Distributed Morphological mechanisms of pronoun-case variation

Jeffrey K. Parrott
Distributed Morphological mechanisms of pronoun-case variation
Distributed Morphological Mechanisms
of Pronoun-Case Variation

Jeffrey K. Parrott

1 Introduction

In this paper I discuss variation in the morphological case form of English pronouns in certain syntactic environments, most infamously coordination. I present some collected specimens of pronoun-case variation and provide a mechanistic account of this variation in the theoretical framework of Distributed Morphology. The paper is intended to contribute toward bridging the unfortunate gap that separates the empirical study of Labovian variation from theoretical (particularly Minimalist) syntax; to illustrate the usefulness of variationist observational methodologies in addressing questions relevant to theoretical syntax and morphology; and to provide an empirical argument that significant mechanisms of Labovian variation can be located in the feature structure of Distributed Morphology's Vocabulary Items.

2 Salient and Stigmatized Sociolinguistic Variation

2.1 Pronominal Allomorphy

In most varieties of English, personal pronouns have a Subject Form (SF) and an Object Form (OF), as illustrated in the following familiar paradigm:

\[
\begin{array}{ll}
\text{Subject Form (SF)} & \text{Object Form (OF)} \\
1s & I \\
3s & she/he \\
1p & we \\
3p & they \\
\end{array}
\]

SF and OF pronouns seem to occur in complementary distribution:

\[
\begin{array}{ll}
\text{We are a curse upon them.} & \text{Us are a curse upon they.} \\
\end{array}
\]

"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? Throughout, *'s mean not only 'unacceptable' but also 'unattested,' unless explicitly stated otherwise.

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

2.2 Infamous Coordination Variation

As is well known to virtually every native speaker of English, pronominal 
how case forms vary inside of coordinate phrases. This variation is a perennial 
target of prescriptivist ire, and “errors” are harshly stigmatized. Scornful 
social attitudes toward pronoun-case variation are illustrated in almost any 
prescriptive usage guide. For amusing examples selected at random, see 
(2003) provide more such examples of the genre, as does Emends (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 speak-
ers).  

2.3 Angermeyer and Singler (2003): A Variationist Approach

Although it is remarkably salient, this case of sociolinguistic variation has 
received almost no attention from variationists. Angermeyer and Singler 
(2003) is a recent and welcome exception. Angermeyer and Singler observe 
that coordinated pronouns exhibit case-form variation in two empirically 
distinct senses. First, they mention differences between individual speakers: 
“...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” (175). This kind 
of cross-linguistic/dialectal variation can be referred to as ‘parametric’ 
variation, since it is explained by a theory of parameters (and principles) 
(e.g. Borer 1984, Chomsky 1995, Kayne 1996, Baker 2001, and much other 
work). However, parametric variation must be distinguished from what I will 
refer to as ‘Labovian’ variation:  

---

2For reasons of space, I do not discuss Dative Case/case in this paper. Every-
thing I have to say should apply straightforwardly to Dative for English; in other 
languages, matters may be different.

3“It’s only a grammatical error, not a drive-by shooting” (O’Conner 1996).

4A.k.a. “inherent variation,” “variability,” or “sociolinguistic variation.”
(3) Labovian variation (in morphosyntax) =

a. Individuals use variant morphosyntactic forms;
b. The variant forms appear in the same morphosyntactic environment (variants are not allomorphs in complementary distribution);
c. The variant forms do not express different lexical or truth-conditional semantics, nor have different morphosyntactic functions.

Labovian variation is the main focus for Angermeyer and Singler: “every speaker who uses the nominative [in object coordinates] also uses the objective in this environment at least some of the time” (2003: 176).

2.3.1 Variants and Methodology

Although Angermeyer and Singler discuss variation in other pronoun forms and structural environments, they limit their quantitative analysis to 1s pronouns in object coordinates: the “Vernacular” (me and X), “Standard” (X and me), and “Polite” (X and I) variants (178).

