A feature-based account of pronoun case variation in English
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0 Introduction

Adger (2006) argues that morphosyntactic variability within the speech of an individual can be captured in an approach where competing variants have uninterpretable features that may be checked in the same syntactic context. The results of a written survey of 90 native speakers of English suggest that the distribution of pronoun case forms in coordinates (1)-(3) and other strong pronoun contexts (4)-(5) exhibits exactly the kind of non-deterministic variability Adger’s approach was designed to capture.

(1) [He/him and I/me] arrived here three hours ago.
(2) Brenda had promised she would meet [he/him and I/me] at the station.
(3) The landscapes painted by [he/him and I/me] drew huge crowds at the exhibition.
(4) [We/us New Zealanders] must stick together.
(5) It was [he/him] who insisted on going to the rally.

In this paper, I outline a feature-based analysis that accounts for the most commonly attested pronoun case patterns and provides supporting evidence for Sigurðsson’s (in press) claim that ‘uninterpretable’ features actually serve to interpret abstract syntactic and semantic relations at the PF-interface.1

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1 Many thanks to the 90 native speakers of New Zealand English who participated in my pronoun survey, to David Adger and Halldòr Sigurðsson for inspiring the analysis proposed here, and to Kate Kearns, Alex D’Arcy, and Andrew Carstairs-McCarthy for helpful questions and suggestions.
1 Combinatorial variability

Adger (2006) illustrates his approach to variability with an analysis of variation between *was* and *were* in Buckie English (6).

(6) Buckie English paradigm for copula and auxiliary *be*
(Adger 2006:513f, based on Smith 2000)

<table>
<thead>
<tr>
<th></th>
<th>singular</th>
<th>plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st person</td>
<td>was</td>
<td>was/were</td>
</tr>
<tr>
<td>2nd person</td>
<td>was/were</td>
<td>were/was</td>
</tr>
<tr>
<td>3rd person</td>
<td>was</td>
<td>were</td>
</tr>
</tbody>
</table>

Adger (2006) follows Harley & Ritter (2002), in assuming that 1st, 2nd and 3rd person are distinguished by the features [author: ±] and [participant: ±], so that the contexts illustrated in Table (6) are exhaustively defined by the following interpretable features (cf. Adger 2006:520):

(7) Interpretable features associated with different subjects

<table>
<thead>
<tr>
<th></th>
<th>(singular:+)</th>
<th>participant:+</th>
<th>author:+</th>
<th>(singular:-)</th>
<th>participant:+</th>
<th>author:-</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>was</td>
<td>was</td>
<td>was</td>
<td>were</td>
<td></td>
<td></td>
</tr>
<tr>
<td>you (sg)</td>
<td>was</td>
<td>was</td>
<td>were</td>
<td>were</td>
<td></td>
<td></td>
</tr>
<tr>
<td>he/she/it</td>
<td>was</td>
<td>they</td>
<td>singular:-</td>
<td>participant:-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Adger’s approach, *was* and *were* are the overt realisations of lexical items (=LIs) that are characterised by the uninterpretable counterparts of the interpretable features in (7). All of these lexical items are underspecified (in this case, they each bear only one feature rather than the whole set), and several of the lexical items have the same surface form (8).

(8) LI1 [{singular:+}] *was*  
LI2 [{singular:-}] *were*  
LI3 [{participant:+}] *was*  
LI4 [{author:-}] *were*  
LI5 [{author:+}] *was*  

(Adger 2006:521)

The subjects in (7) can combine with any of the lexical items in (8) whose uninterpretable feature matches one of their interpretable features. So we can combine with LI2 (*were*), LI3 (*was*), and LI5 (*was*), which accounts for the variation between *was* and *were*, but a 3rd person plural subject can only combine with LI2 (*were*).
2 Common patterns of pronoun case variation

2.1 Variation in coordinates

The patterns below are based on a combination of acceptability judgments and cloze test responses elicited from individual survey participants. Each of the 90 participants produced 5-10 tokens per cell for 1sg, and 6-12 tokens per cell for each of the other pronouns (the numbers varied between participants, because they were free to choose the conjunct position of the pronoun in the cloze tests). Only patterns with variation in at least one cell that are attested for more than 5 speakers have been included.

