needs it the most	subj	P ___	in-situ subj of obj clause	FIN	embedded
n	41	Give it to whomever asks for it first	subj	P ___	in-situ subj of obj clause		
o	41	I place faith in whomever seems trustworthy	subj	P ___	in-situ subj of obj clause		
p	41	I'm still skeptical of the ex-convict whom you believe to be reformed and humane	subj		extracted	infin	embedded

All of the above sentences elicited *whom* more than half of the time, suggesting it is not chance alone but other factors as well. **Bold** rows indicate conditions under which *who* is the prescribed form but more than half the participants supplied *whom*. In all such rows, *whom* was elicited for the subject of the object/complement clause that directly follows a governor: P in (68l)-(68o) or V in (68j).

6.2 Frequency effects of independent variables

6.2.1 LINEAR POSITION w.r.t. GOVERNMENT

The single most important factor in determining whether a stimulus will elicit *who* or *whom* is its LINEAR POSITION W.R.T GOVERNMENT. If the stimulus featured a *wh*-pronoun directing following a V or P, then participants supplied *whom* 69.92%⁴⁷ of the time, regardless of whether the V or P was actually the syntactic governor and case assigner of *whom*. When a *wh*-pronoun was extracted and did not directly follow a governing V or P, then it only elicited *whom* 34.34%⁴⁸ of the time.

6.2.2 GAP FUNCTION

The second most important factor in determining whether a stimulus will elicit *who* or *whom* is the gap function of the *wh*-pronoun. When it functioned as an object, either as a DP or within the RelCl CP, participants responded with *whom* an average of 64.69% of the time. When it functioned as a subject, it elicited *whom* an average of only 37.14% of the time.

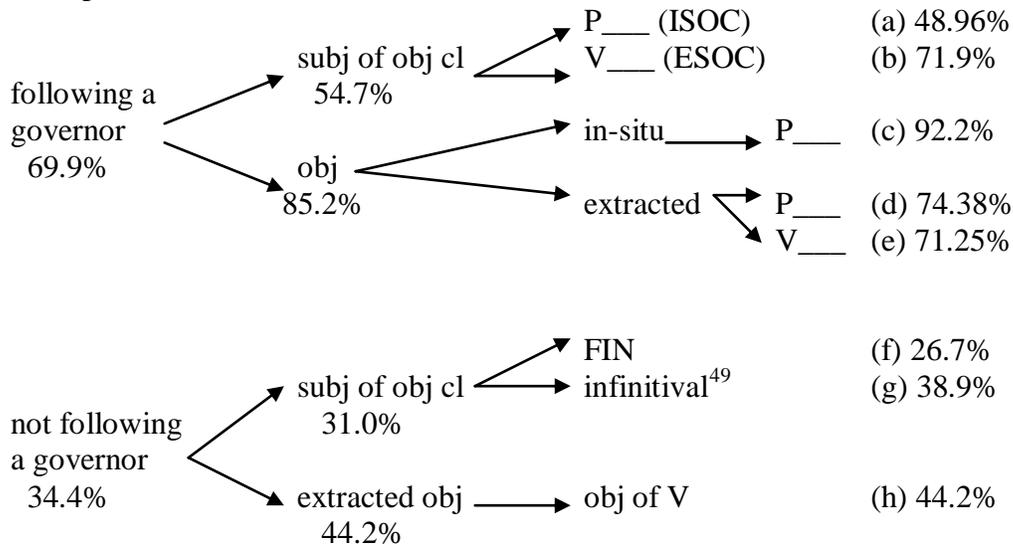
6.2.3 Combination of independent variables

⁴⁷ Based on a weighted average of *whom* responses.

⁴⁸ Also based on a weighted average, as are all other percentages that follow.

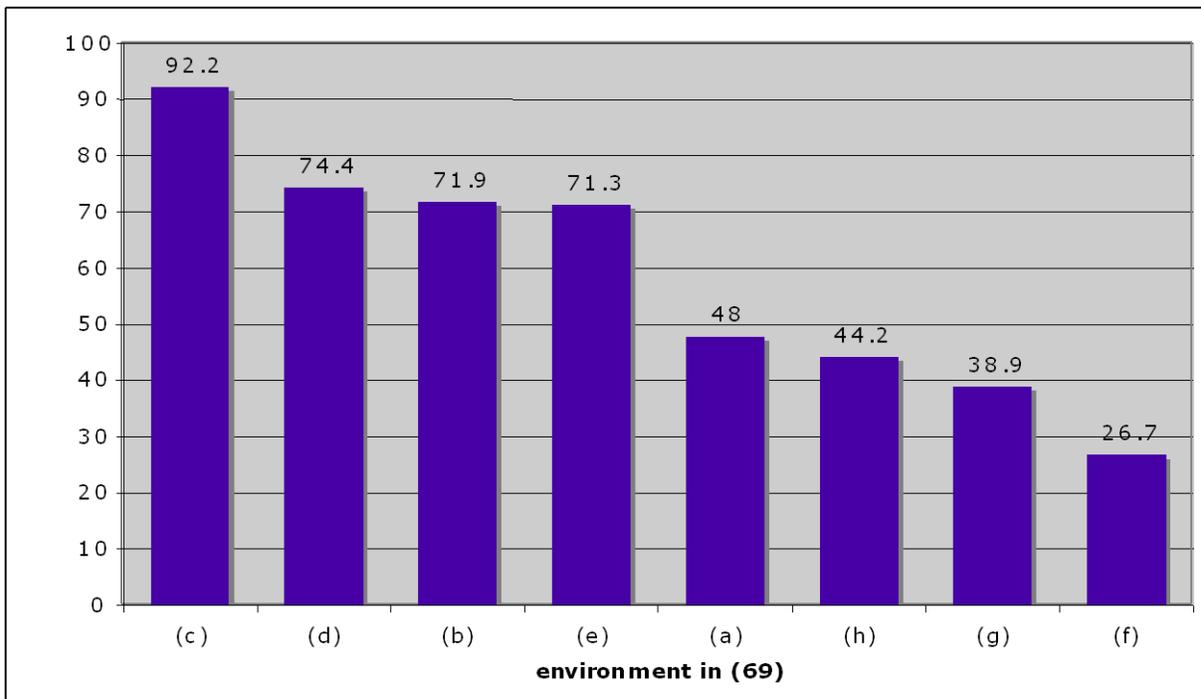
We can revisit the schema of (59) but now reformulate it according to the 2 most influential factors: LINEAR POSITION w.r.t. GOVERNMENT and GAP FUNCTION/RC FUNCTION.

(69) % responses of *whom*



These percentages are summarized below:

(70) Frequency of *whom* responses across environments in (69a)-(69h)



⁴⁹ Included in this figure are SCs because they are non-finite.

The categories are arranged in the above chart according to the highest % of *whom* responses elicited.

Recall that prescriptive rules require the use of *whom* in conditions (c), (d), (e), (g), and (h).

7 Cluster analysis

7.1 Isolating clusters of individuals

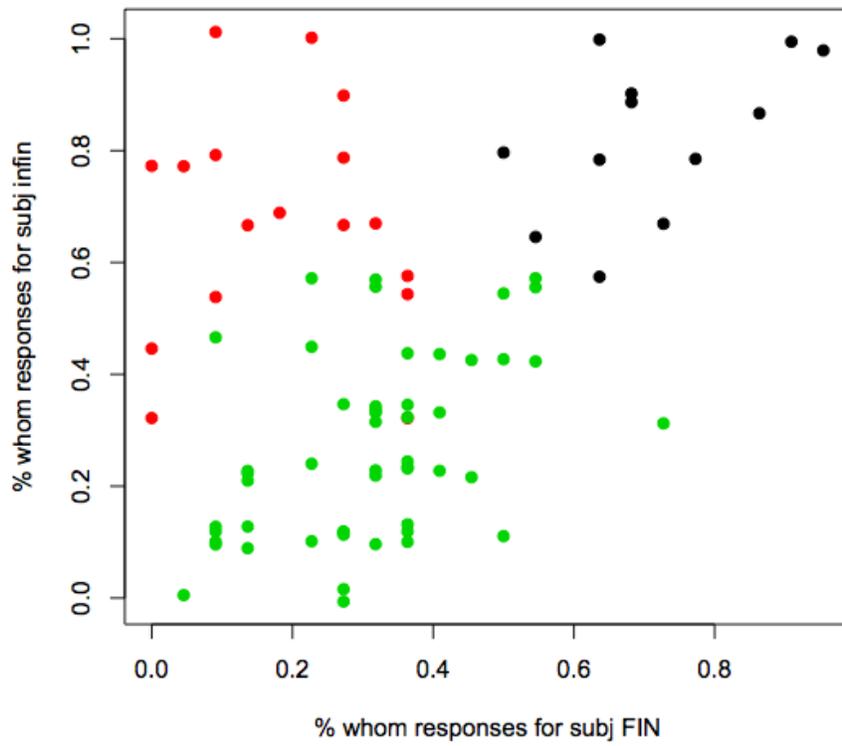
Using a k-means clustering method of cluster analysis, individuals were divided into three groups that exhibit significantly ($P = 0.00$) different average *whom* responses in 3 oppositional environments: for the subject of a finite object clause; the subject of an infinitival clause; and for an object.

