Post-syntactic mechanisms of pronominal case variation in Germanic

Citation

DOI

Permanent link

Post-syntactic mechanisms of pronominal case variation in Germanic

Jeffrey Keith Parrott

Department of Modern Languages and Literatures, Tomas Bata University in Zlín, Zlín, Czechia

CONTACT: *Jeffrey Keith Parrott parrott@utb.cz, Department of Modern Languages and Literatures, Tomas Bata University in Zlín, Štefánikova 5670, 76001 Zlín, Czechia*

ABSTRACT

Pronoun-case-only (pro-case) languages in Germanic have been under-investigated, despite exhibiting theoretically significant patterns of inter- and intraindividual case variation. The goals of this paper are thus twofold. First, it establishes a pro-case typological distinction between Oblique-Form Default (OFD) as observed in Danish and English, and Subject-Form Default (SFD), as observed in Swedish. In OFD varieties, SFs (Subject Forms) occur as subjects of finite clauses, while OFs (Oblique Forms) occur elsewhere, including as predicatives and in heterogenous other syntactic environments. OFs also appear inside coordinate and other complex DPs, where sociolinguistic variation is attested. In SFD varieties, variation inside complex DPs is unattested; SFs occur as predicatives, but variable OFs express non-deictic semantics. My second aim is to demonstrate that these patterns of variation result from distinct post-syntactic mechanisms for OFD and SFD pro-case. Following Emonds, I argue that OFD pronouns are not the phonological realization of case features; instead, pro-case forms are morphosyntactic-contextual allo-morphs. SFD pro-case, in contrast, is the phonological realization of dependent Oblique and Nominative features assigned by post-syntactic rules.

KEYWORDS: Distributed Morphology, Danish, English, morphosyntax, pronouns, Swedish, typology

1. Introduction

The morphosyntax of pronoun-case-only (hereafter, 'pro-case') languages in the Germanic family has been under investigated, perhaps because of a perception that 'poor' as opposed to 'rich' case morphology is of little theoretical significance, as noted by **Sigurdsson** (**2006**, 31-32). However, there are documented patterns of cross-linguistic/dialectal and sociolinguistic pro-case variation[1] that have clear relevance for morphosyntactic theory.

For a starting point, consider the most (infamous phenomenon of English prescriptive grammar, namely variable pronoun-case mismatches in coordinate determiner phrases (CoDPs). Mismatched Oblique Form (OF = me, her/him, us, them) pronouns inside finite-clause subject CoDPs (1) and mismatched Subject Form (SF = I, she/he, we, they) pronouns inside prepositional object CoDPs are robustly attested in all English varieties:

[1]In previous work, I and others have used the more accurate technical terms 'inter-individual' and 'intraindividual' variation to refer to, respectively, observable linguistic differences between speakers or signers, regardless of their perceived language variety, and linguistic differences observed within the usage or intuitions of a single individual, regardless of whether this variation has social significance.

(1) a *There was another period where me and other people...were making a mistake.*[2]
    b **There was another period where me was making a mistake.*
    c *We get a lot of talky scenes between he and various characters, most notably Batman.*
    d **We get a lot of talky scenes between they.*

Furthermore, it has been observed (e.g., by **Emonds 1986; Schutze 2001**) that the phenomenon of case variation in CoDPs co-occurs with apparently default OFs in several heterogenous syntactic environments, including when pronouns occur as so-called predicative complements.[3]

Although theoretical accounts of variation in CoDPs have been advanced, these pro-case phenomena have been treated as a peculiarity of English.

(2) *Is it just me/*I?*

However, the distribution of pronominal case in Danish is nearly identical to English, attesting mismatched OFs and SFs in CoDPs (3a-b) as well as default OFs in the same range of diagnostic structures, including predicatives (4):

(3) a *mig og min lillebror   skal tage buss-en*   (Odder)[4]
      me and my little.brother must take bus-the
    b ... *fem år   imellem   min bror og jeg*   (BySoc)
      five years in.between my brother and I

(4) *Er det bare mig, eller er der   80.000 grader udenfor i dag??!!*
    is it just me or   is there 80,000 degrees outside today

Moreover, not every Germanic pro-case language looks like Danish and English. In Swedish, a closely related language, pro-case variation inside CoDPs is unattested and SFs are the default as predicatives (**Sigurdsson 2006**). Recent research by **Sigurdsson** (**2013**) and colleagues (**Sigurdsson** and **van de Weijer 2021**) has revealed a previously undocumented pattern of variable predicative OFs expressing a non-deictic "role" semantics in Swedish.

[2]*Noam Chomsky, during a lecture in 2011. Many of the examples in this paper were attested in various spoken or written media and documented by the author. For reasons of space, the source of attestations is not given here but is available upon request. Other examples are cited from the literature or composed by the author (and confirmed by native speakers as necessary).*

[3]*The term 'predicative complement', shortened to 'predicative', is employed here for comparability with other papers in this issue. It is used descriptively, referring to what are better known more specifically as 'predicate nominals', and does not presuppose any particular analysis. Perhaps for this reason, **Schutze** (**2001**, 235-238) deploys the theoretically neutral term "postcopular" for DPs that occur following the copula be. Predicative complements should not be confused with secondary predication structures, sometimes called subject (He arrived drunk) or object (They painted the door green) complements.*

[4]*Danish examples from the University of Copenhagen's LANCHART corpus of sociolinguistic interviews (**Gregersen 2009**) are labeled with a code for the corpus file in which they are attested. The code indicates the place where the interviews were conducted ('BySoc' is Copenhagen).*

It is remarkable, then, that pro-case typology and variation in Germanic has had almost no impact whatsoever on Case theory at large. These facts are conspicuous in their absence from comprehensive works on morphological case and syntactic Case (e.g., **Lasnik 2008; Malchukov** and **Spencer 2009; Baker 2015**), despite the prima facie empirical problems such phenomena pose for all extant theories of case.

Therefore, this paper is structured around twin goals. First, it establishes a typological distinction between OF Default (OFD) pro-case as observed in Danish and English, among other varieties, and Subject-Form Default (SFD) pro-case, as observed in Swedish and other varieties. After an overview of case typology and variation for the Germanic language family in **Section 2**, the distinction between OFD and SFD pro-case is distributionally diagnosed in **Sections 3** and **4** respectively, with a focus on Danish, English, and Swedish. In OFD pro-case varieties, the SF is specified for pronouns that are the "whole" subject of an overt finite clause, while OFs occur elsewhere, including as predicatives. OFs also appear by default inside coordinate DPs and other complex DPs, where salient sociolinguistic variation is attested, with SFs displaying exceptional item-specific linear-ordering asymmetries (**Parrott 2006, 2007, 2009**b). In SFD varieties, complex DPs are not a factor in procase distribution, and variable mismatches are unattested. SFs occur as predicatives, with variable predicative OFs attested in Swedish (**Sigurdsson 2006, 2013; SigurSsson** and **van de Weijer 2021**).