The left-hand column in each table shows the pronoun form(s) found in initial conjunct position. The right-hand column shows the pronoun form(s) in final conjuncts.

S = the coordinate appears as the subject of a finite verb, as in (9)
O = the coordinate appears as the object of a verb, as in (10)
P = the coordinate appears as the complement of a preposition, as in (11)

<table>
<thead>
<tr>
<th>1sg – var 1 (23 speakers)</th>
<th>1sg – var 2 (15 speakers)</th>
<th>1sg – var 3 (7 speakers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S  me</td>
<td>S  me</td>
<td>S  me/ I</td>
</tr>
<tr>
<td>O  me</td>
<td>O  me</td>
<td>O  me/ I</td>
</tr>
<tr>
<td>P  me</td>
<td>P  me</td>
<td>P  me/ I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3sgM – var 4 (15 speakers)</th>
<th>3sgM – var 5 (14 speakers)</th>
<th>3sgM – var 6 (11 speakers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S  he/him</td>
<td>S  him/he</td>
<td>S  he/him</td>
</tr>
<tr>
<td>O  him</td>
<td>O  him</td>
<td>O  him</td>
</tr>
<tr>
<td>P  him</td>
<td>P  him</td>
<td>P  him/ he</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3sgF – var 5 (19 speakers)</th>
<th>3sgF – var 4 (11 speakers)</th>
<th>3sgF – var 7 (7 speakers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S  her/she</td>
<td>S  she/her</td>
<td>S  she/ her</td>
</tr>
<tr>
<td>O  her</td>
<td>O  her</td>
<td>O  her</td>
</tr>
<tr>
<td>P  her</td>
<td>P  her</td>
<td>P  her/ her</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1pl – var 5 (40 speakers)</th>
<th>1pl – var 4 (16 speakers)</th>
<th>1pl – var 8 (8 speakers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S  us/we</td>
<td>S  we/us</td>
<td>S  we</td>
</tr>
<tr>
<td>O  us</td>
<td>O  us</td>
<td>O  us</td>
</tr>
<tr>
<td>P  us</td>
<td>P  us</td>
<td>P  us/ us</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3pl – var 4a (27 speakers)</th>
<th>3pl – var 5 (17 speakers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S  they/ them</td>
<td>S  them/ they</td>
</tr>
<tr>
<td>O  them</td>
<td>O  them</td>
</tr>
<tr>
<td>P  them</td>
<td>P  them</td>
</tr>
</tbody>
</table>
(9) [He/him and I/me] arrived here three hours ago.
(10) Brenda had promised she would meet [he/him and I/me] at the station.
(11) The landscapes painted by [he/him and I/me] drew huge crowds at the exhibition.

2.2 Variation in 1pl-NP constructions

Pronoun case choice in 1pl-NP constructions was tested in multiple-choice and cloze test items where the construction appeared as the subject of a finite clause (12), the object of a verb (13), and the complement of a preposition (14).

(12) [We/us New Zealanders] must stick together. (= S)
(13) Society just doesn’t understand [we/us young people]. (= O)
(14) It’s a hard life for [we/us students]. (= P)

Each of the 90 speakers in the survey produced two tokens per cell (one for each task type). The majority of survey participants exhibited no case variation in this context, opting either for we in subjects and us elsewhere (29 speakers), or for us in all three syntactic positions (18 speakers).

The only 1pl-NP variation pattern produced by more than 5 speakers is given below:

<table>
<thead>
<tr>
<th>1pl-NP - var (25 speakers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S  we/us</td>
</tr>
<tr>
<td>O  us</td>
</tr>
<tr>
<td>P  us</td>
</tr>
</tbody>
</table>

19 of these speakers exhibit the same kind of variation in initial conjuncts of coordinates

2.3 Variation in it-clefts

The survey provides some evidence for case variation in it-clefts where the relativised constituent in the clause is the subject (15). Case preferences for first and third person singular and plural pronouns were tested in multiple choice items such as (16), which appeared in a questionnaire completed by 41 of the original 90 survey participants.