(71)

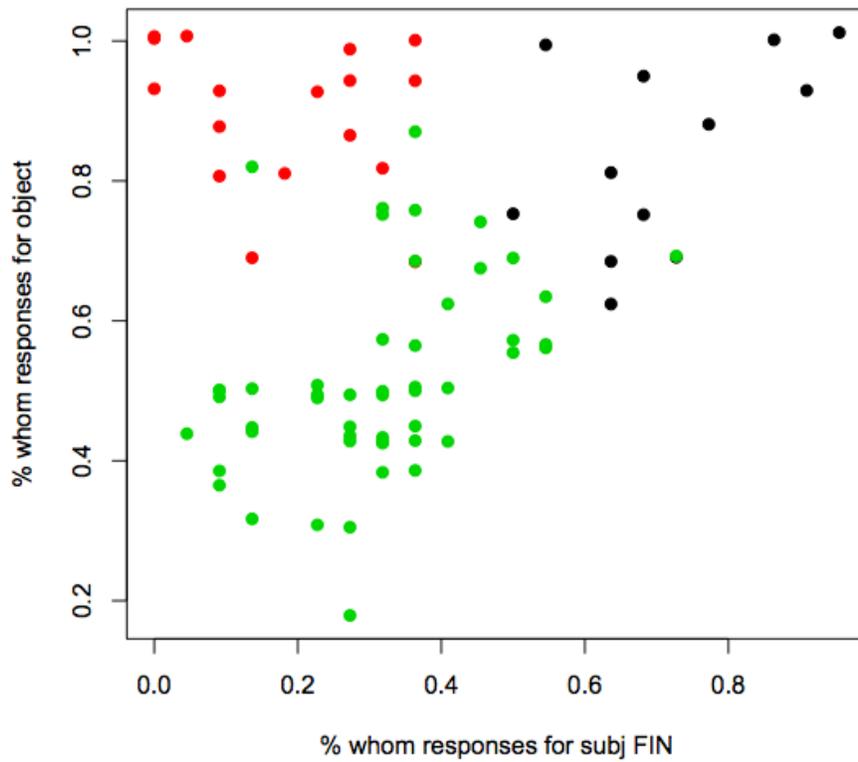
<u>cluster centers:</u> <u>average % whom</u> <u>responses for</u>	<u>cluster 1</u>	<u>cluster 2</u>	<u>cluster 3</u>
subj of a FIN clause	71.21%	18.18%	31.11%
subj of an infinitival clause/SC	82.41%	67.32%	26.58%
all objects	83.85%	89.71%	51.84%
n =	12	17	15

The bottom row reflects the number of individuals in each cluster. The following charts show the distribution of individuals' *whom* usage across these three different environments. The black points comprise **cluster 1**; the red points, **cluster 2**; and the green, **cluster 3**.

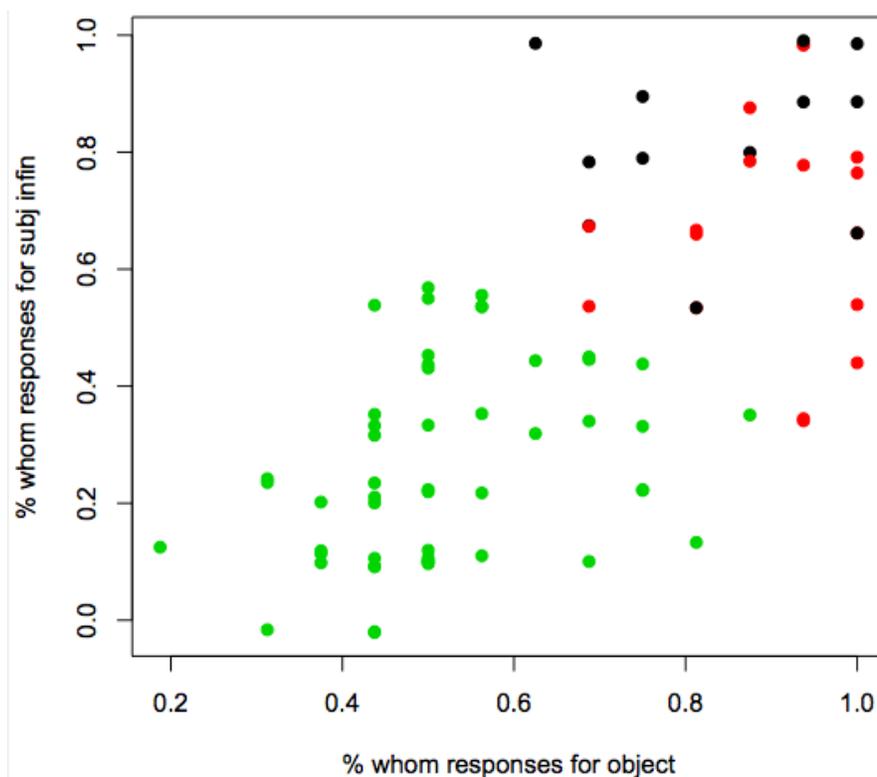
(72) % *whom* responses for subject of a FIN clause vs. subject of an infinitival clause



(73) % *whom* responses for subject of a FIN clause vs. object



(74) % *whom* responses for object vs. subject of an infinitival clause



7.2 Distribution of sociolinguistic scores by cluster:

The three clusters of individuals produced the following average responses to nine sociolinguistic questions on a scale of 1 (strongly disagree) to 5 (strongly agree):

(75)

<u>dimension</u>	<u>statement</u>	<u>cluster 1</u> <u>mean</u>	<u>cluster 2</u> <u>mean</u>	<u>cluster 3</u> <u>mean</u>
INSECURITY	I am insecure about the way I speak.	1.58	1.88	2.04
INSECURITY	My parents have better grammar than I do.	2.08	2.24	2.55
INSECURITY	My peers have better grammar than I do.	2.17	2.18	2.69
VALUE	I judge others negatively when they make grammatical mistakes.	3.25	3.53	3.04
VALUE	I place great value on speaking correctly.	4.25*	3.94*	3.33*
VALUE	There is a correlation between a person's intelligence and the way he or she speaks.	3.67	3.24	2.98
SELF-CONSCIOUSNESS	I often worry about whether my grammar is correct.	3.25	2.94	2.90
SELF-CONSCIOUSNESS	During a formal conversation, I often 'edit' my speech to ensure that it is correct	3.25	3.76	3.49

SELF-CONSCIOUSNESS	I speak in different styles and/or employ different sentence constructions depending on the person I'm talking to and/or the formality of our exchange.	4.00	4.35	4.26
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* Indicates that the mean difference is significant at the $P = 0.05$ level.

7.3 Correlations & predictions

An ANOVA test indicates a correlation between group membership and responses to the statement “I place great value on speaking correctly.” Cluster 3 members’ mean of 3.33 is significantly different from the cluster 2 mean of 3.94 ($P = 0.031$, confirmed by post-hoc Bonferroni test) and cluster 1 mean of 4.25 ($P = 0.003$, also confirmed by Bonferroni test). The speakers in cluster 3 tended to respond neutrally to the statement that they place great value on speaking correctly, whereas those in cluster 2, and even more so in cluster 1, tended to agree with it.

See **Appendix D** for a scatterplot depicting this correlation and **Appendix E** for the relevant ANOVA output and post-hoc tests.