The article's second aim, advanced in Section 5, is to demonstrate that these patterns of inter- and intra-individual variation result from two distinct postsyntactic mechanisms for OFD and SFD pro-case, as implemented in a Minimalist, Distributed Morphology (see, e.g., **Chomsky 2013; Embick 2015**) theoretical framework. Following **Emonds** (**1986**), I argue that OFD pronouns do not phonologically realize any syntactic or morphological C/case features whatsoever. Rather, pro-case forms are allomorphs that are conditioned by morphosyntactic context. SF Vocabulary are inserted when a pronoun is merged to finite T, and OF Vocabulary are inserted in all other environments; exceptional SF variation is due to late-learned, non-competing Supplementary Vocabulary Items that insert SFs in linearly specified contexts. SFD pro-case, in contrast, phonologically realizes Oblique (Obl) and Nominative (Nom) features assigned by post-syntactic rules (following **McFadden 2004**). An Obl feature, phonologically realized by OF Vocabulary, is assigned to case-dependent verbal direct and indirect object DPs (following **Marantz 2000**), as well as to DP objects of selectional heads; a Nom feature (phonologically realized by SF Vocabulary) is assigned by default to DPs in all other environments.

Section 6 concludes by summarizing some advantages of the proposed analysis and pointing toward avenues for future research on pro-case in Germanic and beyond.

2. Case typology and variation in Germanic

Uncontroversially, the Germanic language family can be classified into two groups according to case morphology. In rich-case varieties such as German or Icelandic, case is morphologically distinguished on various elements within the DP-NP structure, such as articles, demonstratives, wh-words, quantifiers, adjectives, nouns, or pronouns. In other words, rich-case languages have case agreement or case concord within DP. Pro-case varieties have distinct case forms only on a subset of personal pronouns, as in English, Danish, and Swedish.

This paper proposes a further division of Germanic pro-case languages into two subtypes, OFD vs. SFD. Danish and English are classified as OFD on the basis of diagnostic syntactic distributional and intra-individual variation patterns enumerated in **Section 3**. Prominent among these are the occurrence of

predicative OFs and sociolinguistically variable pro-case mismatches in CoDPs. As discussed in **Section 4**, Swedish is classified as SFD because it lacks any such pro-case variation internal to CoDPs and has predicative SFs; Swedish also attests a newly discovered variable pattern involving semantically interpreted predicative OFs (**Sigurdsson** and **van de Weijer 2021**).

The distribution of rich case contrasts sharply with OFD pro-case. Nom case occurs on predicative DPs in German, Icelandic, and Faroese (**Sigurdsson 2006; Thráinsson 2007**, 156-158; **Haider 2010**, 264-267), whereas in OFD Danish and English, predicative pronouns are virtually always OFs. 'Case matching', where a predicative or clefted DP, a dislocated DP, or a DP isolated by ellipsis has the same case morphology as it would have in an implicitly related syntactic structure - for example, answers to questions - is attested in rich-case languages (e.g., **Schütze 2001; Haider 2010**, 264-267). In contemporary OFD languages, pronouns in dislocation and isolation are invariably OFs, regardless of their discourse relationship to implicit syntactic structures. Finally, the distinctive OFD intra-individual case variation in CoDPs is unattested in rich-case languages (**Thráinsson 2007**, 157, 184-185; **Parrott 2009a**).

At first glance, some properties of SFD pro-case resemble rich case in Germanic. Both types have Nom SF predicative DPs, lack variable mismatches inside CoDPs, and attest case matching (**Sigurdsson 2006, 2013; Thráinsson 2007**, 157; 184-185). However, SFD differs from rich case in other properties.

The newly discovered phenomenon of variable predicative OFs with role semantics (**Sigurdsson** and **van de Weijer 2021**) has no known homolog in Germanic, although there are possible analogs in Slavic. Furthermore, pronominal comparative objects are OFs in OFD Danish and English, regardless of elided structure, with sociolinguistic variation involving SFs; in Swedish, while SFs seem to be preferred as comparative objects, with sociolinguistic variation involving OFs. These patterns in pro-case languages are unlike rich-case languages, where DP comparative objects are Nom or have semantically disambiguating matched case with an implicit position in elided syntactic structure.

3. OFD pro-case: Danish and English

The (non)default status of some variant morphological form is firstly an empirical question about its distribution, and secondly a theoretical question of the implementing mechanism. An essential property of default forms, emphasized by **Schutze** (**2001**), is that their environments of occurrence do not form a coherent 'natural' class. In other words, default allomorphs have a heterogeneous distribution, as opposed to the limited contexts where highly specified allomorphs occur. Applying this diagnostic, OFs are evidently the default pronominal case in both Danish and English.

The Danish personal pronouns are given in (5). In contrast to English, there are distinct case forms in both numbers of the second person. Like English, Danish lacks case distinctions in the third-person singular (3SG) neuter-gender pronouns den/det 'it, that'; otherwise there are no case syncretisms, unlike English, which has case syncretism in both numbers of the second person.[5,6]

---

[5]The pronominal possessive forms of English and Danish are excluded from consideration here for reasons of scope. **Parrott** (**2020**) provides a detailed morphosyntactic analysis of English possession that is compatible with the present approach.

[6]English who/whom variation is also excluded here on the grounds of its distinct distribution. For discussion, see **Quirk et al.** (**1985**, 464-467), **Lasnik** and **Sobin** (**2000**), and **Huddleston** and **Pullum** (**2002**, 464-467)

(5) Danish pro-case

	Subject Form	Oblique Form
1SG	*jeg*	*mig*
2SG	*du* [formal *De*]	*dig* [formal *Dem*]
3SG	*hun* [F] *han* [M]	*hende* [F] *ham* [M]
1PL	*vi*	*os*
2PL	*I*	*jer*
3PL	*de*	*dem*

The syntactic distribution of SF/OF case forms in both Danish and English can be described as follows: a personal pronoun is the SF if it is the "whole" (**Huddleston** and **Pullum 2002**, 463) - that is, not coordinated or otherwise DP-internal - subject of an overt finite clause; otherwise, the pronoun is the OF. The distributionally 'marked' SF has the most specific environment of occurrence ('the whole finite-clause subject'), while the 'unmarked' OF need not be specified at all since it is the elsewhere form, occurring by default in heterogeneous syntactic contexts. Accordingly, OF pro-case occurs invariably on pronominal direct and indirect objects (6a-b), not because these pronouns are Accusative (Acc) or Dative, but because they are non-subjects and therefore OFs by default.

(6) a *Student-en   har set   mig/*jeg.*
      student-the has seen me/*I
    b *Professor-en   gav   hende/*hun en bog.*
      professor-the gave her/*she   a book

Invariable default OFs also occur as pronominal subjects of non-finite clauses, whether with at/to or bare infinitives (i.e., small or ECM clauses) in Danish and English, as well as pronominal subjects of verbs in the -ing form (i.e., gerunds or present participles) in English (these are exemplified in **Section 5**). The heterogeneity of the default OF's distribution is evident, and additional syntactic environments are detailed below.

What I will call 'exceptional' SFs (ESFs) occur outside of this basic distribution - in other words, SF pronouns that are attested DP-internally and when the pronoun is not the subject of an overt finite clause. ESFs have characteristic properties in Danish and English: they are relatively infrequent, sensitive to linear order, item specific, intra-individually variable, and associated with 'social meanings' particular to the language community.

The following subsections enumerate further syntactic environments that function as diagnostics for default OFs - and in some but not all instances ESFs - in Danish and English, according to the distributional description given above. We begin with pronouns that are not subjects of an overt finite clause, proceed to consider DP-internal pronouns, and finally examine pronouns that are the objects of comparatives.

