

BEYOND YOU AND I: DISTRIBUTED MORPHOLOGICAL MECHANISMS OF PRONOUN-CASE VARIATION

1. INTRODUCTION AND GOALS

The descriptive linguists are a curse upon their race, who of course think that what the people say is the law.

John Simon, on PBS's *Do You Speak American?*
(<http://www.pbs.org/speak/transcripts/1.html>)

In this talk I will discuss variation in the morphological case form of English pronouns in certain syntactic environments, most (in)famously coordination. I present some collected specimens of pronoun-case variation, and sketch a mechanistic account of this variation in the theoretical framework of Distributed Morphology. The talk has the following general goals:

- X[Ⓢ] To make a contribution toward bridging the unfortunate gap that separates the empirical study of (Labovian) variation from theoretical (particularly Minimalist) syntax;
- X[Ⓢ] To illustrate the usefulness of variationist observational methodologies in addressing questions relevant to theoretical syntax and morphology;
- X[Ⓢ] To provide an empirical argument that significant mechanisms of (Labovian) variation can be located in the feature structure and individual inventories of Distributed Morphology's Vocabulary Items.

2. SALIENT AND STIGMATIZED SOCIOLINGUISTIC VARIATION

Throughout and with apologies, I refer to abstract syntactic features as 'Case' (= Nominative, Accusative, Oblique); I refer to the morphological forms of pronouns as 'case' (= Subject Form, Object Form).

2.1 PRONOMINAL ALLOMORPHY

In most varieties of English,¹ personal pronouns have a Subject Form (SF) and an Object Form (OF), as illustrated in the following familiar paradigm (for a similar paradigm see e.g. Quirk and Greenbaum 1973: 102):²

(1) Pronoun case-form paradigm

	<u>Subject</u> Form (SF)	<u>Object</u> Form (OF)
<u>1s</u>	<i>I</i>	<i>me</i>
<u>3s</u>	<i>she/he</i>	<i>her/him</i>
<u>1p</u>	<i>we</i>	<i>us</i>
<u>3p</u>	<i>they</i>	<i>them</i>

The distribution of these case forms is determined by the pronoun's position in a sentence--pronouns appear in the SF when they are the subject of a tensed clause, and otherwise they appear in the OF. SF and OF pronouns seem to occur in complementary distribution:

- (2) a. We are a curse upon them.
b. * Us are a curse upon they.³

It has been almost universally assumed that pronoun case-form allomorphs in English are isomorphic with abstract syntactic Case features. On this view, SFs correspond to Nominative Case and OFs correspond to Accusative and Oblique Cases.

¹ This discussion does not include pidgin and creole varieties of English.

² I exclude 2nd-person pronouns because they are homophonous for case form; for the same reason, I exclude the 3rd-person singular neutral pronoun *it*. Also, I do not discuss here the interesting question of genitive case, which is apparently marked on both pronouns and full NPs in English (making it "morphologically transparent", more on this concept below). See e.g. Bernstein and Tortora (2005) for a theoretical treatment of genitive case morphology in English. Finally, I do not discuss variation in the case form of *who/whom* (see e.g. Lasnik and Sobin 2000 for a "virus theory" account).

³ Throughout, '*' means not only 'unacceptable' but also 'unattested,' unless explicitly stated otherwise.

2.2 (IN)FAMOUS COORDINATION VARIATION

As is well known to virtually every native speaker of English, pronominal case forms vary inside of coordinate phrases. This extremely salient variation is a perennial target of prescriptivist ire, and "errors" are often stigmatized quite harshly. The existence of sometimes scornful social attitudes toward pronoun-case variation in coordinates can be verified by consulting almost any prescriptive usage guide. Here are my favorite examples, from books selected at random.

...Confusion of Nominative and Objective Cases. One might think that a work of this kind, catering as it does to serious writers, could pass over the differences between subjects and objects in pronouns. But debilitated grammar seems ubiquitous--e.g.:

....

- "My mother was busy raising my brother and *I* [read *me*]."/"Give Al Gore and *I* [read *me*] a chance to bring America back." Bill Clinton...16 July 1992.
- "Thomson said the final step in the university grievance process will be for *he* [read *him*] and Chandler to meet." ...*Canyon News*, 26 June 1994....

HYPERCORRECTION. Sometimes people strive to abide by the strictest etiquette, but in the process behave inappropriately. The very motivations that result in this irony can play havoc with the language: a person will strive for a correct linguistic form but instead fall into error. Linguists call this phenomenon "hypercorrection"--a common shortcoming.

...Between you and I. Some people learn a thing or two about pronoun cases, but little more. They learn, for example, that it is incorrect to say..."Me and Jane are going to school now." But this knowledge puts them on tenterhooks: through the logical fallacy known as "hasty generalization," they come to fear that something is amiss with the word *me*--that perhaps it's safer to stick to *I*. They therefore start using *I* even when the objective case is called for: "She had the biggest surprise for Blair and *I* [read *me*]."/"Please won't you keep this between you and *I* [read *me*]." These are gross linguistic gaffes, but it is perennially surprising how many otherwise educated speakers commit them.

A Dictionary of Modern American Usage (Garner 1998: 527 and 345, italics, bold, and small caps in original)

Why is it that no one ever makes a mistake like this? You'll be hearing **from I**. It's instinctive to use the correct form (*from me*) when only a solitary pronoun comes after a preposition. But when a pronoun isn't alone, instinct goes down the drain, and grammar with it. So we run into abominations like *The odds were **against you and I***, although no one would dream of saying "against I."

Woe Is I: The Grammarphobe's Guide to Better English in Plain English (O'Conner 1996a: 11, italics and bold in original)

Angermeyer and Singler (2003) provide more such examples, as does Emonds (1986). See Loving (1990), Honey (1995), and Redfern (1994) for prescriptivist-flavored attempts to grapple with the undeniable ubiquity of pronoun-case variation in coordination (especially "hypercorrection" by elite-class speakers).⁴

2.3 ANGERMEYER AND SINGLER (2003): A VARIATIONIST APPROACH

This salient sociolinguistic variation has received almost no attention from variationists,⁵ with the recent and welcome exception of Angermeyer and Singler (2003).