7.4 Cluster-based typology

7.4.1 Cluster 1 speakers

Members of cluster 1 had the highest overall frequency of *whom* responses across all syntactic environments, including when the *wh*-pronoun functioned as subject of a FIN object clause. They supplied *whom* for the in-situ subject of an object clause governed by (and directly following) a P (hereafter P_ISOC) in sentences such as “I place faith in ___ever seems trustworthy” an average 70.83% of the time. Recall that the average across all individuals in the P_ISOC environment was 48.96%. When the extracted subject of an object clause was raised to a position directly following a V (hereafter V_ESOC), as in “Let the people elect ___ever they think is best qualified to lead them,” all 12 individuals (100%) supplied *whom*.⁵⁰ In the same V_ESOC setting, all participants combined supplied *whom* an average of 62.5% of the time. For the extracted subject of a finite object clause that did not follow a governor (hereafter ESOC_fin), as in the stimulus “His behavior will only lead to further alienation of the people ___ he forgets have his fate in their hands” cluster 1 members supplied *whom* an average 69.44% of the time. This is considerably larger than the ESOC_fin average of 26.7% across all individuals.

For the subject of an infinitive or small clause that did not follow a governor (hereafter ESOC_infin), cluster 1 individuals supplied *whom* an average of 80.21% of the time, as compared to 38.9% across all individuals. When we consider *all* ESOC_infin, including the stimulus “They indict ___ever they find suspicious” in which the *wh*-pronoun follows a

⁵⁰ The survey only contained one stimulus that tested this specific combination of independent variables.

governing V, the figure climbs to 82.41%, compared to 43.6% across all individuals. For this stimulus, all 12 cluster 1 members supplied *whom* (100%).

For all *wh*-pronouns with a gap function of object, cluster 1 members supplied *whom* 83.85% of the time, whereas the average across all individuals was 64.69%. More specifically, if the object followed a governor, cluster 1 members supplied *whom* 89.58%, but when it did not follow a governor, it only elicited *whom* 78.13% of the time. Thus the LINEAR POSITION w.r.t. GOVERNMENT seems to have had some effect on cluster 1 members' use of *whom*, even though this effect is not statistically significant.

The 12 members of cluster 1 supplied *whom* more frequently across the board—even when it functioned as subject and did not follow a governor (ESOC_fin). This output is exemplary of hypercorrection, so I call these 12 individuals “hypercorrectors” who use *whom* as much as possible in the presence of variables that put the *wh*-pronoun in “object territory.”

As for their responses to the sociolinguistic statements, the hypercorrectors tended to disagree with the statement “I am insecure about the way I speak” more than any other individuals. They also were more likely to disagree that their parents and peers have better grammar than they do, suggesting that for this population, the more secure they feel about their grammar, the more they supply *whom* in non-standard syntactic contexts. This result is unforeseen: from Labov (1966) to Boyland (2001), the prime social motivation for hypercorrection—be it phonological or syntactic—is linguistic insecurity. Instead, these hypercorrectors display security. Clearly their sense of security is a false one, given that they are unaware of their ‘errors.’

Members of cluster 1 were also more sensitive to VALUE, since they tended to agree or strongly agree with the statement “I place great value on speaking correctly.” This suggests that hypercorrectors are more likely to be judgmental of others' grammar, which is consistent with their relative linguistic security. This unfounded sense of security leads them to believe that they occupy an authoritative position as a judge of grammatical correctness, when in reality, their usage is the least conservative.

7.4.2 Cluster 2 speakers

Cluster 2 members readily supplied *whom* for objects and subjects of infinitival clauses, but rarely for the subject of a finite object clause. In P_ISOC settings, they supplied *whom* only 29.41% of the time. In a V_ESOC environment, 8 out of the 17 individuals supplied *whom* (47.06%). In ESOC_fin settings, cluster 2 members supplied *whom* only 11.76% of the time. This figure is significantly smaller than the average among cluster 1 individuals (69.44%) and cluster 3 individuals (31.11%). Because cluster 2 individuals tended to supply *whom* according to prescriptive rules, they were not likely to hypercorrect.

Under ESOC_infin conditions, if the RelCl did not follow a governor, cluster 2 members supplied *whom* an average of 63.24% of the time, a percentage that is significantly higher than the average across all individuals (38.9%). When the ESOC_infin directly followed a governor as in “They indict ___ever they find suspicious,” all 17 cluster 2 members supplied *whom* (100%). Therefore, for all ESOC_infin stimuli combined, including the sentence containing a RelCl that directly follows a V, they supplied *whom* 67.32% of the time. Again, this figure is higher than the average across all individuals for ESOC_infin (43.61%).

When the *wh*-pronoun was underlyingly an object, cluster 2 members supplied *whom* 89.71% of the time, which is higher than the cluster 1 average (83.85%) and the average across all individuals (64.69%). When we consider the role of LINEAR POSITION w.r.t GOVERNMENT, we find that if the object followed a governor, cluster 2 members supplied *whom* 94.85%; when it did not follow a governor, they supplied it 84.56%. Once again, LINEAR POSITION seems to have had a slight effect on cluster 2 members' *whom* responses, but this is minimal compared to its effect across all individuals. The members of cluster 2 tended to supply *whom* only when the prescriptive rules required it, so for these 17 individuals, the single most important independent variable is the GAP FUNCTION of the *wh*-pronoun, as opposed to its LINEAR POSITION w.r.t. GOVERNMENT, which is the most important variable for cluster 1 hypercorrectors.

Members of cluster 2 were more likely to agree with the statement "I judge others negatively when they make grammatical mistakes" than members of cluster 1 or 3. This makes sense: because they have 'mastered' the prescriptive rules, members of cluster 2 are the *least* likely to make grammatical mistakes.⁵¹ Their adherence to the prescribed system of rules permits them to judge others whose *whom* usage does not follow these rules.

It is also worth noting that cluster 2 members were more likely to agree with the statement "During a formal conversation, I often 'edit' my speech to ensure that it is correct" than the members of clusters 1 or 3. 'Editing' their own speech means that they monitor their output at the spell-out level towards a target that is 'correct' according to the prescriptive tradition, a social code. They are able to attain this target because they have mastered the prescriptive standard, granting them considerable authority in realms where correct grammar affords them higher status.

7.4.3 Cluster 3 speakers

Members of cluster 3 were altogether less likely to supply *whom*. For them, P_ISOC environments elicited *whom* only 50.33% of the time. In a V_ESOC environment, 29 out of the 51 members supplied *whom* (56.86%). ESOC_fin settings elicited *whom* an average of 21.57% of the time, whereas ESOC_infin settings elicited *whom* only slightly more, an average of 26.58% of the time. For the ESOC_infin stimulus in which the *wh*-pronoun followed a governing V, 36 of the 51 individuals supplied *whom* (70.59%). With this stimulus vouched for, cluster 3 members supplied *whom* for ESOC_infin in the absence of a directly preceding governor an average 21.08% of the time.

When the *wh*-pronoun had a gap function of object, cluster 3 speakers supplied *whom* 51.84% of the time. More specifically, if the object directly followed a governor, they supplied *whom* 80.88% of the time, but in the absence of a governor directly preceding the RelCl, cluster 3 members supplied *whom* for an underlying object only 22.79% of the time.

Although members of cluster 3 were overall less likely to supply *whom*, they still used it enough to demonstrate that for them, the single most important independent variable is LINEAR POSITION w.r.t GOVERNMENT. For this reason, we argue that in contrast to cluster 2, cluster 3 individuals' distribution of *whom* depends not on prescriptive rules nor on the GAP FUNCTION of

⁵¹ Errors related to hypercorrection; this model does not account for genuine performance errors.

the *wh*-pronoun but instead on its LINEAR POSITION—i.e. whether or not it directly follows a governing P or V.

Members of cluster 3 were more likely to respond neutrally to statements that their parents and peers have better grammar than they do, as compared to members of clusters 1 and 2, who tended to disagree with such statements. This suggests that the informants who used *whom* the least overall also tended to be less secure about their grammar, as compared to the hypercorrectors and adherents to prescriptive rules who denied linguistic insecurity. Their insecurity reflects syntactic uncertainty about when to use *whom*, which results in less usage. And with less usage, the frequency of *whom* decreases, and its paucity perpetuates the uncertainty about when to use it. This pattern contrasts with assumption that linguistic insecurity is positively correlated with frequency of syntactic hypercorrection.

7.4.4 Other cluster-based characteristics of members

Among the 80 respondents to the survey, five identified themselves as non-native speakers of English. One of these individuals is in cluster 1; another two are in cluster 2; and the remaining two are members of cluster 3. Their responses to the sociolinguistic statements were not significantly different from the native speakers' responses.

Neither sex nor age was found to be a statistically significant factor in predicting *whom* output. Furthermore, there were no statistically significant correlations between sex and/or age and any of the sociolinguistic variables.