3.1. Isolated pronouns

Pronouns left in isolation from an overt finite clause are invariably OFs, regardless of their associated syntactic structural position. For instance, whether an isolated pronoun is the answer to a subject (7a) or object (7b) wh-question, it will be the OF (7c). Case matching, as observed in rich-case languages, is not possible in Danish or English (7d). When the elided syntactic structure is ambiguous, the isolated pronoun is always the OF, never the SF (7d-f):

(7) a *Hvem har drillet hund-en?*
    who   has teased dog-the
   c *Mig/dig/ham/hende/os/jer/dem!*
    me/you.SG.OF/him/her/us
    you.PL.OF/them
   e *Hvis ikke os/*vi, hvem så?*
    if   not us/*we who so
    'If not us, then who?'

   b *Hvem har hund-en bidt?*
    who   has dog-the bitten
   d **Jeg/du/han/hun/vi/I/de!*
    *I/you.SG.SF/he/she/we/
    you.PL.SF/they
   f *Også mig/*jeg!*
    also me/*I
    'Me/*I too!'

In English, pronouns in apposition to subjects (8a) are invariably OFs,[7] as well as pronouns that are left- or right-dislocated from a subject position (8bc):

(8) a *A professor, namely her/*she, will organize the conference.*
   b *Me/*I, I like that book.*
   c *He's a good student, him/*he.*

Pronouns must be overt finite clause subjects, not just implicit ones, to be pronounced as SFs. This is strong evidence that OFs are the morphological default pro-case in Danish and English.

3.2. Predicative complement pronouns

Much discussion has focused on the predicative complement and whether this is truly a default case environment (e.g., **Schutze 2001; Sigurdsson 2006; Sigurdsson** and **van de Weijer 2021**). Predicative pronouns occur as OFs, invariantly in Danish and with limited variation in English (see below). This is unsurprising, since predicative DPs, whatever their correct analysis, are not in the subject position of overt finite clauses. That predicative OFs are indeed the default in Danish and English is supported by the absence of case matching. Whether it is the answer to a subject (9a) or object (9b) wh-question, the predicative pronoun is the OF (9c), not the SF (9d). In conditional clauses, a predicative pronoun is the OF even though it is implicitly related to the subject of the consequent clause (9e-f):

---

[7]*While some linguists have given (8a) as a context for ESFs (e.g., Emonds 1986), these are unacceptable for me.*

(9) a *Hvem har drillet hund-en?*   b *Hvem har hund-en bidt?*
   who has teased dog-the   who has dog-the bitten

   c *Det var mig/dig/ham/hende/os/jer/dem.*
   it was me/you.SG.OF/him/her/us/you.PL.OF/them

   d **Det var jeg/du/han/hun/vi/I/de.*
   *it was I/you.SG.SF/he/she/we/you.PL.SF/they

   e *Hvis jeg var dig/*du*   f *Hvis du var mig/*jeg*
   if I was you.SG.OF/you.SG.SF   if you were me/*I

SFs are unprescribed and impossible as predicative pronouns in Danish (**Allan, Holmes**, and **Lundskaer-Nielsen 1995; Bjerre 2006; Hansen 1988; Hansen** and **Heltoft 2011**).[8] In English, however, there is some moribund intra-individual variation, which is certainly due to a declining normative prescription for predicative SFs. English predicative SFs display exceptional properties. Predicative ESFs appear variably in certain linearly fixed, item-specific expressions (10a,e) - their acceptability degrades sharply with any permutations, such as tense (10b), intervening adverbs (10c), negation (10f), question inversion (10g), or other SFs (10d,h).

(10) a *It is I!*   b **It was I!*
     c **It is just I!*   d **It is she/he/we/they!*
     e *This is she/he.*   f **This is not/isn't she.*
     g **Is this she?*   h **This is I/we/they!*

English predicative ESFs are so marked distributionally, sociolinguistically, and in terms of frequency that some contemporary prescriptivists have given up the battle for their usage and conceded to default predicative OFs (e.g., **O'Conner 1996; Casagrande 2008**).

In the cleft construction, where a predicative DP has a relative clause complement, pro-case behaves the same. Clefted pronouns are OFs by default in both English (11) and Danish (12), regardless of whether the pronoun is associated with a subject position in the relative clause:

(11) a *Samantha Cameron reveals it was her who left daughter Nancy, 8, behind in pub.*
     b *Cheryl Cole Reveals It Was HER Who Chased Boyfriend Tre Holloway*

(12) *Det er dig,   der laver en masse larm!*
     it is you.SG.OF who makes a mass noise
     'It is you who is making tons of noise!'

As with predicatives, clefted ESFs are unprescribed and impossible in Danish, but variably attested in English due to the weak prescription for predicative SFs:

[8]*In my personal experience as an adult non-native learner of Danish, predicative SFs were never recommended by any teachers or course materials.*

(13) a *If anything, it was she who groomed you*
    b *It Was She Who I Wronged Most Of All*

ESFs in clefts are sociolinguistically significant as well; this leads to so-called 'hypercorrection' mismatches as seen in (13b), where the predicative ESF in the cleft is syntactically associated with the object position in the relative clause.

3.3. Coordinate and other determiner phrases

This subsection looks at Danish and English pronouns that are internal to a complex DP structure. We start with the most salient such structure, coordinate DPs (CoDPs), and then go on to survey other types of complex DPs where default OFs, and in some instances ESFs, are attested.

3.3.1. CoDPs

Intra-individual pro-case variation inside of CoDPs has been well documented in multiple varieties, and seems to be a universal phenomenon of English worldwide (e.g., **Angermeyer** and **Singler 2003; Grano 2006; Quinn 2005**). OFs appear inside CoDPs, regardless of what syntactic position the CoDP itself appears in. Naturally, OFs occur in object and other non-subject CoDPs. The attestations of interest, however, are pro-case 'mismatches' with OFs in CoDP subjects of finite clauses, as illustrated in (14).[9] OFs in CoDP are not item specific or sensitive to linear order - any OF pronoun can occur in either conjunct.[10]

(14) a *Me and her party!*
    b *My sister and her don't have any mutual friends.*
    c *Him and Gordon Brown are communicating about that.*
    d *Our friends from Denver, Colorado and us went for dinner.*

SFs are variably attested in CoDPs, but they display exceptional properties of item specificity, linear sensitivity, and highly salient sociolinguistic implicature.[11] 1_{SG} ESFs virtually always occur in the second conjunct (or, linearly right-adjacent to the coordinate head) and the two 3_{SG} ESFs virtually always occur in the first conjunct (or, linearly left-adjacent to the coordinate head).[12] Again, although ESFs occur in finite-subject CoDPs, they are well known to be mismatched in object CoDPs.[13]

[9](14a-c) are reproduced from **Parrott (2009**b).

[10]For cross-linguistic evidence that case assignment inside CoDPs is always symmetrical, see **Weisser (2020)**, who partially adopts the present treatment of apparent ESF counterexamples in Danish and English (**Parrott 2009b**; cf. **Sobin 1997**).

[11]It is difficult to overstate the sociolinguistic significance of pro-case variation in CoDPs for speakers of English. This phenomenon is mentioned prominently in every normative guide (e. g., **O'Conner 1996; Garner 1998; Casagrande 2008**, among countless others).

[12]Plural SFs in CoDPs are rare and apparently unacceptable as such. Consider the expressions us vs them, Us and Them (the title of a Pink Floyd song, as well as at least two films), and Them and Us (the title of a videogame and at least one book); all of these are impossible with any SF pronoun (e.g., *we and they, etc.).

[13](15—17) are reproduced from **Parrott (2007, 2009a)**.

(15) a *And if our troops do lose, it's Night of the Living Dead for you and I.*
　　b **It's Night of the Living Dead for I and you.*
　　c *I sensed she and I as the same person, in that moment.*
　　d **I sensed I and she as the same person.*

Strikingly, 'mixed' CoDPs containing both an ESF and an OF are commonly attested - in whichever syntactic environment they occur, one of the pronouns will be pro-case mismatched. ESFs in mixed CoDPs conform to the aforementioned item-specific linear-ordering asymmetries.