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. “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” (182). Instead of sociolinguistic interviews, Angermeyer and Singler 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 produced about 25% of the tokens in their data set. Their second data-collection methodology “...consisted simply of listening for occurrences of case-marked pronouns in co-ordinate NPs in object position in everyday speech” (183). I adapted this observational methodology, as reported below.

---

5 Even prescriptivists confess to variation in this environment: O’Conner challenges her friends to “...catch me in the occasional ‘between you and I’ (OK, I admit it)” (1996b: 12).

6 Myself variants (myself and X; X and myself) were also counted when they did not have a subject antecedent.
2.3.2 Quantitative Analysis

Angermeyer and Singler provide a first quantitative and sociolinguistic analysis of variation in the case form of is pronouns in object coordinates. Summarizing their general results, 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” (201). Linguistic factors, including the phonological ‘weight’ of the other conjoined NP, had a statistically significant effect on the variation. Finally, social factors, including the education and age of the speaker, had a statistically significant effect on the variation.

3 A Syntactic-Theoretical Approach

3.1 Case Theory in (Minimalist) Syntax

Case Theory is a central and fundamental component of Government and Binding (Chomsky 1981, et sq.), Principles and Parameters (Chomsky and Lasnik 1993), and Minimalist (Chomsky 1995, 2000, et seq.) theories of syntax. Crucially, in all permutations of these theories, “abstract” syntactic Case features are always present on DPs, regardless of whether Case is realized phonologically as case morphology in a particular language. 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...([p hеNOM [r] [v t admires hеmACC]])” (Hornstein, Nunes and Grohmann 2005).

On this very basic version of Case theory, pronouns are composed of semantically interpretable person and number features, semantically uninterpretable Case features (indicated with ‘u’), and phonological features. The uninterpretable Case features must be checked by a matching functional head before Spell Out:

---

7For an interesting quantitative (not variationist) study, see Quattlebaum (1994).
8Determiner (D) heads have Noun Phrase (NP) complements, the standard analysis following Abney (1987).
9McFadden (2004) argues for the elimination of Case features in the ‘narrow’ syntactic computation. My analysis of Case variation does not entail this conclusion, but may be compatible with it.
(4) Pronoun features and Case-checking functional heads

Nominative Case (NOM) =

\[
\{ \\
[D; 1s; uNOM; /ai/] \\
[D; 3s; M; uNOM; /hi/] \\
[D; 3s; F; uNOM; /yi/] \\
[D; 1p; uNOM; /wi/] \\
[D; 3p; uNOM; /oe/]
\}
\]

Accusative Case (ACC) =

\[
\{ \\
[D; 1s; uACC; /mi/] \\
[D; 3s; M; uACC; /itm/] \\
[D; 3s; F; uACC; /he:j/] \\
[D; 1p; uACC; /as/] \\
[D; 3p; uACC; /oe:m/]
\}
\]

1.2 Pronoun-case Variation as Mismatch

Given such a theory of Case, pronoun-case variation seems to be a straightforward instance of morphosyntactic mismatch: an item’s morphophonological form does not correspond to the morphosyntactic features that the theory predicts it should have. Even keeping just to 1s pronouns in coordinates, mismatches are well attested (see below for specimens).

1.3 Previous Theoretical Approaches

Theoretical efforts to analyze pronoun-case mismatch in coordinates have been hampered by methodological problems. The strong social stigma against “incorrect” usage of pronoun case in coordinates makes acceptability

---

10 Alternately, T* or AgrS*—whatever finite head hosts the subject.
11 Alternately, V* or AgrO*—whatever verbal head takes a direct object.
judgments unreliable, and syntactic theorists have generally declined to em­
ploy the observational methods of variationists. Thus, pronoun-case variation 
has remained at the margins of theoretical inquiry despite the centrality of 
Case. For reasons of space, I can only briefly list previous approaches here 
(for discussion and criticism, see Parrott in progress).