7.5 Unexpected results: Anecdotal evidence and its implications

7.5.1 In the survey responses

Some participants supplied the word *that* despite the explicit instructions not to do so. I believe that their uncertainty about whether to supply *who* or *whom* led them to avoid (intentionally or otherwise) making the choice altogether, even though *that* is a less specific pronoun for human antecedents in sentences such as:

- (76) His behavior will only lead to further alienation of the people ____ he forgets have his fate in their hands.

Participants also occasionally supplied *which* for (76) and other ESOC constructions, even though it sounds less acceptable and 'natural' than *that* or *who(m)*. These data offer evidence that at least some speakers employ a sort of 'avoidance technique' even at the cost of clarity and 'naturalness'. The avoidance technique is especially marked in responses such as *because* to the following sentence:

- (77) The agent was far more hostile to Diana, ____ she believes betrayed the prince of Wales.

Clearly the ESOC construction confused the participants. Whether they intentionally supplied a stimulus that makes the sentence ungrammatical is unclear. There are two motivations for supplying *because* in (77):

- (78) a. to avoid having to choose a relative pronoun entirely
 b. they did not understand the syntax of (77) well enough to know what type of word it was eliciting

Either way, their unexpected responses suggest that this is a construction that they are either uncomfortable using or with which they are unfamiliar. Note that the individuals who provided such answers to (77) and (78) all belong to cluster 3.

It is also worth noting the considerable number of crossed-out letters and words I found on the surveys, which provide tangible evidence of self-correction⁵² and the grammatical anxiety that precedes it. Even though most participants disagreed with the statement “During a formal conversation, I often ‘edit’ my speech to ensure that it is correct” (mode = 4) on the sociolinguistic questionnaire, ‘~~whom~~ who’ evidence on the syntactic part of the survey suggests that they actively correct themselves, at least in writing.

7.5.2 In participants’ behavior

Some participants reacted strongly during and after taking the survey. The most common responses expressed frustration and/or disdain:

- (79) a. “That was the most fucking annoying thing I ever did” –M, 21
 b. “God, that was just like the SATs” –F, 22
 c. “Your survey reminds me of English class, and not in a good way” –F, 21

The negative reactions of many participants suggest that properly applying the rules of prescriptive grammar is a sensitive topic for them—unfortunately they took their frustration out on me instead of the survey! I explained to them that they were only having such a difficult time because the *whom* rules they were struggling to ‘master’ are arbitrary and impossible to internalize in the operative grammar, but many participants nonetheless blamed it on their “bad grammar.” These responses demonstrated genuine insecurity, much more compelling than their responses to the statement, “I am insecure about the way I speak.” In fact, no one strongly agreed with it, and only 7 out of 80 participants responded “I agree.” Among the rest, 30 people strongly disagreed with the statement, 32 disagreed, and 11 were neutral.

Other reactions to the survey were less disparaging but are still demonstrative of the social value attached to prescriptive adherence. At least a dozen participants asked me to “grade” their surveys or give them a key with the “correct” answers, which suggests a high level of investment in using the prescriptive rules properly. A few of these grammatically anxious individuals genuinely wanted to know the ‘correct’ distribution of *who* and *whom* prescribed by rules in grammar handbooks. Yet others—especially those members of cluster 2—requested that I grade their tests even though their results show that they have mastered the prescriptive rules (as far as one can master a dated and now unnatural system). These participants are seeking validation: an explicit affirmation that they can correctly apply the prescriptive rules which they so value.

⁵² i.e. ‘~~whom~~’; ‘~~whom~~ who’; ‘~~whom~~ ~~who~~ whom’

8 Discussion: Consequences and considerations

8.1 Back to the literature

The distribution of *whom* responses from the survey demands a re-evaluation of the linguistic explanations proposed by previous literature. First of all, the results of the survey do not support Bennet's (2001) proposal of a new *acc + fin* construction because the stimuli featuring ESOC_fin did not consistently elicit *whom*. The 12 hypercorrectors in cluster 1 supplied *whom* for such sentences, but this does not provide evidence for the kind of bracket erasure and governing access that Bennet's *acc + fin* construction would entail. It is more likely that members of cluster 1 supply *whom* for ESOC_fin as in (80a) based on a conscious analogy with ESOC_infin constructions, as in (80c):

- (80) a. The ambassador, ____ we hope will arrive shortly, is quite a character.
 b. We hope ____ will arrive shortly. (*he/*him*)
 c. The ambassador, ____ we expect to arrive shortly, is quite a character.
 d. We expect ____ to arrive shortly. (**he/him*)

Although (80a) and (80c) seem to differ only in the V that embeds the RelCl, in reality they differ in governing relationships. The ECM verb *expect* can assign accusative case across the governing IP, whereas the verb *hope* should be blocked by the empty complementizer [e]. If speakers instead test nominative and accusative personal pronouns in similar constructions as in (80b) and (80d), they can easily determine what the prescribed forms would be in (80a) and (80c). However, Sobin (1999) argues that this method of analogy is faulty because the question words *who* and *whom* “simply have no connection to pronouns in the operative grammar,” (30). For instance, pronouns have antecedents that precede them, but question words are “involved with attempts to elicit a reference” (30) and therefore need not have an antecedent.

Emonds' (1986) proposal that different speakers rely on separate systems of rules provided me with the motivation for performing a cluster analysis, yet his binary division of the systems into Prestige Usage (PU) and Normal Usage (NU) greatly restricts the spectrum of possible adherences to different systems of rules. Although cluster 1 members seem to correspond to Emonds' PU speakers, the other two clusters do not fit into his over-simplified typology. Furthermore, Emonds' analysis is based on the assumption that speakers are consistent and always provide the same responses in the same syntactic environments. In reality, each individual speaker exhibits much more variation, be it synchronic (in the form of register change based on context) or diachronic (adopting different systems over her lifetime). The switch between PU and NU can fit on either axis. Moreover, Emonds' model does not consider the syntactic uncertainty resulting from speakers trying to use a no-longer productive paradigm.

Lasnik and Sobin's (2001) *whom* GVs are case-checking mechanisms that apply to a finite sequence of surface elements at spell-out and “mimic the original phenomenon” (370) that the grammar no longer produces. The authors argue that viruses are only necessary to check certain features of Case that the normal system cannot resolve without them. Their proposal is well suited to account for only a fraction of the survey results. The 12 cluster 1 hypercorrectors

seem to adhere both to the ‘basic *whom* rule’ and to the ‘extended *whom* rule,’ because they supply *whom* in any environment where it is in ‘object territory.’ 17 other participants follow not the GVs themselves, but instead prescriptive rules (which provide the target that GVs overshoot). Their conscious application of explicitly learned prescriptive rules pre-empts their need for and assumption of GVs. The other 51 individuals—the majority—only consistently apply the ‘basic *whom* rule’ directly after Ps. But why must their usage of *whom* be ascribed to a virus, when it can be explained by standard system with P assigning objective case to its complement? Is a simple P + *whom* construction really so outdated that the operative grammar cannot do the case checking? I argue that it is redundant to attribute simple P + *whom* and other idiomatic usages (e.g. to *whom* it may concern) to GVs.

8.2 Further Research

Virus Theory also demands an explanation of the actual mechanism that allows conscious “editing” of speech. Is the process of producing formal speech more conscious than for less stylistically marked speech? In other words, is there evidence for varying degrees of consciousness in speakers? Perhaps this is a question for psycholinguistics given that it involves simultaneous parsing and self-correction. Yet it is no less relevant to formal syntactic theory. Such *whom* usage and conscious case-checking challenges the idea that the grammar (and the Case mechanism) is informationally encapsulated (cf. Felber (2004) 28). But maybe GVs *do* provide the perfect solution—if they in fact do not read grammatical structure, then perhaps the interaction between the encapsulated grammar and other cognitive processes (such as self-monitoring and self-correcting) could be minimal. Hopefully further research will elucidate the application of GVs on a less speculative, more concrete realm.

9 Concluding remarks

9.1 Why hypercorrection?

Phenomena of grammatical hypercorrection are often denied the comprehensive analysis that they merit because they are seen as variable at best, if not entirely random. Recall the hypercorrection of (8), which refers to a speaker’s overgeneralization of adverbs to positions following linking verbs (e.g. *I feel terribly today*). Although this trend varies by person, the speakers who overgeneralize the prescriptive rule “adverbs follow verbs” (because adjectives following verbs are stigmatized as informal (e.g. *I feel bad for you*)) seem to do so consistently. Ostler (2007) argues that the *feel badly* construction is a modern development that only arose after prescriptive grammars became popular. Now this overgeneralization is linked to the “prestige dialect.” But other grammatical hypercorrection phenomena exhibit more variability, so they face marginalization, threatening the oversight of the underlying sociolinguistic motivation. Plus the syntactic factors are often relevant. Just as sociolinguistics recognizes the significance of

variable output, the systematic output and the patterns in hypercorrection often reveal an attempt to mimic a system attested in other languages.