(16) a *Him and I were working at the time.*
　　b **I and him were working at the time.*

(17) a *This is starting to make him and I both feel really bad.*
　　b **This is starting to make I and him both feel really bad.*

Aspects of this variation have been documented by linguists utilizing a variety of methods. For instance, **Angermeyer** and **Singler** (**2003**) used sociolinguistic observation of everyday situations coupled with experimental language games to investigate 1st person singular (1_{SG}) pronouns in object **CoDPs; Quinn** (**2005**) conducted comprehensive questionnaire studies of coordinated pronouns in **New Zealand**; and **Parrott** (**2007**) collected dozens of mismatch attestations in CoDPs from speech and writing.

It is much less widely discussed (but see mentions in **Allan, Holmes**, and **Lundskaer-Nielsen 1995; Thráinsson 2007; Jorgensen 2000; Hansen** and **Heltoft 2011; Sigurdsson 2006**) that a nearly identical pattern of sociolinguistically significant (see e.g., the prescriptivist **Bjerre 2006**, among others) pro-case variation is equally well attested in Danish CoDPs. The following attestations of pro-case mismatches in subject (18a,c)[14] and object (18b,d) CoDPs are taken from spoken (BySoc) and written (KorpusDK) corpora (**Hilton and Parrott 2009**).

(18) a *Hende og hendes bror   har selvfølgelig gået i de samme*
　　　 her   and her   brother have of.course   gone to the same
　　　 institutioner.　　　　　　　　　　　　　　　　　(BySoc)
　　　 institutions
　　b *Der er to år   imellem   min bror   og jeg.*　　(BySoc)
　　　 there are two years in.between my brother and I
　　c *Øh jamen ham og jeg vi kørte hjem i går*　　　(BySoc)
　　　 uh well   him and I we drove home yesterday
　　d *En terapi med hende og jeg ville   have været [...]*　(KorpusDK)
　　　 a therapy with her   and I would have been ...

Findings from the LANCHART corpus of Danish sociolinguistic interviews (which includes the BySoc corpus, see **Gregersen 2009**) reveal that pro-case mismatches are attested in as many as 40% of CoDPs with pronouns (**Hilton** and **Parrott 2009; Parrott 2010**).

---

[14](18c) is a subject left-dislocation.

In these data, OFs occur in either conjunct of CoDPs, while ESFs exhibit the same pronoun-specific linear ordering asymmetries seen in English - all the attested ESF mismatches are 1_{SG} pronouns in the second conjunct (i.e., *og jeg* 'and I').

3.3.2. Modified and demonstrative personal pronouns

Coordination is the most famed DP-internal environment where OF pronouns are the default pro-case, but there are other kinds of complex DPs inside of which pronouns can occur. When a pronoun is pre-modified by a determiner or adjective, only the default OF is possible in English and Danish:

(19) a *Oh, that is just classic him/*he!*
　　b *... den nye mig/*jeg tænkte, at   det kunne være en god*
　　　　the new me/*I   thought that it   could be   a   good
　　　　udfordring ...
　　　　challenge

The same is true when a pronoun is part of a compound NP that is the complement of D:

(20) a *... we should take a "me"/*I day (or at least some "me"/*I time) every so*
　　　　often
　　b *... besluttede jeg mig for at tage en "mig-dag"/*jeg-dag ...*
　　　　decided   I   me for to take a   me-day/*I-day
　　　　'I decided to take a "me-day".'

When SFs occur in English NP compounds, they indicate semantic gender only and are not referential. Therefore, we might take these ESFs to be the phonologically realizations of N rather than D.

(21) a *She-Hulk (*Her-Hulk)*
　　b *He-Man (*Him-Man)*

In English, 1_{PL} demonstrative personal pronouns are OF by default (22a), but variable demonstrative ESFs generate sociolinguistic implicatures, and thus mismatches are attested (22b):

(22) a *Us whites are no less compelled to adhere to similar guidelines.*
　　b *Cut we liberals a bit of slack.*

In some English varieties, 3_{PL} OF demonstrative personal pronouns are attested in variation with the plural distal demonstrative, but ESFs are impossible.

(23) *Them/those/*they people is living in Mad Max times.*

3_{SG} demonstrative personal pronouns are impossible in all English varieties but are often attested in Danish.

(24) *Han har fat   i   den lange ende, ham/*han Søren Malling.*
       he   has a hold on the long end   him/*he   Søren Malling
       'He has gotten the upper hand, that Søren Malling.'

The generalization here is that whenever a pronoun does not comprise the entire DP by itself, instead being embedded inside a complex DP structure with modifiers or NPs, OF is the default pro-case; ESFs are only possible with English 1pl demonstratives, which has sociolinguistic significance.

3.3.3. Pronoun-headed relative clauses

This generalization holds of another type of complex DP, pronoun-headed relative clauses (PHRs). In English, PHRs have a distinctly anachronistic or literary feeling and are extremely scarce in spoken usage. When PHRs are used, almost always in writing or planned speech, the pronoun is an ESF:

(25) a *He who must not be named*
     b *She who laughs last laughs best.*

In Danish, however, PHRs are quotidian and occur with OFs by default:

(26) a *Ham der har skidt   i   din   tuba er her . . .*
        him who has shit.PTCP in your tuba is here
     b *Dem, som ved   noget,   siger ikke noget.*
        them who know something say not anything
     c *Dem, der siger noget,   ved   ikke noget.*
        them who say   something know not anything

PHRs with variable ESFs are possible in Danish, and hypercorrection mismatches are thus prescribed against (as in this example from **Hansen 1988**).

(27) *Blandt de,   der hjalp famili-en, var især   naboer-ne.*
        among they who helped family-the were especially neighbors-the

This subsection has shown that default OFs, and sometimes ESFs, occur DP internally in Danish and English. We now turn to our final syntactic environmental diagnostic of OFD pro-case.

3.4. Pronominal comparative objects

Pronominal objects of comparatives such as end/than, som/as, or ligesom/like are OFs by default in Danish and English. With clausal ellipsis, as in (28b), the comparative object is ambiguous between an interpretation where it is the subject (I like the film more than he likes the film) or the object (I like the film more than I like him) of the elided clause.

(28) a *Jeg er større end ham.*
      I   am bigger than him
    b *Jeg kan lide film-en mere end ham.*
      I   can like film-the more than him
      'I like the film more than him.'

There is mild prescription for ESFs in both languages, justified in terms of elided structure (indicated within brackets).

(29) a *Jeg er større end*   *han*   [*er stor*].
      I   am bigger than   he   [is big]
    b *Jeg kan lide film-en mere end han* [*kan lide film-en*].
      I   can like film-the more than he   [can like film-the]
      'I like the film more than he [likes the film].'

In both languages, it is possible to elide only the VP, leaving an overt auxiliary verb in the finite T position (30). OFs are impossible, but SFs are not exceptional in this environment because they are the whole subjects of a clause whose finiteness is overtly realized. Note that an overt auxiliary in T disambiguates comparative ellipsis (30b), so that only the subject and not the object interpretation is available for the SF pronoun.

(30) a *Jeg er større end han/*ham er.*
      I   am bigger than he/*him   is
    b *Jeg kan lide film-en mere end han/*ham gør.*
      I   can like film-the more than he /*him does
      'I like the film more than he does.'