2.3.1 TWO KINDS OF VARIATION

Angermeyer and Singler (2003) observe that coordinated pronouns exhibit case-form variation in two empirically distinct senses.

- (3) **(Parametric) Variation** = Differences in linguistic forms between individuals, speech communities, dialects, languages.⁶

→ Explained by a theory of (principles and) parameters (e.g. Baker 1996; 2001; Borer 1984; Chomsky and Lasnik 1993; Chomsky 1995 and much other work)

⁴ "It's only a grammatical error, not a drive-by shooting." (O'Conner 1996b)

⁵ Although sociolinguist Hudson (1995), looking at coordinated pronouns among other things, asks if English "really" has "case."

⁶ Especially including "microparametric" variation in the sense of Kayne (1996).

When we speak of constructions occurring frequently and when we present judgments that find nominative case forms in co-ordinate NPs in object position to be grammatical, we are aware that for many speakers such sentences are strictly ungrammatical. (Angermeyer and Singler 2003: 175)

(4) **(Labovian) Variation**⁷ =

- X Individual speakers use variant phonological or morphosyntactic forms;
- X The variant forms appear in the same phonological or morphosyntactic environment (not in complementary distribution);
- X The variant forms do not express different lexical or truth-conditional semantics, nor different morphosyntactic functions.

...as Sobin (1994a: 57) pointed out and as far as we have been able to determine, every speaker who uses the nominative [in object coordinates, JKP] also uses the objective in this environment at least some of the time. (Angermeyer and Singler 2003: 176)

Even prescriptivists confess to Labovian variation in this syntactic environment:

Since my grammar book was published this fall [i.e. (O'Conner 1996a) JKP], my friends have discovered a new sport: gotcha! The object is to correct my speech, to catch me in the occasional "between you and I" (OK, I admit it).

"Like I said, don't worry." (O'Conner 1996b: 12)

2.3.2 CHARACTERIZING THE VARIANTS

Although Angermeyer and Singler (2003) discuss variation in other pronoun forms and structural environments, they limit their quantitative analysis to 1s pronouns in object coordinates. They characterize the variants as follows:

⁷ Aka "inherent variation."

(5) 1s Pronouns in Object Coordinates^{8,9}

Vernacular	=	me and X
Standard	=	X and me
Polite	=	X and I

2.3.3 METHODOLOGY

Standard variationist data-collection methodologies are difficult to employ in this case, because coordinated pronouns appear rarely in ordinary discourse, are difficult to elicit, and are socially stigmatized.

...pronoun choice in coordinate NPs in object position may be highly salient, but the actual occurrence of 1sg and 3sg pronouns in this environment is quite infrequent in spoken language. Thus, the sociolinguistic interview, the basic unit of quantitative research in a Labovian paradigm, simply yields too few instances of co-ordinate NPs in object position to be an adequate source of data. (Angermeyer and Singler 2003: 182)

Instead of sociolinguistics interview, Angermeyer and Singler (2003) used two different methodologies to gather tokens for quantitative analysis.

First, they designed a novel "sociolinguistic experiment" designed to (covertly) elicit coordinated 1s pronouns; this accounted for "[a]pproximately one-fourth of the tokens in [their] data set" (Angermeyer and Singler 2003: 183).

Their second data-collection methodology¹⁰

...consisted simply of listening for occurrences of case-marked pronouns in co-ordinate NPs in object position in everyday speech. We did so by listening for this environment in conversations in which we participated, at the meetings at which we were in attendance, and as auditors of non-scripted television programs. (Angermeyer and Singler 2003: 183)

I adapted this observational methodology, as reported below.

⁸ Modified from Angermeyer and Singler (2003: 178, their #17)

⁹ *Myself* variants (*myself and X*; *X and myself*) were also counted when they did not have a subject antecedent.

¹⁰ They cite Rickford et al. (1995) as another study that employs such a methodology.

2.3.4 QUANTITATIVE ANALYSIS

Angermeyer and Singler (2003) provide a first quantitative analysis¹¹ of variation in the case form of 1s pronouns in object coordinates:

...in those instances where the objective and nominative pronouns are in variation, we seek to determine the factors, both linguistic and social, that favor particular variants. (Angermeyer and Singler 2003: 176)

Here I summarize their general results--for figures and other details see their paper:

☠ There is no change in progress, nor is this variation a recent innovation:

Rather, as they have apparently done for more than 400 years, the Vernacular, the Polite, and the Standard seem to be continuing in a dynamic state of stable ternary variation. (Angermeyer and Singler 2003: 201)

☠ Linguistic factors, including the 'weight' of the other conjoined NP, had a statistically significant effect on the variation.

☠ Social factors, including the education and age of the speaker, had a statistically significant effect on the variation.

3. PRONOUN-CASE VARIATION: A SYNTACTIC-THEORETICAL APPROACH

We turn now to a syntactic-theoretical perspective on pronoun-case variation.