9.2 Oppositions and continua: Sociolinguistic and cognitive factors

9.2.1 Self-consciousness

In addition, an analysis of the causes for and theoretical mechanisms enabling hypercorrection helps tease apart trends by extricating distinct factors and dividing them into oppositions. Consider the opposition of unawareness of correctness vs. high self-consciousness, which is actually less polar than one might think. In reality there exists a whole spectrum of self-consciousness. Some speakers ought to exemplify self-consciousness, constantly ‘checking’ their speech and self-correcting to ensure that it adheres to the accepted (i.e. prescriptive) standards.⁵³ And in theory, those at the opposite end of the spectrum ought to be oblivious as to the grammatical correctness⁵⁴ of their speech. However, it remains unclear whether they are genuinely *unaware* of these prescriptive standards or they consciously *choose* not to follow them.

9.2.2 Grammaticality vs. Acceptability

Another relevant opposition concerns grammaticality versus acceptability. The traditional reliance on speakers’ intuitions in the formulation of syntactic theory understates the key distinction between grammaticality and acceptability. The standard instance that emphasizes their divergence is a sentence that is believed to be grammatical but is not considered acceptable by many speakers:

(81) The horse raced past the barn fell.

The well-known “garden-path” sentence in (81) is considered unacceptable because of the effect of parsing by the performance system. The word *raced* is ambiguous: it functions as a past participle modifying *horse* in (81) but the performance system instead parses it as a matrix V. Felber (2004) indicates that grammaticality and acceptability might also diverge in the other direction, giving rise to sentences that are acceptable to native speakers but not grammatical (26). Felber suggests that GVs underlie the hypercorrect constructions that satisfy this very description:

(82) I think I love you, *whomever* you think you are!

The FR pronoun *whomever* is not formally assigned accusative case by any mechanism within the grammar, yet the acc (-*m*) can be attributed to the ‘extended *whom* rule’, which is only

⁵³ See Rosemary Marie Ostler (2007) for examples of self-correction. She writes, “Educated speakers are generally aware of this fact and will sometimes correct themselves if they notice that they’ve said *and I* after a preposition. They must, then, be using this stigmatized form in spite of their knowledge of the prescriptive rules, presumably because it serves a conversational purpose” (259-60). In this case, the “conversational purpose” is probably to be polite, whereas when speakers overgeneralize *whom* for a subject, their motive is to demonstrate sophistication and learnedness.

⁵⁴ Not acceptability, but whether it complies with prescriptive guidelines.

concerned with the *wh*-word's position extracted from the object clause *you think*. There is a V that comes after it that has *you* as its subject; this nominative form's proximity to the *wh*-pronominal is what licenses the accusative case on *whomever*.

9.2.3 Natural vs. grammatically 'correct'

Closely related is the tension between what the grammar proper produces (which should be acceptable *and* grammatical) and what prescriptive authorities suggest. There is a dual tendency to glorify linguistic description and to condemn the prescriptive tradition. Syntactic intuition is revered as *the* uncorrupted source of empirical information about language, while prescriptive guidelines are written off as esoteric and too entrenched in social values to merit a linguistic analysis, which underestimates their influence on usage.

Both 'authorities' derive from ideologies representative of a value system that is both reflected and recreated in the social code and traditions. Deborah Cameron explains, "All attitudes to language and linguistic change are fundamentally ideological, and the relationship between popular and expert ideologies, though it is complex and conflictual, is closer than one might think" (4).

9.3 Verbal hygiene: Prescriptivism & anti-prescriptivism

In the discourse of linguistics, 'prescriptivism' is a loaded term, and it is virtually impossible to avoid the negative connotations attached to it. This is exemplary of the larger paradox that emerges whenever people judge or reflect on language: it is impossible to extract the *parole* themselves from the value structure in which they are embedded. So when people make evaluative statements about language, they establish themselves as outsiders. But in reality making such value judgments about language is a fundamental element of language use.

Deborah Cameron (1995) coins the term 'verbal hygiene' to account for these value judgments, which represent "the urge to meddle in matters of language" (vii). In the realm of linguistics, verbal hygiene promotes a type of anti-prescriptivism that scoffs at attempts to "change language." Consider, for instance, Sobin's (1997) viral nomenclature. He decides to label the remnants of outdated rules prescribing *whom* as VIRUSES that are parasitic on the grammar proper. This appellation depicts prescriptive rules as forces that 'infect' the grammar, a perspective no less disparaging than the stereotypical prescriptivist fear that the language will decay without their 'maintenance' and standardization.

Cameron argues that the linguistic anti-prescriptivism ideology "mirrors the same value-laden attitudes it seems to be criticizing" (3) because it also imposes a normative standard. Both prescriptivism and linguistic anti-prescriptivism are concerned with observing and enforcing the norms that emerge in language. Linguists regard language as its own entity that ought not be "preserved" by prescriptive rules, but such a perspective is equally norm-enforcing as that which it denigrates! Although linguistic and prescriptive authorities differ in their motivation and expression of norms,⁵⁵ Cameron observes that "'description' and 'prescription'

⁵⁵ Cameron argues that in the case of linguistics, norms are more covert (8).

turn out to be aspects of a single (and normative) activity: a struggle to control language by defining its nature” (8).

9.4 The Future of *whom*

Following a tradition beginning with Sapir (1921), linguists often predict the death of the word. Contemporary grammarian Brian Foster (1968) writes that *whom* “is doomed to fade away after a more or less protracted period of artificial stimulation. So far as the instinctive feeling of the speakers of English is concerned it may be said that *whom* is in fact already dead for the majority” (220). Perhaps this is true for the majority of speakers, but it is not they who have the influence on the notions of ‘correctness’ so highly valued in our society. Instead, it is a select few highly-educated and authoritative writers and speakers who affect the prescriptive realm. And for these individuals, *whom* is very much alive—at least as the complement of a fronted PP.

I predict the permanence of *whom* (at least over the next few generations) because of the value attached to prescriptive mastery and proper usage of the word. Although the Old English nominal case-ending system dropped out of usage long ago, the prestige associated with the case-marked form *whom* shows no signs of waning. There is no logic to distribution of *whom* because it is merely a leftover form from a system no longer active in Modern English. Ostler (2007) therefore attributes the use of these prestige forms to an altogether social motivation. She writes, “People don’t use these pronouns because they match an abstract Case. They use them because they want to make an impression on their audience” (260). In the case of *whom* and *whomever*, the desired impression is one of erudition and upper-class status. But when certain speakers endowed with a false sense of security over-apply *whom* in nonstandard environments, they achieve the opposite effect. There is a fine line between ‘correct’ usage and the highly-stigmatized overuse of *whom*—one which only makes sense in light of the value judgments that are intrinsic to language use.

9.5 Value and authority: A paradox emerges

In any discussion of correctness, it is necessary to question the authority that determines the standards. Cameron explains, “Linguistic conventions are quite possibly the last repository of unquestioned authority for educated people in secular society” (12). Prescribed *whom* usage is exemplary of such a convention, and is therefore highly valued in an elite environment such as an academic institution. But why is so much value attached to following the prescriptive rules of language use? Perhaps it provides a stringent membership test to gain entrance into the “ivory tower” club, limited to the elite academic world, and represented by the 17 individuals in cluster 2. Cameron believes that these “rules of language use often contribute to a circle of exclusion and intimidation, as those who have mastered a particular practice use it in turn to intimidate others” (12). Clearly, there is an inherent value in forms such as *whom*, which explains why some speakers feel so strongly (see 7.5.2) about this innocent four-letter word.