In a paper entitled “Grammatically deviant prestige constructions,” 
Emonds (1986) gave what I believe to be the first syntactic-theoretical ac­
count of pronoun-case variation. Below, I will adapt much of Emonds’s 
analysis into a Distributed Morphology framework. Johannessen’s (1998) 
book Coordination deals with a wide range of phenomena involving coor­
dination, for a number of languages; a significant amount of her data and 
analysis involves case-form variation in English. In order to deal with pro­
noun-case variation in coordinates, Sobin (1994a, 1994b) proposed the 
“grammatical virus” theory and later extended it to other variable phenom­
ena such as who/whom (Lasnik and Sobin 2000) and rightward agreement in 
expletive constructions (Sobin 1997, 2004). Schütze (2001) adopts the vi­
rus analysis for SF pronouns in coordinates, including “overcorrection” SFs 
in Accusative and Dative 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 Some Collected Specimens

Pronoun-case variation could be a productive point of contact between syn­
tactic theory and the empirical methodologies of variation study. Thus, fol­
lowing an adapted form of the observational methodology presented by 
Angermeyer and Singler (2003), I have collected specimens of pronoun-case 
variants observed in everyday speech (and some writing, as noted). Only 
specimens exhibiting morphosyntactic mismatch were collected. Specimens 
are not restricted to 1s pronouns in object coordinates, but include a range of 
pronoun forms and Case environments. I do not perform (or intend) any 
quantitative or sociolinguistic analysis of these data. Rather, I merely attempt 
to infer from these attested specimens the range of possible mismatched case 
forms, the Case environments where variation occurs, and any apparent linear-ordering or lexical-specificity effects. In what follows, I present selected 
specimens classified according to the pronoun(s)’s case form and its Case 
environment (drawn from Parrott, in progress). To repeat, no inferences 
should be drawn about variant frequency on the basis of these data.

12See also Zoemer (1996) for a similar approach.
13But cf. Schütze’s “Expletive constructions are not infected” (1999).
4.1 OFs in Nominative-Case Coordinates

4.1.1 1s

(5) a. S., I dreamed last night that you and me went on a [canoeing] trip.
    b. J. and me were talking about that yesterday.

(6) 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)

(7) a. Me and her party!
    b. That’s why me and him still talk.

(8) the place where you, me, and 95 million others put our money. (TV, unscripted?)

4.1.2 3s

(9) 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)

(10) because Dennis Rader and him couldn’t share the same facility. (written online, quotation)

(11) a. Her and Britney are trying to grow up....
    b. Her and her new boyfriend are coming.

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

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

4.1.3 Plural

(14) a. [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. (TV, unscripted)

(15) The Times, the News and the Post (who reported that quote, incidentally), the Voice, us, and dozens of others keep and maintain...

---

14 In the same paragraph there is a Nominative \( [X \text{ and } I] \) coordinate.
15 From a British speaker.
their own news racks on the city streets. (written online and print)

4.1.4 Mixed Case Forms in Nominative-Case Coordinates

(16) 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)

(17) 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 SFs in Accusative-Case coordinates

4.2.1 1s

(18) 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)

4.2.2 3s

(19) 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?)

(20) 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, edited cartoon?)

(21) 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, edited)
   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?)

(22) [Michael Jackson] gave his sister vodka, and he and his brother wine. (TV, unscripted?)

4.2.3 Mixed case forms in Accusative-Case coordinates

(23) ...they brought him and Greg Kinnear and I up... (TV, unscripted)
4.3 Summary of Inferred Patterns

Based on the mismatch specimens presented above, I infer the following patterns of pronoun-case variation in coordinates. The patterns marked "*" below are completely unattested in all of my mismatch specimens. Notice that they all involve SFs. This does not mean that the starred patterns cannot occur in a Nominative Case environment: they occasionally appear there in edited writing, but more research will be required to determine their quantitative frequency in spoken usage. So far as I am aware, such patterns are not commonly attested. 16

(24) 1s OFs in coordinates
   a. X and me
   b. me and X

(25) 1s SFs in coordinates
   a. X and I
   b. * I and X

(26) 3s OFs in coordinates
   a. X and him/her
   b. him/her and X

(27) 3s SFs in coordinates
   a. * X and she/he
   b. she/he and X

(28) 1p, 3p pronouns in coordinates
   a. X and us/them
   b. us/them and X
   c. * X and we/they
   d. * we/they and X