(15) It was [he/him] who/that insisted on going to the rally.

(16) Imagine you’re in a conversation with friends.

   a. Tick the sentence you would be most likely to come across.
   b. Pick the second best sentence and put a 2 in the box beside it.

Robert feels very strongly about this.

[ ] It was him who insisted on going to the rally.
[ ] It was him that insisted on going to the rally.
[ ] It was he that insisted on going to the rally.
[ ] It was he who insisted on going to the rally.
Although objective forms were generally favoured in the focus of *it*-clefts like (15), 26 speakers chose different case forms for their first and second choices with at least one of the pronouns tested, most commonly a 3ps pronoun. Objective pronoun forms were readily selected with both *who* and *that*, but nominatives tended to be paired with *who*.

3 The proposed analysis

Pronoun case variability is found only in strong pronoun contexts such those discussed in section 2 (cf. Quinn 2005). Weak pronouns invariably surface in the nominative when they appear as the subject of a finite clause, and in their objective form in canonical object position (17).

(17) *He/*him* invited *me/*I.*

Following Cardinaletti (1994), I assume that strong pronouns are base-generated in N, and raise to D before Spell-Out (18), whereas weak pronouns are intransitive Ds that simultaneously behave like heads and maximal projections (19). This means that strong pronouns are distinguished from weak pronouns by having the lexical category feature [N].

(19) DP

3.1 Capturing the distribution of strong pronoun forms

I propose that the case variability in strong pronoun contexts can be captured in terms of the following features:

(a) The **lexical category feature** [N] that sets strong pronouns apart from weak pronouns.

(b) The feature [higher[{-N}]:±], which serves to distinguish the highest structural arguments of [-N] predicates (i.e. V and P) from their lower arguments (cf. Wunderlich 1997). The bracketed arguments in (20) are [higher[{-N}]:-], because their predicate takes no higher structural argument. The bracketed arguments in (21) are [higher[{-N}]:+], because there is a higher structural argument in the argument structure of the predicate they are associated with.

(20) a. [**He/him** and **I/me**] arrived here three hours ago

   *arrive* [BECOME [x AT y]]

   b. [**We/us** New Zealanders] must stick together.

   *stick together* [x STICK TOGETHER]
(21) a. Brenda had promised she would meet [he/him and I/me] at the station.
   
   meet [x MEET y]

b. The landscapes painted by [he/him and I/me]
   
   by [x BY y]

c. It was [he/him] who insisted on going to the rally.
   
   be\_id [x BE y]  (insist on [x INSIST ON y])

The case variation found in *it*-clefts such as (21c) suggests that the argument structure status of the relativised constituent in the clause also some bearing on the case of the focused pronoun. We could capture this by assuming that the focused pronoun can inherit the [higher\_N] feature value of a coindexed relative operator, especially when this operator is overtly realised as the relative pronoun *who*.

(c) The feature [EDGE:=], which distinguishes the initial element of a complex constituent from more deeply embedded non-initial elements (cf. Brittain 2003 for evidence that such positional differences may have morphological reflexes).

According to Chomsky (1999), derivations proceed in chunks, which he terms ‘phases’. Chomsky (2001:5) defines the ‘edge’ of a phase as the part that is accessible to outside operations, i.e. the head of the constituent plus any specifiers and adjuncts. In the proposed analysis, the value [EDGE:+] is associated with the phonological edge of a phase, i.e. the first overt edge element in a constituent (cf. Chomsky 1999:22). The remaining elements have the value [EDGE:-].

Initial conjuncts of a coordinate are [EDGE:+], final conjuncts are [EDGE:-] (22).

(22) \[
\begin{array}{c}
\text{ConjP} \\
\text{DP [EDGE:+]} & \text{Conj'} & \text{DP [EDGE:-]}
\end{array}
\]

Pronouns modified by a noun phrase are [EDGE:+] (23).