One of the most interesting facts related to *whom* usage is the contradiction that emerges in the speech and writing of verbal hygienists. Many linguists and language-mavens consistently

criticize *whom* as unnatural and hyper-formal; however, their actual *whom* usage in books and journals conflicts with their published opinions on the topic. Consider, for example, Steven Pinker's anti-*whom* crusade in *The Language Instinct* (1994):

The *who/whom* distinction is a relic of the English case system, abandoned by nouns centuries ago... the old distinction between subject *ye* and object *you* has vanished, leaving *you* to play both roles and *ye* as sounding completely archaic. *Whom* has outlived *ye* but is clearly moribund; now it sounds pretentious in most spoken contexts... If the language [sic] can bear the loss of *ye*, using *you* for both subjects and objects, why insist on clinging to *whom*, when everyone uses *who* for both subjects and objects? (402-403)

His argument appeals to the laymen in his audience, not to professional linguists, but it is problematic to general readers and specialists alike for two reasons. For one, he advocates abandoning *whom* altogether, in an appeal that is just as norm-enforcing as the prescriptive rules he condemns. But his hypocrisy does not end here. In fact, *whom* appears at least 35 times in this very book. Sometimes Pinker uses it in a discussion of grammatical function, so I understand why it is necessary in the phrase “who did what to *whom*,” as in (83a) below. However, consider the follow excerpts in (83b-f), which are all demonstrative of regular, non-stigmatized usage (italics are mine):

- (83) a. “...we are simply a species of primate with our own act, a knack for communicating information about who did what to *whom*...” (5)
- b. “...that there should be a creature in the world to *whom* a nestful of eggs was not the utterly fascinating and precious...object which it is to her.” (7)
- c. “Bellugi...found that the child (*whom* they called Crystal), and a number of others they have subsequently tested, had a rare form of retardation called Williams syndrome.” (41)
- d. “Susan Schaller tells the story of Ildefonso, a twenty-seven-year-old illegal immigrant from a small Mexican village *whom* she met while working as a sign language interpreter in Los Angeles. (58)
- e. Humans are ingenious at sniffing out minor differences to figure out *whom* they should despise. (242)
- f. Joseph Greenberg, *whom* we met earlier as the founder of the study of language universals, also classifies languages into phyla (257).

All told, *whom* appears at least 25 times in Pinker's book in standard constructions unrelated to the metalinguistic discourse of how unnatural it sounds.

Just as problematic is Pinker's sarcastic use of *whom* in his comment “To whom I say: Maven, shmaven!” (385), in which he ridicules former *On Language*⁵⁶ columnist William Safire for identifying himself as a “language maven.” Yet Pinker's own prescriptive rule-generated *whom* usage, representative of his linguistic expertise, places him in the same category as Safire. This is not to attack Steven Pinker—it is just an observation of paradoxical value system embedding language use. Most ironic is that Pinker advocates abandoning pretentious prestige

⁵⁶ A weekly column in *The New York Times Magazine*.

forms and constructions, such as those containing *whom*, but even his suggestions are delivered in language that exemplifies the prestige-markers he censures. This illustrates that no matter how easy it is to criticize the arbitrariness of the prescriptive tradition, it is virtually impossible to escape the pervasive influence it has on usage.

Appendices

A Example survey – part I (syntactic variables)

I am interested in how speakers build complex sentences and questions in a formal register. Please fill in the blanks in the sentences below with the correct word that you would use when speaking in a formal style (for example, in writing).

Instructions: Please fill in the blanks in the following data with one word each.
Do not leave any blanks empty and do not say *that*.

1. For _____ are you buying that gift?
2. The agent was far more hostile to Diana, _____ she believes betrayed the prince of Wales.
3. The lady _____ you watched devour three plates of food ought to go on a diet.
4. Please name every person _____ you believe to be involved in the cover-up.
5. _____ handcuffs are these? Someone must have left them here.
6. He neglected to apologize to the baronet _____ Smith claimed had been the target for homosexual blackmail.
7. The junior Civil Servant _____ the government had claimed is implicated in insider training has been allowed to return to work at the Office of Fair Trading.
8. They indict _____ ever they find suspicious.
9. He sat motionless for nearly two hours, during _____ time his telephone rang seven times.
10. _____ he did might seem impossible, but I saw him do it with my own eyes.
11. A defendant _____ justices expected would be in court was unable to attend.
12. We will hire _____ ever you recommend.
13. _____ did you say the committee expelled?
14. The detective questioned the suspect _____ I believe the media opposes.
15. His behavior will only lead to further alienation of the people _____ he forgets have his fate in their hands.
16. Let the people elect _____ ever they think is best qualified to lead them.
17. There was no doubt as to _____ he would choose.
18. And _____ should I say is speaking?

19. But the question remains: _____ should we support in the present situation?
20. I'm still skeptical of the ex-convict _____ you believe to be reformed and humane.
21. The elderly woman _____ you saw cross the street needs to be more cautious amidst the chaos of city traffic.
22. Quentin will work on the project with _____ ever you suggest.
23. Mr. Irwin said it would not be fair to name the signatories _____ he thought despised Mr. Roache.
24. Her mother, in _____ she often confided, said it wasn't easy for her.
25. That's the dog _____ owner used to spy on me.
26. Although married with three children, he is demanding \$10,000 from the elderly woman _____ he says has ruined his life.
27. In late 1982, officers of the Royal Ulster Constabulary shot dead six people _____ they said were armed members of the Irish Republican Army.
28. There has been some speculation as to _____ the fifth representative from South Africa was.
29. I advise any and all passersby to avoid approaching the place _____ the landmines are feared to be.
30. Gabriel encountered a strange unearthly figure _____ he felt at once was no being of this world.
31. Here's a lesson _____ time has come.
32. The teenager _____ you consider spoiled rejects every favor I offer her.
33. To _____ do I owe this great honor?
34. That's the car in _____ my father taught me how to drive.
35. She couldn't decide _____ movie to watch.
36. Was there anyone now _____ she could decently ask?
37. This is the prize for _____ ever gets the highest score.
38. Five o'clock is the time at _____ happy hour begins.
39. Give it to _____ ever asks for it first.
40. _____ cell phone keeps ringing?
41. The ballroom was crowded with attendees, many of _____ failed to respond to the invitation.
42. David donates his time to _____ ever he thinks needs it the most.
43. I advise all wise men that they not accompany those _____ they know are not esteemed.
44. Even writers _____ we must all admit are honest in their intentions have treated unpleasant subjects.

45. He attacked the enemy _____ he saw cross the river.
46. The senior class gift is also a competition between the colleges, and _____ ever wins in either category will receive a \$10,000 scholarship to award to an incoming freshman.
47. The detective called in an expert to identify _____ handwriting is on the ransom letter.
48. There comes a time in every woman's life _____ she must reassess her priorities and values.
49. _____ does the store open on Sundays?
50. This is the time of year _____ you're allowed to wear pajamas in public.
51. _____ did you elect to the overseeing committee?
52. Tiffany only wears diamonds, _____ are expensive.
53. I chastise the students _____ I doubt attended class today.
54. _____ ever you elect will serve a four-year term.
55. I do not trust the man _____ you expect the jury to release.
56. To _____ it may concern: please abstain from dumping your compost pile directly onto our landing.
57. The woman _____ you find beautiful is my sister.
58. To avoid an awkward encounter, start a conversation with _____ ever among the girls seems the most uncomfortable.
59. I place faith in _____ ever seems trustworthy.
60. Do you know the man _____ they expect the church to excommunicate?
61. I'd advise you not to eat at the restaurant in _____ I contracted a tapeworm.
62. Do you know the senator _____ the president denies was involved in the conspiracy?
63. The man _____ you presume to be innocent is indeed dangerous.
64. Other times, because they are dealing with people _____ they know might have recourse to the law, they hold back the gratuitously offensive nicknames.

B Example survey – part II (sociolinguistic questionnaire)

Please fill out the following information:

Age: _____

Gender: _____

Are you a native speaker of English? _____

Instructions: Rate the following statements on a scale of 1 (strongly disagree) to 5 (strongly agree)

I am insecure about the way I speak.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

My parents have better grammar than I do.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

My peers have better grammar than I do.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

I judge others negatively when they make grammatical mistakes.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

I place great value on speaking correctly.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

There is a correlation between a person's intelligence and the way he or she speaks.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

I often worry about whether my grammar is correct.

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

During a formal conversation, I often 'edit' my speech to ensure that it is correct.