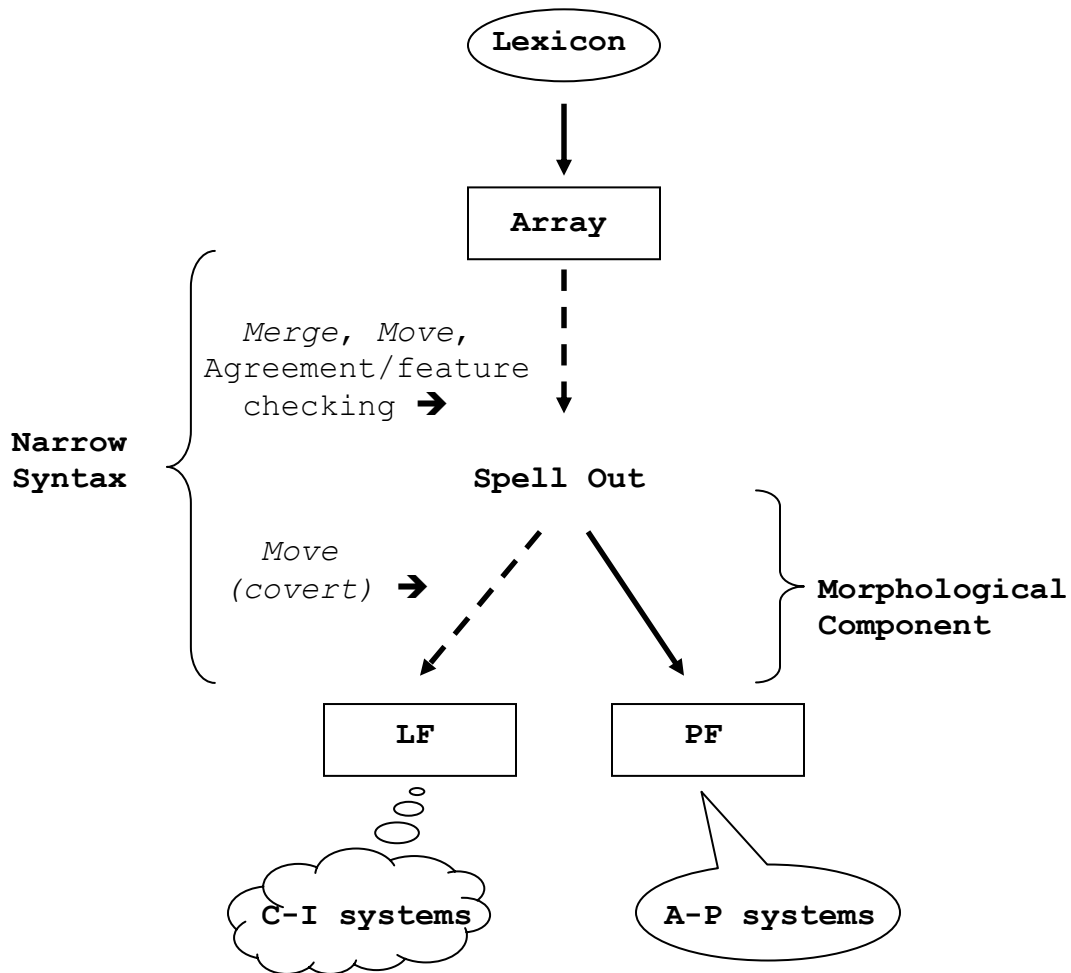
3.1 CASE THEORY IN (MINIMALIST) SYNTAX

Case Theory is a central aspect of Government and Binding (GB) (Chomsky 1981; 1982; 1986a; b), Principles and Parameters (PP) (Chomsky and Lasnik 1993), and Minimalist (Chomsky 1993; 1995; 2000 et seq.) theories of syntax. In all permutations of these theories, Case features are active in the syntactic computation (e.g. making Determiner

¹¹ For an interesting quantitative--but not variationist--study, see Quattlebaum (1994).

Phrases (DPs)¹² "visible" for theta-roles, or driving movement, etc.). Crucially, "abstract" Case features must be present on all DPs regardless of whether Case is realized phonetically in a language's DP morphology (i.e. case).

(6) A (Minimalist) model of the language faculty



As mentioned above, it is standardly assumed that the morphological case forms of English pronouns are isomorphic with syntactic Case features. For example, a recent textbook on Minimalist syntax so interprets

...the empirical fact that DPs may have different phonetic shape depending on the type of Case they bear, as illustrated in [7] below.... (Hornstein, Nunes and Grohmann 2005: 105)

¹² Taking Noun Phrase (NP) complements since Abney (1987).

(7) [_{IP} he_{NOM} [_{I'} I⁰ [_{VP} t admires him_{ACC}]]]

In Minimalist theories,

...lexical items (including functional heads) enter the derivation with their features already specified, and the system determines whether a given expression X is licit in a given derivation by checking the features of X against the features of an appropriate head. (Hornstein, Nunes and Grohmann 2005: 105-106)

Thus, on a very basic Minimalist Case theory, the mechanics of Nominative Case might be as below:

...he in [7] enters the derivation specified as bearing nominative Case and moves to [Spec, IP] to be checked against the finite I⁰, which by assumption can only check nominative Case. If the subject in [7] were the genitive pronoun *his*, for instance, it would not have its Case-feature checked by I⁰ and an ungrammatical result would obtain. (Hornstein, Nunes and Grohmann 2005: 105-106)

(8) Pronoun features and Case-checking functional heads

~~X~~ Nominative Case (NOM) =

[D; 1s; uNOM; /ai/]	}	I ⁰ _[+Fin] (T ⁰ _[+Fin] ; AgrS ⁰)
[D; 3s; M; uNOM; /hi/]		
[D; 3s; F; uNOM; /ʃi/]		
[D; 1p; uNOM; /wi/]		
[D; 3p; uNOM; /ðe/]		

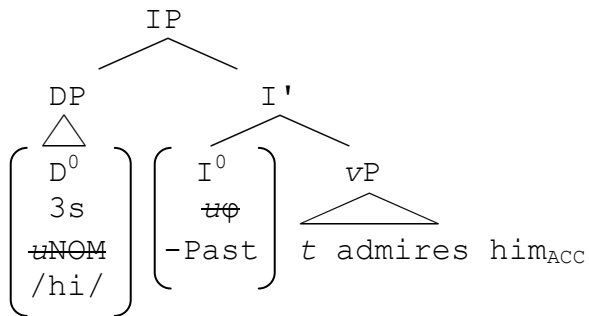
~~X~~ Accusative Case (ACC) =

[D; 1s; uACC; /mi/]	}	v ⁰ (V ⁰ ; AgrO ⁰)
[D; 3s; M; uACC; /him/]		
[D; 3s; F; uACC; /hər/]		
[D; 1p; uACC; /ʌs/]		
[D; 3p; uACC; /ðɛm/]		

☠ Oblique Case (OBL) =

[D; 1s; uOBL; /mi/]	}	P ⁰
[D; 3s; M; uOBL; /him/]		
[D; 3s; F; uOBL; /her/]		
[D; 1p; uOBL; /ʌs/]		
[D; 3p; uOBL; /ðɛm/]		

(9) Nominative Case checking (details omitted)



3.2 PRONOUN-CASE VARIATION AS MISMATCH

(10) **Morphosyntactic mismatch** =

The morphophonological form of an item does not correspond to the morphosyntactic features that the theory predicts it should have.