(23) \[
\begin{array}{c}
\text{DP} \\
\text{D[EDGE:+]} & \text{NumP} & \text{NP}
\end{array}
\]

\[
\begin{array}{c}
\text{N} \\
\text{Num} & \text{NP} & \text{New Zealanders}
\end{array}
\]

\[
\begin{array}{c}
\text{N} \\
\text{ti}
\end{array}
\]
If we adopt a monoclausal analysis of *it*-clefts along the lines of (24), a pronoun in the focus of the cleft is arguably [EDGE:+] as well, since it occupies a specifier position (cf. Quinn 2005 for more discussion on *it*-clefts).

(24)  
\[
\begin{array}{c}
\text{CP} \\
\text{TP} \\
\text{DP}_j \text{it} \\
\text{T'} \\
\text{V}' \\
\text{VP} \\
\end{array}
\text{is/was} \\
\begin{array}{c}
\text{T} \\
\text{DP} \text{t}_j \\
\text{V} \text{k} \\
\text{VP} \\
\end{array}
\begin{array}{c}
\text{V'} \\
\text{DP} \text{[EDGE:+] he/him} \\
\text{V} \text{t}_k \\
\text{CP} \\
\end{array}
\text{who insisted on} \\
\text{going to the rally}
\]

So we can identify the pronoun contexts in the tables in Section 2 as follows:

<table>
<thead>
<tr>
<th>initial conjunct</th>
<th>modified pronoun</th>
<th>final conjunct</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>$uN$ higher$_{[N]}$:- EDGE:+</td>
<td>$uN$ higher$_{[N]}$:- EDGE:-</td>
</tr>
<tr>
<td>O</td>
<td>$uN$ higher$_{[N]}$:+ EDGE:+</td>
<td>$uN$ higher$_{[N]}$:+ EDGE:-</td>
</tr>
<tr>
<td>P</td>
<td>$uN$ higher$_{[N]}$:+ EDGE:+</td>
<td>$uN$ higher$_{[N]}$:+ EDGE:-</td>
</tr>
</tbody>
</table>

In some less commonly attested case patterns, we find (subtle) case differences between O and P. These can be captured by distinguishing higher$_{[N,+V]}$:+ (= O) from higher$_{[N,-V]}$:+ (= P).

(26)  
focus of a subject *it*-cleft

\[
\begin{array}{c}
\text{uN} \\
\text{higher}_{[N]}:+ \ (\text{higher}_{[N]}:-) \\
\text{EDGE}:+ \\
\end{array}
\text{The focused pronoun is most likely to} \\
\text{inherit the feature value [higher}_{[N]}:-} \\
\text{when the clause is introduced by the} \\
\text{relative pronoun *who*}
\]
The following sets of lexical items will yield the most common variation patterns attested for 1sg pronouns (note that all of the items will also have the interpretable features [singular:+, participant:+, author:+]).

\begin{align*}
\text{(27) 1sg-var 1} & \\
\text{L11} & [N, u\text{EDGE}:-] I \\
\text{L12} & [N, u\text{EDGE}:+] me \\
\text{L13} & [N,\text{uhigher}[-N]:+] me
\end{align*}

\begin{align*}
\text{(28) 1sg-var 2} & \\
\text{L11} & [N, u\text{EDGE}:-] I \\
\text{L12} & [N, u\text{higher}[-N]:+] me \\
\text{L13} & [N] me
\end{align*}

\begin{align*}
\text{(29) 1sg-var 3} & \\
\text{L11} & [N, u\text{EDGE}:+, u\text{higher}[-N]:-] me \\
\text{L12} & [N, u\text{EDGE}:-] us \\
\text{L13} & [N, u\text{EDGE}:-] I \\
\text{L14} & [N, u\text{higher}[-N]:-] I \\
\text{L15} & [N, u\text{higher}[-N]:+] me
\end{align*}

As can be seen from the sets in (28) and (29), we sometimes need different lexical items to be in a subset relation with each other. This situation is explicitly allowed in Combinatorial Variability and, as Adger (2006:524) points out, we would predict it to arise when a system is in flux.