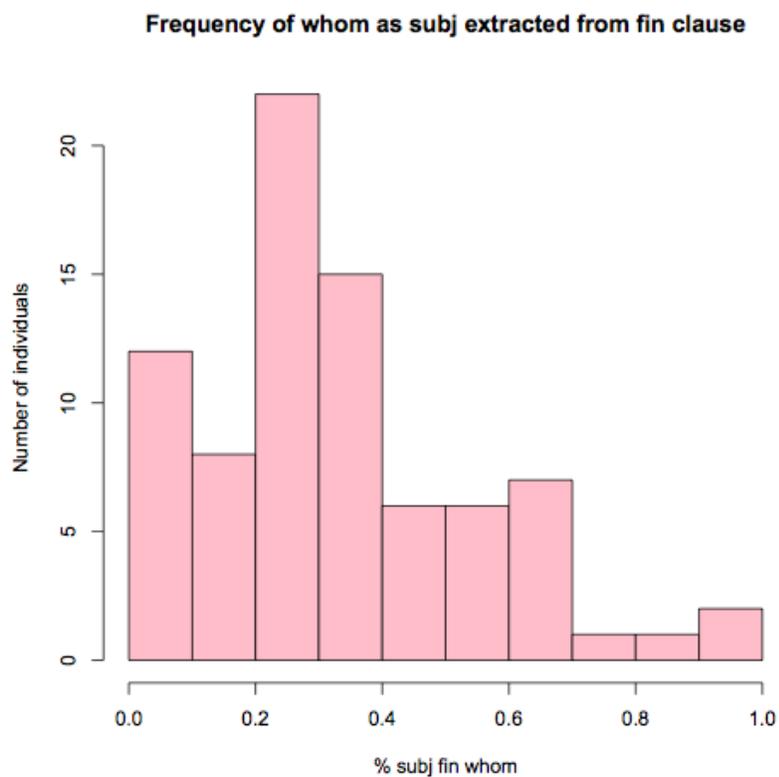
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

I speak in different styles and/or employ different sentence constructions depending on the person I'm talking to and/or the formality of our exchange.

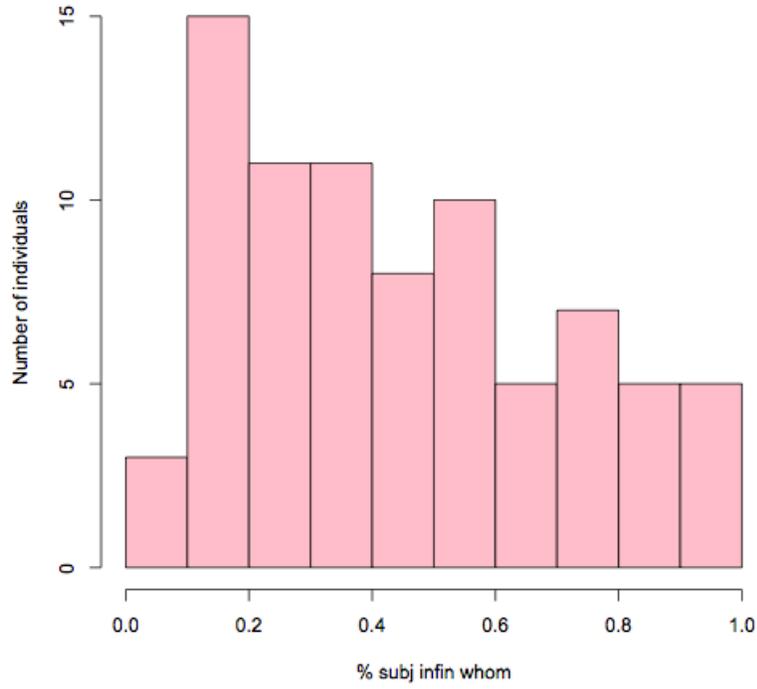
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

Thank you for your participation!

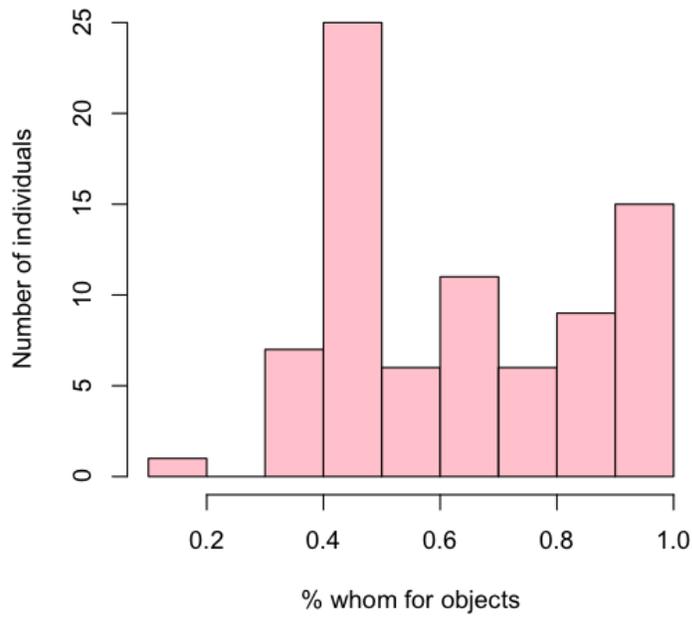
C Distribution of *whom* responses in 3 oppositional syntactic environments



Frequency of whom as subj extracted from infin clause

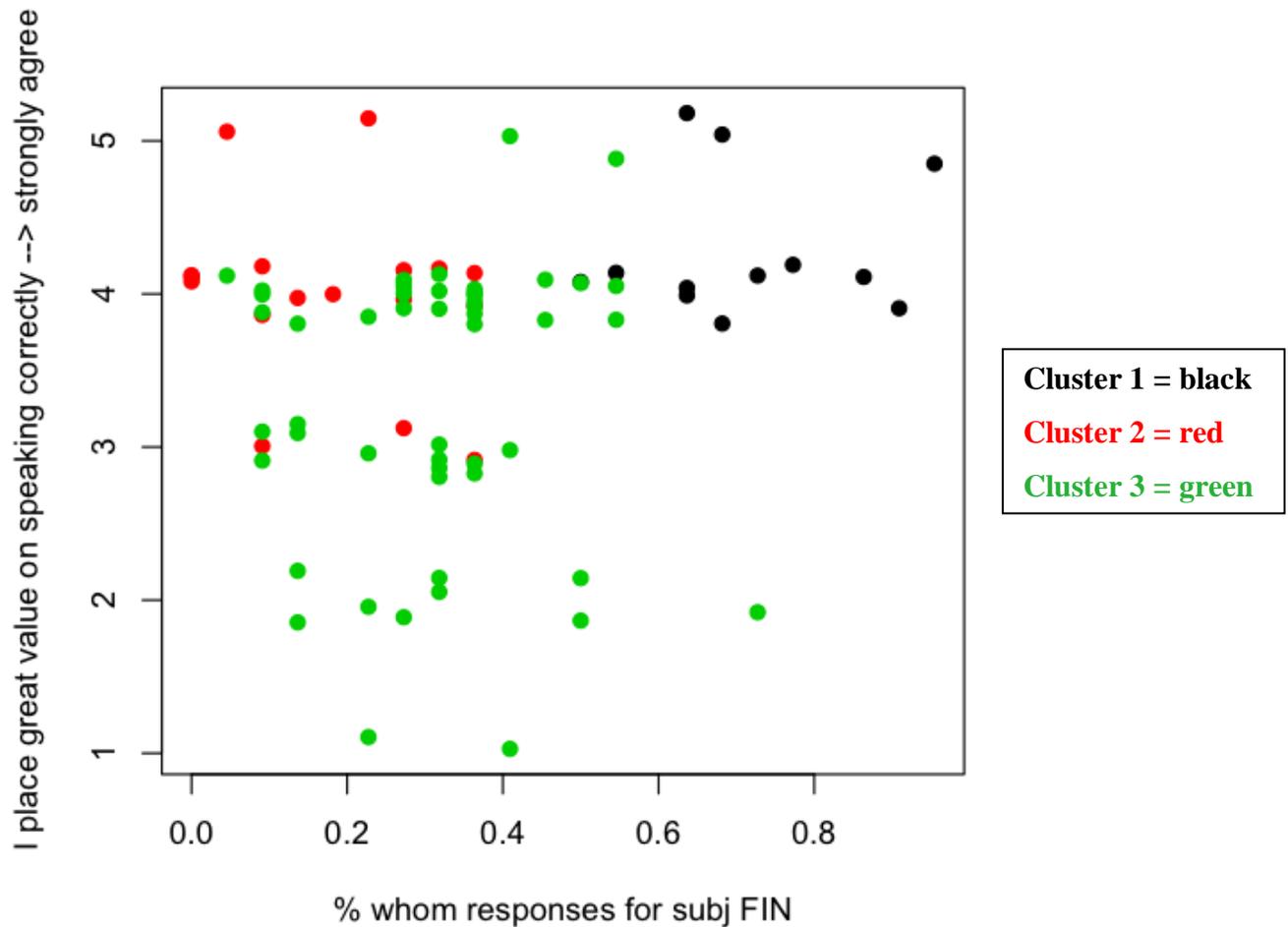


Frequency of whom as object



D Cluster membership and agreement with the statement “I place great value on speaking correctly.”