➔ OF in Nominative-Case coordinates (subject of tense)

- (11) a. * Me was talking about that yesterday.
 b. % [J.] and me were talking about that yesterday.¹³
 c. % Me and my fellow researchers have tried to defend our research.¹⁴

➔ SF in Accusative-Case coordinates (verbal object)

- (12) a. * That's what fucked I, the fours.
 b. % That's what fucked [J.] and I, the fours.¹⁵
 c. * That's what fucked I and [J.], the fours.

¹³ Attested, spoken to the author.

¹⁴ Attested, collected by the author from an unedited online comment [<http://portland.indymedia.org/en/2005/07/321073.shtml>].

¹⁵ Attested, spoken to the author during a game of dominos.

→ SF in Oblique-Case coordinates (prepositional object)

- (13) a. * He used to do that to I a lot.
b. % He used to do that to [J.] and I a lot....¹⁶
c. * He used to do that to I and [J.] a lot.

3.3 PREVIOUS THEORETICAL APPROACHES

Efforts to analyze pronoun-case variation in coordinates have been hampered by methodological problems. The strong social stigma against "incorrect" usage of pronoun case in coordinates makes acceptability judgments unreliable, and syntactic theorists have generally declined to employ the observational methods of variationists. Thus, pronoun-case variation has remained at the margins of theoretical inquiry despite the centrality of Case.

3.3.1 DEVIANT PRESTIGE CONSTRUCTIONS

In a paper entitled "Grammatically deviant prestige constructions", Emonds (1986) gave what I believe to be the first syntactic-theoretical account of pronoun-case variation. Emonds identified five constructions where he claimed that the usage of OF pronouns was "normal" and the usage of SF pronouns was "grammatically deviant", yet prescriptively prestigious:

(14) **Deviant prestige constructions (Emonds 1986: 96)**

- ☠ **Conjoined Subjects** (e.g. *Mary and him/*he are late.*)
- ☠ **Subjects of understood predicates** (e.g. *Students smarter than her/*she get no scholarship.*)
- ☠ **Predicate nominals** (e.g. *It is just us/*we who John says are late.*)
- ☠ **First person demonstratives** (e.g. *Us/*we commuters are often blamed for smog.*)
- ☠ **Appositives to subjects** (e.g. *Judy thinks that the best math student, namely her/*she, ought to get a scholarship.*)

¹⁶ Attested, spoken to the author.

Emonds (1986: 97) proposes that English pronouns can appear in the SF only when they are "an immediate constituent of a sentence (S) which contains an inflected verbal element." He gives the following "local transformation rule" for pronouns, where '--' means 'governed by'. Assuming that the phrase structure of coordination blocks government of a internal conjunct by Inflection, this rule seems to correctly generate the "normal" distribution of pronominal case forms in Emonds's "prestige constructions" above.

(15) **Normal Usage Rule**

PRONOUN--INFLECTION → [PRONOUN SUBJECT]--INFLECTION

Why are English pronominal case forms determined by a local transformation rule, and not simply by their abstract Case features? Emonds (1986: 105-107) points to the difference between English and (e.g.) German, a language where all NPs are morphologically "case marked". He proposes an acquisition principle of "Morphological transparency" that prevents English-acquiring children from realizing Case features in their lexical items:

(16) **Morphological transparency (Emonds 1986: 106-107)**

Definition. A syntactic category [e.g. a Case feature, JKP] C is "morphologically transparent" on B [a lexical item, JKP] if and only if a productive number of pairs of simple B which contrast with respect to C also differ phonologically.

→ An abstract (e.g. case) feature C of a category B is realized on the lexical head of B in a language if and only if the C is morphologically transparent on B.

Below, I will adapt most of Emonds's analysis into a Minimalist, Distributed Morphology framework. However, I want to note Angermeyer and Singler's criticism of Emonds, which applies to any proposed theoretical account of pronoun-case variation:

For Emonds (1986)..., it is the presence of nominative pronouns in co-ordinate NPs in subject position that is the primary aberration. ... As for the use of nominative pronouns in co-ordinate NPs in object position, Emonds attributed this to "overcorrection," an extension of the "deviant" subject construction. (Emonds and, like him, Johannessen [(1998)] seemed to feel that labeling something "overcorrection" freed one from the obligation of having to provide a formal account of it.) (Angermeyer and Singler 2003: 201, fn. 9)

3.3.2 UNBALANCED AND EXTRAORDINARILY BALANCED COORDINATION

According to Angermeyer and Singler (2003: 175), Johannessen's (1998) book *Coordination* provides "the most thorough of the formal treatments" of pronoun-case variation in coordinates. Johannessen's book deals with a wide range of phenomena involving coordination, for a number of languages. However, a significant amount of her data and analysis involves case-form variation in English.¹⁷ Regarding this as parametric variation, Johannessen distinguishes two types of case-form mismatch in coordinate structures. Notice that the isomorphism of the pronoun case forms and their abstract syntactic Case features is assumed by Johannessen throughout.

(17) **Unbalanced Coordination (UC) =**

Just one conjunct has "deviant" (i.e. mismatched) Case features.

(e.g. *Can someone help [my wife and I] find housing in Texas...?*) (Johannessen 1998: 15)

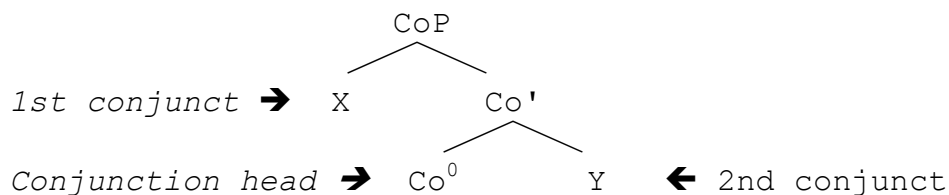
(18) **Extraordinarily Balanced Coordination (EBC) =**

Both conjuncts have the same "deviant" (i.e. mismatched) Case features.

(e.g. *[Them and us] are going to the game together.*) (Johannessen 1998: 62)

For Johannessen, coordination is a functional head Conjunction (Co^0) that projects a standardly asymmetrical X-bar (X') phrase structure Conjunction Phrase (CoP). The first conjunct is the Specifier ($Spec$) of Co^0 , while the second conjunct is the complement of Co^0 :

(19) Conjunction Phrase (CoP) (Johannessen 1998)¹⁸



Johannessen claims that the facts of English pronoun-case variation (her UC and EBC) are explained by the interacting mechanics of CoP and Case assignment, Case

¹⁷ See also Zoerner (1996) for a similar treatment involving the phrasal structure of the coordinate phrase.