16 "* I and X cannot occur in object position and it shows up only rarely in subject position in speech, but it does show up in subject position in writing” (Angermeyer and Singler 2003: 203, fn. 17). Famously, this pattern turns up in the writing of Labov, as Angermeyer and Singler remind us: “...I and my associates have interviewed many thousands of speakers....” (Labov 2901: 6).
5 Distributed Morphological Mechanisms

5.1 Distributed Morphology

Distributed Morphology (DM) is a theory of the lexicon and the Phonetic Form (PF) interface branch of the syntactic computation (a.k.a. the ‘morphological component’) (Halle and Marantz 1993, Harley and Noyer 1999, Embick and Noyer 2001, and much related work). Space constraints preclude a full exposition, but it will suffice to highlight the aspects of the theory most relevant for present purposes (mostly following Embick and Noyer to appear).

In DM, there is no single ‘lexicon.’ Lexical information is ‘distributed’ among three Lists: The Encyclopedia “is the repository for ‘special’ meanings” 17; The Syntactic Terminals include Abstract Morphemes (= functional heads), which consist solely of semantic and syntactic features; and The Vocabulary contains “rules that provide phonological content” to Abstract Morphemes. Crucially, Abstract Morphemes have no phonological features prior to Spell Out. During the morphological computation, the operation Vocabulary Insertion 18 supplies terminal nodes with phonological features according to the instructions contained in Vocabulary Items. Vocabulary items are represented schematically below. The phonological features on the right side of the double arrow will be Inserted into the terminal node identified by the “substantive” morphosyntactic features to the left of the arrow (contextual features further identify Insertion sites):

(29) Schematic Vocabulary Item

\[ [+F1, -F2] \rightarrow /fono/ \quad / X_\_X \]


The morphosyntactic features of a Vocabulary Item can be underspecified, so phonological features can be Inserted into a terminal node whenever the Vocabulary Item contains no contradictory features. Underspecified Vocabulary Items compete for Insertion into a (fully-specified) terminal node, according to the Elsewhere Principle: the Vocabulary Item with the most

---

17I will not say anything about the Encyclopedia, except to note that this List might also function as a repository for the social meaning of Labovian variation.

18Vocabulary Insertion is one implementation of the Separationist Hypothesis that (some or all) phonological features are not present in the syntax (for other versions, see Beard 1995 or Anderson 1992).
features matching the terminal node is inserted first, blocking the insertion of less-specified vocabulary items. 'elsewhere' vocabulary items are inserted by default if a more specified vocabulary item cannot be inserted. competition of underspecified vocabulary items is the primary mechanism of allomorphy in dm.

5.2 English Pronouns in Distributed Morphology

Emonds (1986: 105–107) points to the difference between English and German, a language where all DPs 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.

(30) Morphological Transparency

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

Adopting and implementing Emonds’s hypothesis in DM, I further hypothesize that a principle of “Vocabulary Transparency” constrains the acquisition of Vocabulary Items.

(31) Vocabulary Transparency

If some morphosyntactic feature F of a terminal node N is not morphologically transparent on N, then F is not contained in the morphosyntactic features of any Vocabulary Item for N.

We can easily determine that Case is not Morphologically Transparent on D in (modern) English. Thus, by hypothesis, Case features are not contained in the Vocabulary of English speakers. If so, how do we account for the complementary distribution of non-coordinated pronoun case forms? I propose that (phonological features of) SF pronouns are inserted whenever D is left adjacent to finite T, specified in the contextual features of the Vocabulary Item; in all other syntactic environments, an elsewhere Vocabulary Item inserts the OF by default.¹⁹