What pronominal comparative objects have in common with isolated or predicative pronouns is that none of them are finite-clause subjects. Danish and English do not exhibit case matching, so a pronoun that is the subject of an elided or implicit finite clause is nonetheless in a default OF pro-case environment.

4. SFD pro-case: Swedish

Swedish exhibits significantly different patterns of pro-case distribution and variation than Danish and English. Swedish pro-case forms are similar to those of Danish, although Swedish has variable syncretisms (indicated here and below by '%') in the 3_{PL}.[15]

---

[15]**Sigurdsson (2013)** *also reports a marginal variable syncretism whereby 3_{PL} SFs occur in object positions.*

(31) Swedish pro-case

	Subject Form	Oblique Form
1SG	*jag*	*mig*
2SG	*du*	*dig*
3SG	*hon* [F] *han* [M]	*henne* [F] *honom* [M]
1PL	*vi*	*oss*
2PL	*ni*	*er*
3PL	*de % dem % dom*	*dem % dom*

The distribution of Swedish pro-case forms can be informally described as follows: all pronominal objects - verbal and prepositional -are OFs; pronominal subjects of non-finite clauses are also OFs. Pronouns in other syntactic environments - namely finite-clause subjects and predicatives - are SFs by default. Coordinate or other DPs are not a factor in SFD Swedish because pronouns inside complex DPs have the pro-case form corresponding to that DP's syntactic position, without the variable mismatches attested in OFD Danish and English.[16] Case matching with elided or implicit syntactic environments is possible in Swedish. In this basic distributional pattern, Swedish is like the rich-case Germanic languages, which have Nom finite subjects and predicatives and Oblique (i.e., non-Nom) objects and non-finite subjects, and which lack the OFD-type DP-internal case mismatches. As outlined below, however, SFD Swedish attests patterns of pro-case variation that distinguish it from both rich-case and OFD varieties.

4.1. Predicative complement pronouns

Swedish predicative pronouns are most frequently SFs, case matching notwithstanding (**SigurSsson 2006, 2013; Parrott 2013**).

(32) a *Det är bara jag/du/hon/han/vi/ni/de.*
     it   is just I/you.SG.SF/he/she/we/you.PL.SF/they

In the related cleft construction, mismatched SFs are variably attested but case matching seems to be preferred (**Sigurdsson 2013**).

(33) a. *Det var hon/*henne som valde honom.*
     it   was she/*her   that chose him
     'It was her who chose him.'

    b *Det är dig % du   som de   ska   respektera.*
     it   is you.SG.OF/you.SG.SF that they should respect
     'It is you who they should respect.'

---

[16]See **Weisser** (**2020**) for arguments that CoDPs are 'transparent' to case-feature assignment crosslinguistically, and that the apparent empirical counterexamples of variable pro-case mismatch and linear asymmetries in Danish and English are explained by their differing morphosyntactic mechanisms of case, along the lines of the present approach (**Parrott 2009b**; cf. **Sobin 1997**).

As documented in recent work by **Sigurdsson** (**2013**) and colleagues (**Sigurdsson** and **van de Weijer 2021**), Swedish predicative OFs are variably attested and their acceptance is increasing in apparent time. These predicative OFs are not exceptional analogues of Danish and English ESFs, nor are they a default pro-case form. Swedish predicative OFs do not generate sociolinguistic implicatures, and in fact have distinct semantics, occurring when "the predicate expresses role semantics (the predicate taking on the role or psyche of the subject, rather than its plain deictic identity)" (**Sigurdsson** and **van de Weijer 2021, 2021**; examples (34a-b) modified from **Sigurdsson 2013**):

(34) a *Det är inte lätt at vara mig.*
        it   is not easy to be   me
     b *I   mitt nästa liv vill   jag vara dig.*
        in my next life want I   be   you.SG.OF
        'In my next life, I want to be you.'

Sigurdsson and **van de Weijer** (**2021**) suggest that Swedish non-deictic role predicates include "a silent som-like head (som = 'as, like'), closely related to comparative som", which assigns a case feature to its DP object. Role-predicate pronouns would then be OFs like other pronominal objects, with SFs the default pro-case elsewhere, in this instance deictic predicates without silent som. There is empirical support for such an approach in rich-case Slavic languages. Czech predicates have Nom case by default (35a) but DPs with role semantics can occur with variable Instrumental (Instr) (35b):

(35) a *Toto dítě na fotografi-i   jsem já/*mnou.*
        this   child on photograph-ACC am I.NOM/*me.INSTR
        'This child in the photograph is me.'
     b *Chtě-l   bych   být   ty   %tebou.*
        want-PTCP would.1SG be.INF you.SG.NOM %you.SG.INSTR
        'I would like to be you.'

Anticipating the analysis in **Section 5.2**, suppose that Czech, like Swedish, has a silent som head that, when present, assigns an Obl case feature to predicative DPs and licenses their distinct semantic interpretation. In Polish, role semantics are not expressed with morphological case on predicative DPs. Instead, it is the overt copula być 'be' that assigns Instr case to predicative DPs (36a), although there is some intra-individual variation with Nom as the default. When the copular v head is not present, the predicative DP occurs with invariable default Nom case, as in (36b), modified from **Swan** (**2003**).

(36) a *Ona jest gwiazd-ą film-ow-ą   %gwiazd-a film-ow-a.*
        she is   star-INSTR film-ADJ-INSTR %star-NOM film-ADJ-NOM
        'She is a movie star.'
     b *To gwiazd-a film-ow-a   /*gwiazd-ą film-ow-ą*
        it star-NOM film-ADJ-NOM /*star-INSTR film-ADJ-INSTR
        'It's a movie star!'

4.2. CoDPs

Unlike OFD Danish and English but like rich-case languages, Swedish does not attest variable pro-case mismatches in CoDPs (**Sigurdsson 2006, 2013; Thráinsson 2007; Parrott 2009b, 2013**). The following CoDP pro-case mismatches (translated from Danish attestations) were presented to mostly older consultants during fieldwork in Torsby, Sweden.[17] Consultants unambiguously rejected these sentences and did not express sociolinguistic attitudes toward them.

(37) a *Björn och mig ska prata om   det.
       Björn and me will talk   about that
    b *Mig och Björn hade rum   vid sidan av varandra.
       me   and Björn had rooms by side of each.other
    c *Det är två år   mellan Björn och jag.
       there are two years between Björn and I
    d *Honom och jag körde hem   igår.
       him   and I   drove home yesterday

It must be noted that the difference in default pro-case does not, by itself, explain the absence of variation inside CoDPs in SFD Swedish. If CoDP were a parametrically determined syntactic environment for default case, as claimed by **Johannessen** (**1998**), **Schütze** (**2001**), and others, then we would predict default SFs to occur inside of verbal and prepositional object CoDPs in Swedish, contrary to fact (37c).*4.3. Pronominal comparative objects*

When a pronoun is the object of a comparative, SFs are prescribed but there is "extensive" (**Sigurdsson 2013**) socially salient inter- and intra-speaker case variation with the OF; for example, (38) is adapted from **Svenska Spraknamnden** (**2005**):

(38) I dessa länder   är Penélope Cruz lika stor som hon/henne.
     in these countries is P.C.   as big as she/her
     'In these countries,   Penélope Cruz is as big as her.'

Sigurdsson and **van de Weijer** (**2021**, fn. 12) report that although "[Nom] is more widely accepted than [Obl] in all cases", acceptance of OFs in this context is also increasing in apparent time, which can be connected to variable predicative OFs with their silent som analysis sketched above. (39a-b) are adapted from **Sigurdsson** (**2013**).