¹⁸ Cf. Munn (1994) or Goodall (1987).

checking, default Case licensing, and Case "overcorrection".¹⁹ Summarizing roughly for the relevant English situation,

(20) **"CoP Sensitivity" parameter**

X[☠] +CoP Sensitive = CoP is a barrier to outside Case features; default Case is licensed on both conjuncts (EBC).

X[☠] -CoP Sensitive = CoP is not a barrier to outside Case assignment; Co⁰ receives outside Case features, then checks the same features on the 1st conjunct in its specifier; default Case is licensed on the 2nd conjunct (UC).

(21) **Default Case** (Johannessen 1998: 120-123)

X[☠] Only licensed by Co⁰ to its complement, where Case is not assigned/checked.

X[☠] For English, Default Case = Accusative.

(22) **Overcorrection in English** (Johannessen 1998: 123-126)

X[☠] Co⁰ assigns Nominative Case to its complement.

X[☠] "...only where the grammar seems to lack the possibility of direct checking (as when there is no case or default case)...."

Johannessen makes some predictions about possible coordinated pronominal case-form variants:

I have not encountered any example of unbalanced coordination in English in which both conjuncts were overtly case-marked pronouns, and where only the pronoun in the first conjunct had deviant case. (Johannessen 1998: 63)

¹⁹ Her analysis includes all of these mechanisms, and more.

Moreover, Johannessen claims that

[i]t is unacceptable for both conjuncts in an object CoP to have nominative case (i), (although one exception is included in the section on EBC), and it is unacceptable for the first conjunct only to have accusative case in a subject CoP (ii).

- (i) a. *Gramps will kiss [he and she]
- b. *Gramps expected [he and she] to sing
 (Schwartz 1985: 167)

- (ii) a. *[Him and she] will drive to the movies
- b. *It would be better if [her and he] drove to
 the movies (Schwartz 1985: 165)

These intuitions are confirmed by the English speakers I have consulted. (Johannessen 1998: 69, fn. 8)

Johannessen's empirical claims are made on the basis of acceptability judgments from native-speaker consultants, which have a serious risk of distortion based on social stigma (as discussed above).

Moreover, her starred examples seem quite a bit more "acceptable"--for at least certain speakers or populations--if the second pronoun is the 1s SF I:

- (23) a. % Gramps will kiss [he and I].
- b. % Gramps expected [he and I] to sing.

- (24) a. % [Him and I] will drive to the movies.
- b. % It would be better if [her and I] drove to the
 movies.

Finally, using the kind of observational methodology used by Angermeyer and Singler (2003) and adapted below, we find that such variants do occur. Regarding "both conjuncts in an object CoP [having] nominative case (i)", Johannessen herself cites the following observed "exception" (1998: 63, #112j):²⁰

- (25) Joe wouldn't explain it to [she and I].

Here's one of my specimens:

- (26) He talked [J.] and I into going.²¹

²⁰ Also noted by Angermeyer and Singler (2003: 176, 202 fn. 11).

²¹ Attested, spoken to the author.

Regarding "the first conjunct only [having] accusative case in a subject CoP (ii)":

(27) Him and I was talking.²²

3.3.3 GRAMMATICAL VIRUSES

In order to deal with pronoun-case variation in coordinates, Sobin (1994a; 1994b) proposed the "grammatical virus" theory and later extended it to other variable phenomena such as *who/whom* (Lasnik and Sobin 2000) and rightward agreement in expletive constructions (Sobin 1997; 2004) (but cf. Schütze (1999), who argues that "expletive constructions are not infected").

...grammatical viruses are rules which check features which the normal system will not check. They involve specific lexical items, they are insensitive to surrounding structure, so that they may as easily produce hypercorrections as desired prestige forms, and they may exhibit unusual or unexpected directionality effects. ...such rules are not generative, but are parasitic on the generative system; they require a host system. ...they subvert output in that they license sentences which are ungrammatical in the strict sense. (Lasnik and Sobin 2000: 352)

[A virus rule] is sensitive to the sequential arrangement of elements and applies at a point in the derivation where the order of overt elements is fixed, most likely at 'spellout.' (Lasnik and Sobin 2000: 355)

A grammatical virus rule:

(28) *The "...and I..." Rule* (Sobin 1997: 336)
If: ...and [_{Prn} +1, +sg, NOM]...
 1 2
then: check NOM on 2.

Not a virus:

(29) *The Default Accusative Rule* (Sobin 1997: 336)
If: ...[_{NP} ACC]...
 1
then: check ACC on 1.

²² Attested, collected by the author, spoken by a defendant on the TV show "The People's Court."

Some problems with the virus theory (Parrott 2001):

- X[☠] No independent motivation for virus mechanisms.
- X[☠] No obvious predictions made by virus mechanisms.
- X[☠] No obvious connection between virus mechanisms and the syntactic environments they "infect."
- X[☠] No obvious connection between virus mechanisms and the languages they "infect."
- X[☠] No Minimalist motivations for virus mechanisms (i.e. from interfaces, "virtual conceptual necessity," or computational efficiency e.g. economy).
- X[☠] Spell out is an operation, not a level (where rules can check features).

3.3.4 VIRAL INFECTION WITH DM DEFAULT CASE

Schütze (2001) adopts the virus analysis for SF pronouns in coordinates, including "overcorrection" SF in Accusative and Oblique Case coordinates. He uses the theory of Distributed Morphology (Halle and Marantz 1993) to account for OFs as "default case" wherever Case is not checked by the syntax (i.e., in coordinates).

4. ABOMINABLE SPECIMENS

- Pronoun-case variation could be a productive point of contact between syntactic theory and the empirical methodologies of variation study.

Following an adapted form of the observational methodology of Angermeyer and Singler (2003), I have been collecting specimens of pronoun-case variants that I observe in speech and writing (as noted). I collect only specimens of morphosyntactic mismatch. Specimens are not limited to 1s pronouns in object coordinates, but include a range of pronoun forms and Case environments. I do not intend quantitative or sociolinguistic analysis of these data. Rather, I attempt to infer from these specimens:

- X[☠] The range of attested mismatched case forms;
- X[☠] The Case environments where variation occurs;

☠ Linear ordering and lexical specificity effects.