% *whom* responses for subj of FIN clause vs.
agreement with “I place great value on speaking correctly”



E ANOVA output and post-hoc Bonferroni test: Cluster membership and VALUE

<u>Sociolinguistic dimension</u>	<u>Statement</u>	<u>Cluster 1 mean</u>	<u>Cluster 2 mean</u>	<u>Cluster 3 mean</u>
VALUE	I place great value on speaking correctly.	4.25	3.94	3.33

One-way ANOVA

	Sum of squares	df	Mean square	F	Sig.
Between groups	10.675	2	5.338	7.825	0.001
Within groups	53.525	77	.682		
Total	63.200	79			

Multiple comparisons, by post-hoc Bonferroni test

(A) Cluster number	(B) Cluster number	Mean difference (A-B)	Std. error	Sig.	95% Confidence Interval	
					Lower bound	Upper bound
1	2	.309	.311	.973	-.45	1.07
	3	.917*	.265	.003	.27	1.57
2	1	-.309	.311	.973	-1.07	.45
	3	.608*	.231	.031	.04	1.17
3	1	-.917*	.265	.003	-1.57	-.27
	2	-.608*	.231	.031	-1.17	-.04

*The mean difference is significant at the $P = 0.05$ level.

Bibliography

- Aarts, Flor. 1994. Relative who and whom: Prescriptive rules and linguistic reality. *American Speech*, 69(1). 71-79.
- Angermeyer, Philipp S. & John Victor Singler. 2003. The case for politeness: Pronoun variation in co-ordinate NPs in object position in English. *Language Variation and Change*, 15. 171-209.
- Baron, Dennis. 1984. *Grammar and good taste: Reforming the American language*. New Haven: Yale University Press.
- Bennet, William. 1994. A case of syntactic change in English. *Studia Anglica Posnaniensian*, 29. 31-38.
- Bourdieu, Pierre. 1977. The economics of linguistic exchanges. *Social Science Information*, 16(6). 645-668.
- Boylard, Joyce Tang. 2001. Hypercorrect pronoun case in English? Cognitive processes that account for pronoun usage. In Joan Bybee & Paul Hopper (eds.), *Frequency and the emergence of linguistic structure* (Typological Studies in Language 45). 383-404. Amsterdam & Philadelphia: John Benjamins Publishing Co.
- Cameron, Deborah. 1995. *Verbal hygiene*. London: Routledge.
- Chomsky, Noam. 1986. *Barriers*. Cambridge, MA: MIT Press.
- Cornips, Leonie & Cecilia Poletto. 2005. On standardising syntactic elicitation techniques (part 1). *Lingua*, 115. 939-957.
- Decamp, David. 1972. Hypercorrection and rule generalization. *Language in Society*, 1(1). 87-90.
- Doyle, Gabe. Whoever vs. Whomever! Cases Collide! Match of the Century! *Motivated Grammar: Prescriptivism Must Die!* Weblog posting. WordPress.com. 13 Oct. 2009. <<http://motivatedgrammar.wordpress.com/2009/10/13/whoever-v-whomever-cases-collide-match-of-the-century/>>
- Dunsky, Marda. 2006. "Mapping who vs. whom." *Watch Your Words: The Rowman & Littlefield Language-Skills Handbook for Journalists*. 2 ed. Lanham: Rowman & Littlefield Publishers, Inc. 16-17.
- Emonds, Joseph. 1986. Grammatically deviant prestige constructions. In *A Festschrift for Sol Saporta*, ed. Michael Brame, H. Contreras & Frederick Newmeyer, 92-129. Seattle: Noit Amrofer.

- Felber, Sarah Ann. 2004. *Isolating the grammar: Removing extra-grammatical effects from the theory of grammar through investigation of grammatical viruses*. Storrs, CT: University of Connecticut dissertation.
- Foster, Brian. 1968. *The changing English language*. New York: St. Martin's Press.
- Fournier, David H. 2006. There's some problems: Accounting for complex subject agreement in English, *Conference: "Complexity in Linguistics", 9th Bilingual Workshop in Theoretical Linguistics (BWTL 9)*, 9-10 Dec. 2005. U. of Western Ontario, London, ON. <<http://ling.uwo.ca/publications/BWTL9-ABLT9/Fournier.pdf>>.
- Giles, Howard & Angie Williams. 1992. Accommodating hypercorrection: A communication model. *Language and Communication*, 12(3/4). 343-56.
- Grano, Thomas. 2006. "Me and her" meets "he and I": Case, person, and linear ordering in English coordinated pronouns. Stanford, CA: Stanford University senior honors thesis.
- Howard, Philip. 1986. *The state of the language: English observed*. Harmondsworth: Penguin.
- Jacobsson, Bengt. 2003. Notes on pronominal case in English. *Studia Neophilologica*, 75. 21-31.
- Jespersen, Otto. 1954. *A Modern English grammar on historical principles*. Part III and IV. London: Allen.
- Johnstone, Barbara. 2000. *Qualitative methods in sociolinguistics*. New York: Oxford University Press.
- Labov, William. 1972. *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press, Inc.
- Lasnik, Howard & Nicholas Sobin. 2000. The who/whom puzzle: On the preservation of an archaic feature. *Natural Language & Linguistic Theory*, 18(2). 343-371.
- Lowth, Robert. 1762. *A Short Introduction to English grammar*. Rpt. Ed. Charlotte Downey. New York: Delmar, 1979.
- Merriam-Webster's Dictionary of English Usage*. 1995. Springfield, MA: Merriam-Webster, Inc. (Original work published 1989).
- Ostler, Rosemarie Whitney. 2007. Prescriptive grammar: Taking the long view. In Simin Karimi, Vida Samiian & Wendy K. Wilkins (eds.), *Phrasal and clausal architecture: Syntactic derivation and Interpretation--in honor of Joseph E.monds (Linguistik Aktuell / Linguistics Today)*, 243-261. Chapel Hill: John Benjamins Publishing Co.

- Parker, Frank, Kathryn Riley & Charles F. Meyer. 1990. Untriggered reflexive pronouns in English. *American Speech*, 63(1). 50-69.
- Priestly, Joseph. 1761. *The Rudiments of English grammar*. London: Printed for R. Griffiths.
- Pullum, Geoffrey K. I really don't care whom. *Language Log* posting. 17 April 2004. <<http://158.130.17.5/~myl/language-log/archives/000777.html>>.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1985. *A comprehensive grammar of the English language*. New York: Longman.
- Riemsdijk, Henk van. 2006. "27 Free Relatives." In Everaert, Martin and Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax* (vol II). 338-382. Malden, MA: Blackwell Publishing.
- Ryan, William M. 1961. Pseudo-subjunctive 'were'. *American Speech*, 36(1). 48-53.
- Sapir, Edward. 1921. *Language: An introduction to the study of speech*. Ann Arbor, MI: University Of Michigan Library.
- Schütze, Carson T. 1999. English expletive constructions are not infected. *Linguistic Inquiry*, 30(3). 467-484.
- Sobin, Nicholas. 1997. Agreement, default rules, and grammatical viruses. *Linguistic Inquiry*, 28(2). 318-343.
- Sobin, Nicholas. 1999. Prestige English is not a natural language. In Rebecca S. Wheeler (ed.), *Language alive in the classroom*. 23-36. Westport, CT: Praeger.
- Trudgill, Peter. 2003. *A glossary of sociolinguistics*. Edinburgh: Edinburgh University Press.
- Walsh, Thomas and Walsh, Natasha. 1989. Patterns of who/whom usage. *American Speech*, 64(3). 284-286.
- White, Richard Grant. 1870. *Words and their uses, past and present: A study of the English language*. Cambridge: The Riverside Press.
- "whom, *pron.*³" The Oxford English Dictionary. 2nd ed. 1989. OED Online. Oxford University Press. <<http://dictionary.oed.com/cgi/entry/50285017>>.
- "who, whom." *Merriam-Webster's dictionary of English usage*. 1989. Reprint. Springfield: Merriam-Webster, 1994. 957-959.
- "whomever, *pron.*¹" The Oxford English Dictionary. 2nd ed. 1989. OED Online. Oxford University Press. <<http://dictionary.oed.com/cgi/entry/50285021>>.

Zwicky, Arnold M. Whom shall I say [___ is calling]? *Language Log* post. 23 Jan. 2007.
<<http://itre.cis.upenn.edu/~myl/languagelog/archives/004084.html>>.

Zwicky, Arnold M. Just Between Dr. Language and I. *Language Log* post. 5 Aug. 2005.
<<http://itre.cis.upenn.edu/~myl/languagelog/archives/002386.html>>.