(39) a Jag är   äldre än   hon%henne.
     I   am older than she%her
    b En karl som du%dig   kan inte göra så.
     a guy like you.SG.SF%you.SG.OF can not do   so

Comparative objects have a different distribution in rich-case languages. German, for instance, has invariable Nom case on adjectival comparative objects (40a); Acc as opposed to Nom case on comparative-object DPs disambiguates objects (40c) from subjects (40b) of the elided clause.

---

[17]I am grateful to the organizers of the 2009 6th NORMS Dialect Workshop for this opportunity.

There is no evidence of such disambiguation with pro-case in Swedish comparatives.

(40) a *Ich   bin größer als   er/*ihn/*ihm.*
        I.NOM am bigger than he.NOM/*me.ACC/*me.DAT
     b *Ich   magden   Film mehr als   er.*
        I.NOM like the.ACC film more than he.NOM
        'I like the film more than he does.'
     c *Ich   mag den   Film mehr als   ihn.*
        I.NOM like the.ACC film more than him.ACC
        'I like the film more than I like him.'

The previous sections have described the typology of pro-case in OFD and SFD Germanic. The next section proceeds toward a theoretical account.

5. Distinct post-syntactic mechanisms of pro-case

The remainder of this paper outlines an analysis of Germanic pro-case that is situated within a Minimalist, Distributed Morphology theoretical architecture (for recent overviews, see e.g., **Chomsky 2013; Embick 2015**). The core proposal, developed by **Parrott** (**2006, 2007, 2009a, 2009b, 2020**), is that distinct morphosyntactic mechanisms are responsible for pro-case in Germanic: OFD is contextual allomorphy while SFD is case-feature assignment.

For consistency, I will follow **McFadden** (**2004**) in treating case-feature assignment as a post-syntactic mechanism in pro- and rich-case languages alike. However, this is not necessary for the analysis, which is consistent with case features being assigned in the syntax (e.g., **Baker 2015**). OFD pro-case does not phonologically realize any case features, whatever the derivational status of case assignment. The present account moreover supports the view that morphological case is not the phonological realization of syntactic argument-licensing features (**Marantz 2000; McFadden 2004; Sigurdsson 2006; Bobaljik 2008; Wood 2015**).

5.1. OFD pro-case as contextual allomorphy

Adapting an early insight of Emonds's (1986), I have analyzed Danish and English OFD as contextual allomorphy, crucially not involving case features at all. Schematically, OFD pro-case Vocabulary inserts the SF when a pronoun terminal $D_{[\varphi]}$[18] is the 'whole subject of a finite clause'; the OF is an elsewhere item.

(41) a $D_{[\varphi]} \Leftrightarrow$ /SF/ /__ = 'whole subject of overt finite clause'
     b $D_{[\varphi]} \Leftrightarrow$ /OF/ *elsewhere*

This raises three questions, addressed in the following subsections: How is the 'overt subject of a finite clause' defined formally? Why must the pronoun be the 'whole subject'? And how are ESFs treated?

[18]*I assume that personal pronouns are decomposed into morphosyntactic substructure along the lines suggested for possessive forms in* **Parrott** (**2020**). *Because of the issues raised, further explication of that structure would take us too far beyond the scope of this paper.*

The relevant notion of 'finiteness' must be formalized to include present-(42a) and past-tense (42b) subjectives, where SFs occur categorically in English.[19]

Following **Chomsky** (**2013**), C shares finiteness features [±real, ±past] with T upon merge; these C/T finiteness features are projected to the label of CP/TP.

(43) $[_{C[\pm real, \pm past]} \; C_{[\pm real, \pm past]} \; [_{T[\pm real, \pm past]} \; T_{[\pm real, \pm past]} \; [_\alpha \; (E)A\ldots]]]$

A T head that lacks the C features [±past, ±real] is realized as *to* in English and is not 'finite' for the purposes of OFD contextual allomorphy. Therefore, pronouns that are the subject of a *to* clause are OFs by default (44a), just like pronouns in gerund (44b) or small clauses (44c), which lack any C-valued T head whatsoever.

(44) a *The professor expected him/*he to drink tea.*
b *Me/*I drinking so much beer worried the professor.*[20]
c *Me/*I drink too much beer? Never!*

There are constructions where a pronoun is categorically realized as the SF although it is not linearly left adjacent to the position of finite T at PF:

(45) a *Who did she/*her see on campus?*
b *Ham har jeg/*mig set på universitet-et i dag.* [Danish]
  him have I/*me seen at university-the today

(46) a *I/* me barely made it on time.*
b *. . . at hun/*hende ikke gør det.*
   that she/*her not does that

Following **Embick** (**2010**), allomorphy can only be conditioned by contextual features within a phase cycle (see also **Bonet** and **Harbour 2012; Marantz 2013**). Everything internal to the TP complement of C, including an (External) Argument raised to spec of TP, will be cyclically transferred to the PF interface in a phase. Thus, T (valued by C) and a pronoun terminal will be present together in the same phase cycle at morphology.

(47) At PF = $[_{T[\pm past, \pm real]} \; D_{[\varphi]} \; [_{T[\pm past, \pm real]} \; T_{[\pm past, \pm real]} \; [_{vP} <D_{[\varphi]}>\ldots]]]$

---

[19]*The case behavior of pronouns inside CoDP subjunctive subjects like (42) is the same as in any other context:*

(i)The professor requested that [him and me/he and I/*he and me/him and I/*I and him] drink tea. Notice that this is exactly as predicted by the approach taken here; since pro-case in English and Danish is not the phonological realization of case features, coordinated pronouns are not sensitive to DPexternal syntactic structure.

[20]*Of course, the possessive form is also possible with gerunds:*

> *(i) My drinking so much beer worried the professor.*

I assume that gerunds are structurally ambiguous, with the OF inserted by default in small-clause verbal gerunds, and the possessive inserted as the modifier of nominal gerund.

Accordingly, the context for SF insertion is specified as a D[φ] terminal merged to a phrase labeled T[±past, ±real]. For clarity, I illustrate this with a tree in (48) but note that the label of the phrase a containing D[φ] and T [±past, ±real] need not be specified in the pronominal Vocabulary.

(48) a $D_{[φ]} \Leftrightarrow$ /SF/ / [___ [$_{T[±real, ±past]}$ ...]] =

    b $D_{[φ]} \Leftrightarrow$ /OF/ *elsewhere*
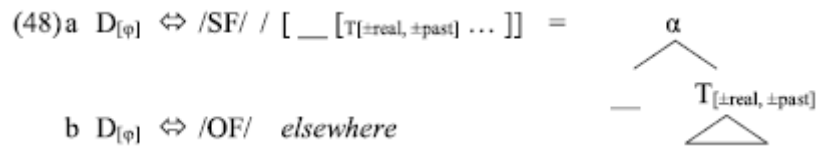
The proposed OFD SF Vocabulary Item can be seen as instantiating a kind of phrasal clitic, analogous to the English and Danish phrasal clitic possessive -s (**Parrott 2020**). However, it is unlike phonological clitics in Romance or English (49a), since an adjunct may intervene between the pronoun and the finite verb (49b).

(49) a *The professor expects (*only/just)* 'ya [2SG]   *to drink tea.*
                                     'im [3SG.MASC]
                                     'er [3SG.FEM]
                                     'em [3PL]
    b *I (only/just) drink beer.*

A pronoun terminal merged to finite TP at PF will always be in the right context for insertion of the SF allomorph, even with T-to-C movement or intervening adjuncts.