In what follows, specimens are classified according to the pronoun(s)'s case form and its Case environment. A full collection of over 100 specimens²³ will appear as an appendix (Parrott In progress).

4.1 OF IN NOMINATIVE-CASE COORDINATES

4.1.1 IS

- (30) a. [S.], I dreamed last night that you and me went on a [canoeing] trip.
b. [J.] and me were talking about that yesterday.
- (31) a. Me and my fellow researchers have tried to defend our research. (written online, unedited comment)
b. Me and photog man march right up and grab Kucinich's hand. (written online and print, edited)²⁴
- (32) a. Me and her party!
b. That's why me and him still talk.
- (33) ...the place where you, me, and 95 million others put our money. (TV, unscripted?)

4.1.2 IS

- (34) a. My sister and her don't have any mutual friends. (TV, unscripted)
b. [Then] you and her can watch me getting your shower working again. (TV, unscripted)
- (35) ...because Dennis Rader and him couldn't share the same facility. (written online, quotation)
- (36) a. Her and Britney are trying to grow up....
b. Her and her new boyfriend are coming.

²³ Including a few of Emonds's other "prestige constructions" that I do not present here.

²⁴ In the very same paragraph there is a Nominative [X and I] coordinate [<http://198.107.45.79/story.php?story=4962>].

- (37) a. Him and the zombie hunter are fighting....²⁵
b. Him and Julie went below deck to smoke some weed.
(TV, scripted)

(38) Him and her have this gallery, on Lorimer.

4.1.3 PL

- (39) a. [S.s] and them I guess are getting in tonight....
b. When Castro and them took over... (talk radio,
unscripted)
c. Her brothers and them was [standing] over there.

(40) The Times, the News and the Post (who reported that quote, incidentally), the Voice, us, and dozens of others keep and maintain their own news racks on the city streets. (written online and print)

4.1.4 MIXED CASE FORMS IN NOMINATIVE-CASE COORDINATES

- (41) a. He called the police because him and I had a conversation. (TV, unscripted)
b. Him and I were working at the time, both of us.
(TV, unscripted)

(42) a. Bob and I and him had talked about a rough cut and we'd actually seen a rough cut. (written online, quotation)

4.2 SF IN ACCUSATIVE-CASE COORDINATES

4.2.1 IS

- (43) a. He picked up a stick, and he proceeded to start whipping [name] and I in the legs with the stick.
(TV, unscripted)
b. It didn't surprise Mark and I. (TV, unscripted)

²⁵ From a British speaker.

4.2.2 35

- (44) Dr. Mohammed Hazim in Baquba, pleaded for his governor to protect he and his colleagues from "organized terrorism of the police and army." (written online, edited?)
- (45) My son just told me you tried to stuff he and his friends into a 55 gallon drum and weld the lid shut while they were in there. (written print cartoon, edited?)
- (46) a. The leg hadn't totally rotted off, but it had rotted sufficiently that the family got nervous about blood poisoning and persuaded he and Call to saw it off. (written print book, edited)²⁶
- b. Try as he might, he can't seem to create a reality that allows he and Kayleigh to live "happily ever after." (written online, unedited?)
- (47) [Michael Jackson] gave his sister vodka, and he and his brother wine. (TV, unscripted?)

4.2.3 MIXED CASE FORMS IN ACCUSATIVE-CASE COORDINATES

- (48) ...they brought him and Greg Kinnear and I up... (TV, unscripted)

4.3 SF IN OBLIQUE-CASE COORDINATES

4.3.1 15

- (49) a. From the vantage of my colleagues and I, ID is a perfectly natural explanation. (TV, unscripted)²⁷
- b. And if our troops do lose, it's Night of the Living Dead for you and I. (written online, unedited comment)

²⁶ "Lonesome Dove"

²⁷ Spoken by William Dembski (don't call him Dumbski).

- c. The horrific ordeal experienced by the innocent young people here, whose lives are turned into a grim reality, is something that could happen to you or I at any given moment, no matter where we are. (written online, unedited?)
- (50) a. It's hard for John [McCain] and I to make the case if the president won't make the case. (TV, unscripted)
- b. That was the perfect date for Mike and I to be on together. (TV, unscripted)
 - c. It was fun for Steve and I to do that together. (TV, unscripted)²⁸

4.3.2 35

- (51) a. ...[an] ongoing political dispute...between he and the person he apparently intended to kill, [Councilman] James Davis. (TV, unscripted)
- b. He thought I was coming between he and his wife. (TV, unscripted)
- (52) a. ...by playing back an old interview with he and Jen. (TV, unscripted?)
- b. With Shaq, the Lakers had the perfect one-two punch in he and Kobe. (written online, edited)
 - c. Tell him that our suffering is not a cry for war, nor an excuse to plunder the earth for profits for he and his cohorts! (written pamphlet, unedited?)
- (53) ...besides he and I...
- (54) a. But what happened between Kobe and I is between he and I -- period. It's not anyone else's business. (written online and print, quotation?)
- b. What happened between he and I is between he and I. It isn't anyone else's business. That's it. It's between us.

²⁸ Bill Gates!

4.3.3 MIXED CASE FORMS IN OBLIQUE

- (55) I don't like to talk about him and I developing chemistry. (written print, quotation)

4.4 SUMMARY OF INFERRED COORDINATE PATTERNS

- (56) **1s OFs in coordinates**
a. X and me
b. me and X
- (57) **1s SFs in coordinates**
a. X and I
b. * I and X
- (58) **3s OFs in coordinates**
a. X and him/her
b. him/her and X
- (59) **3s SFs in coordinates**
a. * X and she/he
b. she/he and X
- (60) **1,3p pronouns in coordinates**
a. X and us/them
b. us/them and X
c. * X and we/they
d. * we/they and X

5. DISTRIBUTED MORPHOLOGICAL MECHANISMS

A fundamental research question:

- (61) What are the mechanisms of morphosyntactic (Labovian) variation in a (Minimalist) theoretical model of the language faculty?
- ☠ What kind of morphosyntactic objects are the variants?
 - ☠ What are the morphosyntactic structures that define the environments where the variant forms occur?