¹⁹See Parrott (2001) for an earlier version.
(32) Postulated Vocabulary Items for English pronouns

a. Schematic Vocabulary Item

\[ \text{[D, _]} \rightarrow /\text{SF}/ \quad /\text{Adjacent}_T^{[\text{Fin}]} \]

\[ \text{[D, _]} \text{ (else.)} \rightarrow /\text{OF}/ \]

b. 3s masc. pronoun (he/him)

\[ \text{[D, pers:-, num:sing, _]} \rightarrow /\text{hi}/ \quad /\text{Adjacent}_T^{[\text{Fin}]} \]

\[ \text{[D, pers:-, num:sing, _]} \text{ (else.)} \rightarrow /\text{him}/ \]

This analysis relies on morphosyntactic Adjacency, a linear (and phrase-structural) relation which may hold between terminals in the morphological component. As an immediate consequence, a coordinate phrase (CoP) is itself Adjacent to T, but DPs internal to a CoP are non-Adjacent to T. Crucially, intervening adjuncts do not interfere with Adjacency between nodes.\textsuperscript{20}

1.3 Supplemental Vocabulary

So far, the analysis will account for the allomorphy of non-coordinated SF and OF pronouns, as well as for OF pronouns as either conjunct of a coordinate in any Case position. But what about SF pronouns in Nominative-Case coordinates and mismatched SF pronouns in Accusative-Case coordinates? Moreover, why are there apparent ordering asymmetries with coordinated SF pronouns (i.e. *I and X; *X and (s)he)?

I propose that English speakers learn "supplementary" Vocabulary Items for pronouns. These may be learned by prescriptive instruction, social pressure, or environmental exposure; by hypothesis, they are not acquired during the period of language development along with the normal Vocabulary for pronouns. Also by hypothesis, these Vocabulary Items do not compete for Insertion (notated with a dashed line); non-completion of Vocabulary accounts for the difference between Labovian variation and allomorphy in this DM approach.

(33) Supplementary Pronoun Vocabulary Item, and I

\[ \text{[D, pers:1, num:sing]} \rightarrow /\text{ai}/ \quad /\text{Adjacent}_T^{[\text{Fin}]} \]

\[ \text{[D, pers:1, num:sing]} \rightarrow /\text{ai}/ \quad /\text{Adjacent}_T^{[\text{Fin}]} \]

\[ \text{[D, pers:1, num:sing]} \text{ (else.)} \rightarrow /\text{mi}/ \]

\textsuperscript{20} For independent evidence of this and other properties of Adjacency, see Bobaljik (1995).
(34) Supplementary Pronoun Vocabulary Item, he and

\[
\begin{align*}
[D, \text{pers:-}, \text{num:sing, }_] & \overset{\text{hi/}}{\rightarrow} /\text{hi/} / \text{Adjacent\_}\{\text{end}\} \\
[D, \text{pers:-}, \text{num:sing, }_] & \overset{\text{hi/}}{\rightarrow} /\text{hi/} / \text{Adjacent\_}\{\text{T[+Fin]}\} \\
[D, \text{pers:-}, \text{num:sing, }\text{(else.)}] & \overset{\text{him/}}{\rightarrow} /\text{him/}
\end{align*}
\]

1.4 Summary of Conclusions

In this paper I have presented an analysis of the Distributed Morphological mechanisms of (Labovian) pronoun-case variation within a Minimalist model of syntax. On this analysis, variant forms are different Vocabulary Items. Variation occurs in coordinates because terminals inside a CoP are non-Adjacent to finite T, and contextual features of “supplementary” Vocabulary Items for SFs refer to the coordinate head and. Labovian variation is distinguished from allomorphy because “supplementary” variant Vocabulary Items do not compete for Insertion. Apparent morphosyntactic mismatch arises because there are no syntactic Case features in the pronoun Vocabulary of English speakers. The analysis furthermore extends to the mechanisms of parametric variation in coordinated pronoun case forms. Individual speakers may have no, one (e.g. and I), two (e.g. he and), or more supplementary pronoun Vocabulary Items in their inventory.

References


O’Conner, Patricia T. 1996b. Like I said, don’t worry. Newsweek, December 9, page 12.


Department of Linguistics
480 Intercultural Center
Georgetown University
Washington DC 20057-1051
parrottj@georgetown.edu
www.punksintscience.org/jeffrey/