The variation patterns found with pronouns other than 1sg will result from the sets of lexical items below (note that the items will also have the interpretable participant, author, and number features of the relevant pronoun, as illustrated in (7) above).

\begin{align*}
\text{(30) var 4} & \\
\text{L11} & [N, u\text{higher}[[-N]:-] we \\
\text{L12} & [N, u\text{EDGE}:-] us \\
\text{L13} & [N] us
\end{align*}

\begin{align*}
\text{(31) var 4a} & \\
\text{L11} & [N, u\text{higher}[-N]:-] \text{they} \\
\text{L12} & [N] \text{them}
\end{align*}

\begin{align*}
\text{(32) var 5} & \\
\text{L11} & [N, u\text{EDGE}:+, u\text{higher}[-N]:-] \text{we} \\
\text{L12} & [N] us
\end{align*}

\begin{align*}
\text{(33) var 6} & \\
\text{L11} & [N, u\text{higher}[-N]:-] he \\
\text{L12} & [N, u\text{EDGE}:+] he \\
\text{L13} & [N] him
\end{align*}

\begin{align*}
\text{(34) var 7} & \\
\text{L11} & [N, u\text{EDGE}:+] she \\
\text{L12} & [N, u\text{higher}[-N]:+] her \\
\text{L13} & [N] her
\end{align*}

\begin{align*}
\text{(35) var 8} & \\
\text{L11} & [N, u\text{higher}[-N]:-] \text{we} \\
\text{L12} & [N, u\text{higher}[-N]:+] \text{us} \\
\text{L13} & [N, u\text{EDGE}:-] \text{us}
\end{align*}

The sets in (30) and (32) will also yield the variation found in 1pl-NP constructions, and sets (29)-(35) could all produce variation in the focus of subject it-clefts where the focus inherits the feature value [higher[-N]:-] from the relative operator.
3.2 Capturing the distribution of weak pronoun forms

Since the DP projected by a weak pronoun lacks a lexical (NP) layer, weak pronouns can only be syntactically licensed by raising to the specifier of an agreement-related functional head before Spell-Out (cf. Panagiotidis 2002:187, Cardinaletti & Starke 1999). When a weak pronoun surfaces in the specifier of a finite TP, it will take the nominative form. In all other contexts, weak pronouns will surface in their objective form. Parrott (2007:280) captures this generalisation in a Distributive Morphology approach, by assuming that for all pronouns with morphologically distinct nominative and objective forms, the English lexicon contains vocabulary items like the ones in (36).

(36) \[[D, Pers:1, Num:s] I / [TP ___ [T[Past: ±] …] \]
\[[D, Pers:1, Num:s] me \elsewhere\]

If we wanted to translate Parrott’s approach into the model proposed by Adger (2006), we could posit that the lexical entry for weak I has a \[utense:+\] feature. It is somewhat less clear what the lexical entry for weak me should be (since the elsewhere principle does not apply in Combinatorial Variability), but we would want any uninterpretable features in the lexical entry to capture the generalisation that me appears in the specifier of agreement-related functional heads that do not have an interpretable tense feature.

4 The interpretive function of ‘uninterpretable’ features

When we consider the nature of the uninterpretable features required for a feature-based account of English pronoun case, we can see that they encode either semantic relations (between arguments of a predicate) or structural relations in the syntax (between phrases or phrases and heads). So, ‘uninterpretable’ features and the morphological forms associated with them actually serve to interpret abstract semantic and syntactic structure at the PF(= Phonetic Form)-interface (cf. Sigurðsson 2006). The difference between ‘interpretable’ and ‘uninterpretable’ features lies not in their interpretability, but in their locus: ‘interpretable’ features are part of Narrow Syntax, whereas ‘uninterpretable’ features are confined to PF (cf. Sigurðsson in press).
References


Chomsky, Noam. 2001. Beyond explanatory adequacy. Ms, MIT.