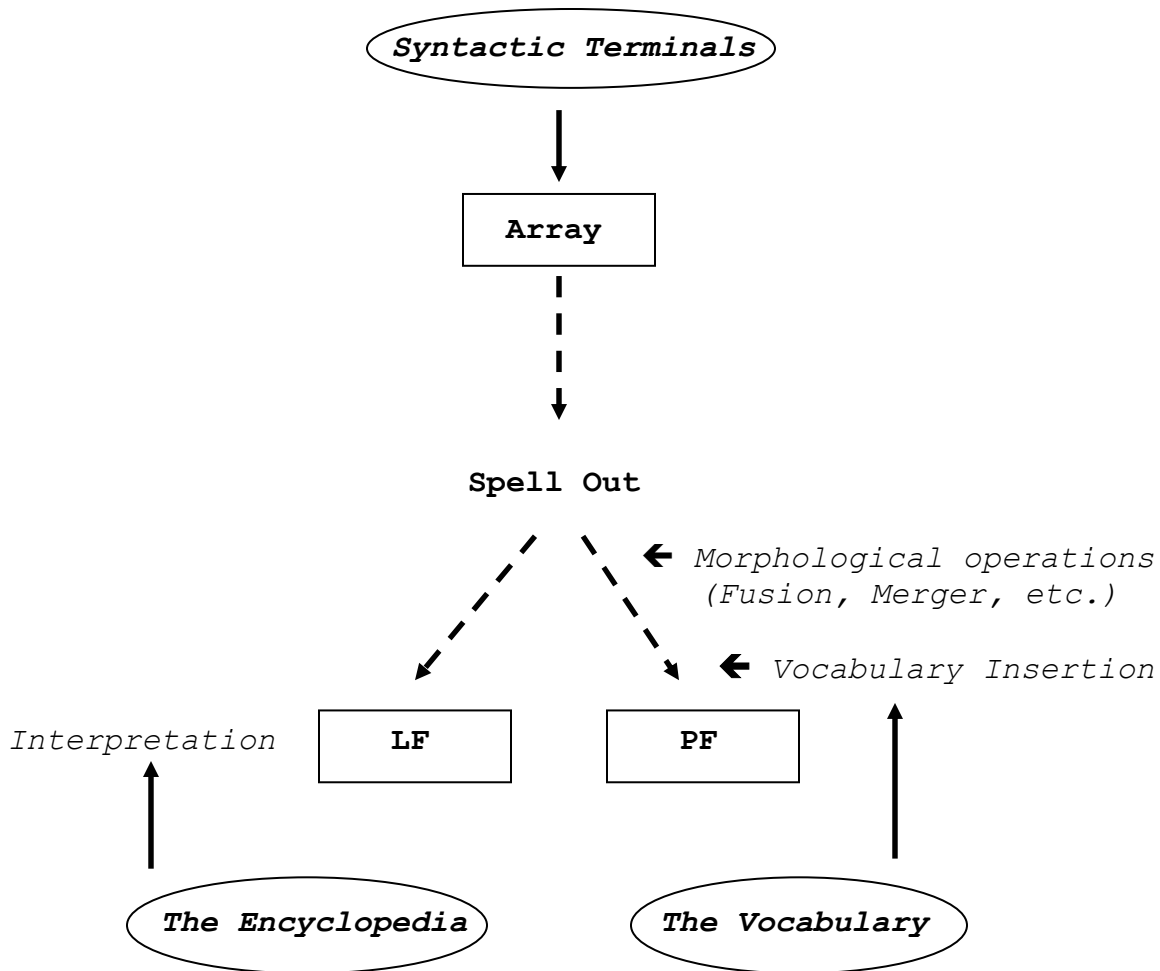
- ☠ Why is variation "non-deterministic"--that is, how do we explain the difference between variation and allomorphy?
- ☠ How can we account for morphosyntactic mismatch in the variant forms?

5.1 DISTRIBUTED MORPHOLOGY

Distributed Morphology (DM) (Embick and Noyer 2001; To appear; Halle and Marantz 1993; Harley and Noyer 1999) is a theory of the lexicon and the post-Spell-Out computation to the PF interface (the 'morphological component' in (6) above). For present purposes, the relevant aspects of DM theory are (Embick and Noyer To appear):

- ☠ There is no single "lexicon"--instead there are three Lists containing lexical information.
- ☠ Phonological features of functional heads are not present before or during the syntactic computation; these phonological features are "late inserted" after Spell Out (cf. the Separationist Hypothesis (Beard 1995))

(62) A (Minimalist) DM model of the language faculty



The input to the morphological component is exactly the output of the syntactic computation: a hierarchically arranged structure of morphosyntactic feature bundles (= syntactic terminal nodes). During the computation to PF, terminal nodes are subjected to further morphological operations (e.g. Merger, Fusion, Fission, etc.).

(63) **DM Lists** (Embick and Noyer To appear)

The Syntactic Terminals: The list containing the Roots and the Abstract Morphemes.

The Vocabulary: The list of Vocabulary Items, rules that provide phonological content to abstract morphemes.

The Encyclopedia: The list of semantic information that must be treated as either a property of a Root, or of a syntactically constructed object (idioms like kick the bucket).²⁹

(64) Schematic Syntactic Terminals

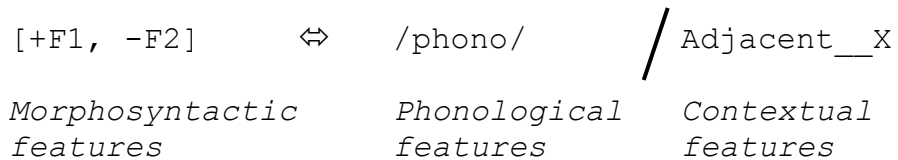
- a. *ghost* = [$\sqrt{\text{GHOST}}$; /*gost*/] (*Root*)
- b. *T(ense)* = [+Past; $u\emptyset$] (*abstract morpheme*)

Vocabulary Insertion, a morphological operation, inserts phonological features at terminal nodes as determined by Vocabulary Items:

[t]he *Vocabulary* is the list of the *phonological exponents* of the different abstract morphemes of the language, paired with conditions on insertion. Each pairing of a phonological context with information about the grammatical (i.e. syntactic and morphological) context in which the exponent is inserted is called a *Vocabulary Item*. (Embick and Noyer To appear, italics in original)

Vocabulary Items are represented schematically below. The phonological features on the right of the arrow will be inserted at the terminal identified by the morphosyntactic features to the left of the arrow:

(65) Schematic Vocabulary Item



☠ The morphosyntactic features of Vocabulary Items can be underspecified. A Vocabulary Item can be inserted at some terminal node so long as the Vocabulary Item contains no features that contradict features of that terminal node.