(50) a T-to-C   = [$_{T[±past, ±real]}$ $D_{[φ]}$ [$_{T[±past, ±real]}$ <$T_{[±past, ±real]}$> [$_{vP}$ ...]]]
    b Adjunct = [$_{T[±past, ±real]}$ $D_{[φ]}$ [$_{T[±past, ±real]}$ [$_α$ Adjunct] [$_{T[±past, ±real]}$ $T_{[±past, ±real]}$ [$_{vP}$ ...]]]]

If T has been Internally Merged (i.e., moved) to C, it leaves a copy and the phrasal label T$_{[±past, ±real]}$ does not change. T-to-C raising does not move the pronoun, so it will remain in the correct context for insertion of the SF allomorph at PF (64a). Nor does the phrasal label T[±past> ±real] change as a result of adjunction. Thus, if some intervening element is adjoined, the pronoun terminal again remains in the correct 'TP-merged' context for insertion of the SF allomorph at PF (65b).
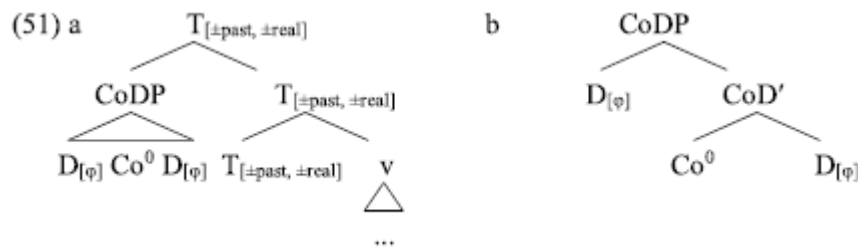
The necessary overtness of the finite clause for SF context follows straightforwardly from the DM architecture, since Vocabulary Insertion happens at the PF interface. Whatever process is responsible for ellipsis renders elided syntactic structure invisible for contextual allomorphy. Case matching in rich-case and SFD languages shows that features can be assigned to DPs from elided or implicit syntactic structure, but that is irrelevant for OFD pro-case because it simply does not phonologically realize case features.

5.1.2. SF context and complex DPs

The second question is why default OFs appear inside of coordinate and other complex DPs. In other words, why must an SF pronoun comprise the 'whole' subject in Danish and English? The allomorphic
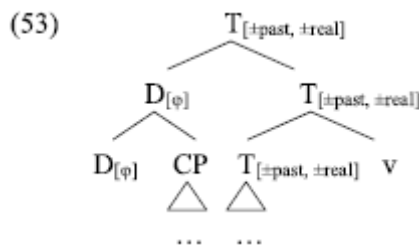
analysis of OF-default pro-case explains this prominent fact. Any pronoun terminal that is inside a complex DP at PF will not receive an SF Vocabulary Item, since the context for this allomorph is specified as merged to finite TP (47).

On standard treatments (**Munn 1994; Johannessen 1998**), a pronoun inside of a CoDP is merged either to the coordinate head or the first coordinate phrase (51b). It is crucially not merged to finite TP and so an SF cannot be inserted (52b).

(51) a $T_{[\pm past, \pm real]}$

CoDP $\quad T_{[\pm past, \pm real]}$

$D_{[\varphi]}$ Co^0 $D_{[\varphi]}$ $T_{[\pm past, \pm real]}$ $\quad v$

...

b CoDP

$D_{[\varphi]}$ $\quad$ CoD'

Co^0 $\quad D_{[\varphi]}$

The same is evidently true of pronouns inside other kinds of complex DPs. The D[φ] terminals that are targeted for Vocabulary Insertion are not merged to TP but to a little n head (52) or a CP relative clause (53). For this reason, pronouns internal to DPs do not receive SF Vocabulary in OFD languages.

(52) a *the new me* = [$_{DP}$ the [$_n$ new [$_n$ n $D_{[\varphi]}$]]]
b *us linguists* = [$_{DP}$ $D_{[\varphi]}$ [$_n$ linguists]]

(53) $T_{[\pm past, \pm real]}$

$D_{[\varphi]}$ $\quad T_{[\pm past, \pm real]}$

$D_{[\varphi]}$ $\quad$ CP $\quad T_{[\pm past, \pm real]}$ $\quad v$

... ...

Under the allomorphy analysis of OFD, then, the curious typological correlation between predicative OFs and OFs inside CoDPs receives a unified explanation.

5.1.3. ESFs as supplemental vocabulary

The final question is how to treat ESFs in OFD pro-case languages, particularly as attested in CoDPs. I suggest that individuals may supplement their vocabulary with late-learned items whose context for insertion includes reference to linear order. In Danish and English, an extremely frequent such Supplementary Vocabulary Item yields the SF of 1SG pronouns under right adjacency (indicated by '*') with the coordinate head.

(54) D[1s] $\quad\Leftrightarrow\quad$ /ai/ $\quad/\quad$ Co^0 * __

D[1s] $\quad\Leftrightarrow\quad$ /ai/ $\quad/\quad$ [__ [T[±real, ±past] ...]]
D[1s] $\quad\Leftrightarrow\quad$ /mi/ $\quad\quad$ elsewhere

Because Supplementary Vocabulary like (54) refer to linear order, their insertion must occur after linearization (e.g., **Embick 2007**), overriding derivationally earlier insertion of default OF Vocabulary. Therefore, Supplementary Vocabulary do not compete for insertion with the other allomorphs, placing this among proposed DM-theoretic mechanisms of intra-individual variation in morphosyntax (for more, see **Parrott 2009c**; **Nevins** and **Parrott 2010**). Optional usage of Supplemental Vocabulary Items, which can be consciously controlled to varying degrees, generates sociolinguistic implicatures, conspicuously around coordinated pronouns in English and Danish.

An individual with (54) but no other Supplemental Items in their Vocabulary will attest variable ESFs for the 1sg pronoun in the second conjunct of CoDPs (i.e., DP and I, *I and DP), while other pronouns in CoDPs will be OFs (e.g., her and DP, DP and her). This individual may also attest mixed pro-case CoDPs, but only with a 1_{SG} ESF in the second conjunct (e.g., her and I, *I and her). Mixed pro-case CoDPs with a 3_{SG} ESF in the first conjunct and a 1_{SG} OF in the second conjunct are virtually[21] unattested (e.g., *she and me). Since it is theoretically possible for an individual to have Supplementary Vocabulary for ESFs in 3_{SG} but not 1_{SG}, the reason for this implicational hierarchy ('and I' < 's/he and') is sociolinguistic rather than mechanistic. A person who is sufficiently motivated by normative prescriptions to learn Supplementary Vocabulary for 3_{SG} pronouns will not have failed to learn the one for 1_{SG} (54).[22]

Supplementary Vocabulary provide a coherent DM-theoretic mechanism for not only ESFs in CoDPs but also for predicative ESFs and the other syntactic environments identified in **Section 3**.

5.2. SFD pro-case as feature assignment

SFD pro-case is the result of post-syntactic feature assignment rules. Adapting **McFadden** (**2004**, 225-227) for concreteness, post-syntactic rules assign an Oblique case feature [obl] to DPs, including pronouns $D_{[\varphi]}$.[23] Feature assignment to DP, rather than allomorphy of the pronominal terminal as in OFD pro-case, means that any pronouns $D_{[\varphi]}$ inside a coordinate or other complex DP are uniformly assigned the same case feature that was assigned to the entire DP (see also **Weisser 2020**). This difference in the morphosyntactic mechanism of pro-case explains why DPs are not a locus of variation in either SFD or rich-case Germanic.