²⁹ Embick and Noyer (To appear) claim that the Encyclopedia "is the repository for 'special' meanings, whether the meanings of Roots or of larger objects. This component...is consulted subsequent to the output of LF/PF, which we abbreviate simply as 'Interpretation'." I will not have anything to say about the Encyclopedia here, except to note that this list may also be the repository for variation's social meaning.

☠ Underspecified Vocabulary Items may compete for insertion at a terminal node, according to the Elsewhere Principle. The most highly specified Vocabulary Items (with the most substantive features that match the features of a terminal node) is inserted first, blocking the insertion of less specified Vocabulary Items. 'Elsewhere' Vocabulary Items are inserted by default whenever a more specified VE cannot be inserted.

→ Allomorphy!

5.2 ENGLISH PRONOUNS IN DISTRIBUTED MORPHOLOGY

(66) **Morphological Transparency** (Emonds 1986: 106-107)
Definition. A syntactic category [e.g. a Case feature, JKP] C is "morphologically transparent" on B [a lexical item, JKP] if and only if a productive number of pairs of simple B which contrast with respect to C also differ phonologically.³⁰

→ Hypothesis: Case is not Morphologically Transparent on D in (modern) English.

(67) **Vocabulary Transparency**³¹
If some morphosyntactic feature F of a terminal node N is not morphologically transparent on N, then F is not contained in the feature set of a Vocabulary Item for N.

→ Hypothesis: There are no Case features in the morphosyntactic features of Vocabulary Items in (modern) English.

³⁰ More Emonds: "An abstract (e.g. case) feature C of a category B is realized on the lexical head of B in a language if and only if the C is morphologically transparent on B."

³¹ See Parrott (2001).

(68) **Vocabulary Items for English pronouns**³²

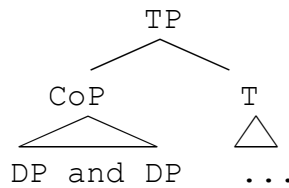
a. Schematic Vocabulary Item

{	[D; ϕ]	→	/SF/ /	Adjacent_____	T _[+Fin]
	[D; ϕ]	→	/OF/ /	elsewhere	

b. 3rd-person singular masculine pronoun *he/him*

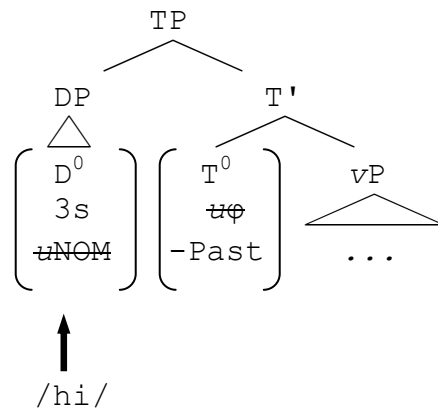
{	[D; 3s; M]	→	/hi/ /	Adjacent_____	T _[+Fin]
	[D; 3s; M]	→	/him/ /	elsewhere	

(69) **Coordination and Adjacency** (Bobaljik 1995)



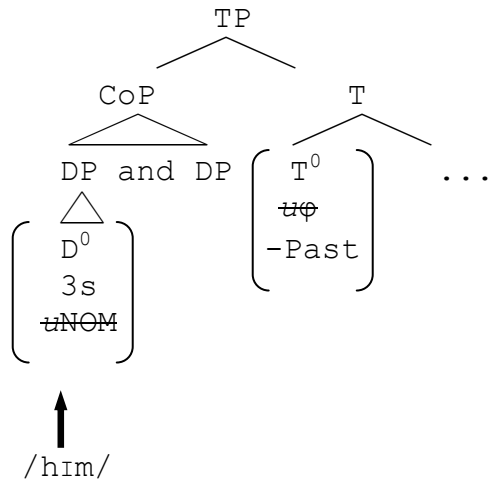
- ➔ CoP is adjacent to T
- ➔ DPs inside CoP are non-adjacent to T

(70) Vocabulary Insertion (details omitted)



³² See Parrott (2001).

(71) Vocabulary Insertion (details omitted)



5.3 SUPPLEMENTAL VOCABULARY AND VARIATION

- ➔ Hypothesis: Native speakers learn "supplementary" Vocabulary Items for pronouns.
- ➔ Hypothesis: These Vocabulary Items do not compete for insertion.

(72) **Supplementary Pronoun VI: "and I"**

	→	/ai/ /	Co ⁰ [ænd] ___ Adjacent

{	[D; 1s]	→	/ai/ / Adjacent ___ T _[+Fin]
	[D; 1s]	→	/mi/ / elsewhere

(73) **Supplementary Pronoun VI: "he and"**

	→	/hi/ /	Adjacent ___ Co ⁰ [ænd]

{	[D; 3s; M]	→	/hi/ / Adjacent ___ T _[+Fin]
	[D; 3s; M]	→	/him/ / elsewhere

6. SUMMARY OF CONCLUSIONS

(74) What are the mechanisms of pronoun case form variation in a Minimalist, Distributed Morphology model of the language faculty?

- ✕ The variants are different Vocabulary Items.
- ✕ Variation occurs in coordinates because terminals inside a coordinate phrase are not adjacent to tense; supplementary Vocabulary Items refer to the coordinate head Co^0 .
- ✕ Labovian variation (vs. allomorphy) may occur when Vocabulary Items do not compete for insertion.
- ✕ Mismatch occurs because there are no syntactic Case features in English pronoun Vocabulary Items.

(75) What are the mechanisms of parametric variation-- differences between speakers--for pronoun case?

- ✕ Individual speakers may have no, one ("and I"), two ("he and"), or more supplementary pronoun Vocabulary Items.
- ✕ Individual speakers' supplementary pronoun Vocabulary Items may compete for insertion (allomorphy).

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