Two different kinds of case assignment rules are necessary to capture SFD pro-case patterns. First, there must be a 'structural case' rule that assigns [obl] to a DP when there is another DP in the specifier of little v within a phase (55a). Second, there must be a generalized 'lexical/inherent-case' rule that assigns [obl] to $DP_{[\varphi]}$ when $D_{[\varphi]}$ is the complement of any selectional categorical head x (55b).[24]

[21]See **Quinn (2005)** for quantitative data from a questionnaire survey.

[22]The analysis predicts, inter alia, that children acquiring OFD pro-case languages should start with OFs in their predicates and CoDPs, with ESFs attested only later, especially after the start of formal education. Insofar as this has been studied, it seems to be true (**Parrott 2009b**).

[23]One technical issue is whether it is possible to have 'reverse allomorphy'. In other words, instead of feature assignment, could an SFD language have Vocabulary that insert OFs in the relevant morpho-syntactic contexts, with SFs as the default? There is no empirical evidence of such a case system, which raises the question of why not.

[24]The head is specified as selectional in order to rule out the coordinate head Co, which does not seem to function as a case-assigning head in any language to my knowledge. A reviewer points out that **Johannessen (1998)** in fact allows parametrically case-assigning coordinate heads; however, this possibility strikes me as an argument against Johannessen's system rather than an argument for their existence.

(55) a DP → DP$_{[obl]}$ / Phase [$_{vP}$ DP [$_{vP}$ v . . . [$_{DP}$ __ . . .]]]
b DP → DP$_{[obl]}$ / [$_{xP}$ . . . x __]

A dependent-case rule like (55a) is needed to account for the fact that OFs occur as direct and indirect objects, but also as subjects of non-finite clauses (56) . The same holds for rich-case languages (**Marantz 2000; Baker 2015**).

(56) *Hon såg mig/*jag komma in.*
  she saw me/*I come in

(57) a *mit mir*   b *ohne mich*   c *helft mir*   d *liebe mich*   [German]
  with me.DAT   without me.ACC   help me.DAT   love me.ACC

(58) a *med mig*   b *uden/utan mig*   c *hjælp/hjälp mig*   d *elsk/älsk mig* [Danish/
  with me   without me   help   me   love   me   Swedish]

A generalized lexical-case rule like (55b) is needed to account for OF objects of prepositions, which do not follow from (55a). Nevertheless, SFD does not have true lexical case, since different verbs and prepositions cannot assign different cases (57), unlike in rich-case languages (58). Thus (55b) assigns an [obl] case feature to the DP complement of any selectional head.

It would be possible to add another case assignment rule to (55) which assigns a feature [Nom] to any DP not in the syntactic specified environments - in other words, an elsewhere rule for default Nom case. However, it is more economical to simply let SFs be the elsewhere Vocabulary for pronouns without [obl] in SFD pro-case languages.[25]

(59) a D$_{[φ, obl]}$ ⇔ /OF/
b D$_{[φ]}$ ⇔ /SF/

Predicative pronouns in SFD pro-case languages will be SFs by default because DPs in predicate position do not receive dependent [obl] or [obl] from a head, and thus are not phonologically realized with OFs. To account for Swedish variable OF role predicates, as discussed in Section 4 above, I follow **Sigurdsson and van de Weijer** (**2021**) in assuming that a phonologically null functional head, silent som, assigns [obl] to its object, the predicative DP.

5.3. Pro-case and comparative objects

The convergence on OF comparative objects in both SFD and OFD languages is a coincidence, involving different aspects of their mechanisms of pro-case. In SFD languages, the case assignment rules treat comparative objects as DP complements of heads, essentially prepositions.[26]

[25]*It's unclear whether this would work in rich-case languages.*

[26]*That comparatives can be treated as prepositions is suggested by the English variation between different to/from/than (Peter Svenonius, personal communication).*

Like all prepositional object DPs, pronominal comparative objects are assigned an [obl] feature and are phonologically realized as OFs. For OFD pro-case languages, comparative objects are simply non-subjects and thus default OFs. ESF comparative objects in both types of pro-case languages are the result of supplementary Vocabulary Items.

6. Conclusions and future research

The DM analysis proposed in this paper is an improvement over previous treatments. A post-syntactic approach to Germanic pro-case provides a unified explanation for the typological connection between OFD pro-case and the attestation of sociolinguistic variation inside of complex DPs, without resorting to construction-specific parameters for predicative complement case and CoDPs (**Johannessen 1998; Schütze 2001**) or 'extragrammatical' devices such as feature-checking 'viruses' (**Sobin 1994, 1997**).

The typological approach taken here raises stimulating issues around the history of Germanic pro-case. Novel work by **Emonds** and **Faarlund** (**2014**) argues that modern English is in fact a North Germanic language - that is, West Germanic Old English was replaced by Norse during the Viking settlement of northern and eastern Britain. On this view, contact with Norse spoken by Danes could be responsible for the change from rich case to OFD pro-case in Middle to Early Modern English (contact with Danish could similarly account for the OFD varieties of Norwegian). Of course, contact alone does not answer the analogous question of why Danish and Swedish are not both OF or SF default. At least one Swedish variety spoken in Finland appears to have switched from Danish-like OFD to SFD (**Jorgensen 2012**). The opposite change occurred on the Danish island of Bornholm, where Swedish-like SFD switched to OFD (**Pedersen 2009; Parrott 2013**).

Going beyond Germanic, there is an analogous typological split in the Slavic family between rich-case (Czech, Slovakian, Polish, Slovenian, Bosnian, Croatian, Serbian, Ukrainian, and Russian) and pro-case (Bulgarian and Macedonian) languages (**Comrie and Corbett 2002**). Similarly to the situation with Germanic, rich case in Slavic has been intensively studied for its perceived theoretical relevance (e.g., **Caha 2009; Bailyn 2012; Pesetsky 2013**) while very little is known about the behavior of pro-case in Bulgarian and Macedonian, to say nothing of its relevance for case theory. Initial inquires (**Parrott 2019**) indicate that Bulgarian is SFD like Swedish, with predicative SFs and no pro-case variation in CoDPs. Future research will seek to confirm this case-typological classification, as well as to determine whether Bulgarian and Macedonian also attest the variable predicative OFs with non-deictic role semantics found in Swedish (Sigurdsson to appear).

References

Allan, Robert, Philip Holmes, and Tom Lundsksr-Nielsen. 1995. Danish: A Comprehensive Grammar. New York: Routledge.

Angermeyer, Philipp S., and 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. doi:**10.1017/S0954394503152027**.

Bailyn, John Frederick. 2012. The Syntax of Russian. Cambridge: Cambridge University Press.

Baker, Mark. 2015. Case: Its Prinicples and Parameters. Cambridge: Cambridge University Press.

Bjerre, Malene. 2006. Fjern fejlene: Korrekt dansk [Remove your errors: Correct Danish]. Arhus: Forlaget Ajour.

Bobaljik, Jonathan David. 2008. "Where's Phi? Agreement as a Post-syntactic Operation." In Phi Theory: Phi-features across Modules and Interfaces, edited by Daniel Harbour, David Adger, and Susana Bejar, 295-328. Oxford: Oxford University Press.

Bonet, Eulalia, and Daniel Harbour. 2012. "Contextual Allomorphy." In The Morphology and Phonology of Exponence, edited by Jochen Trommer, 195-235. Oxford: Oxford University Press.

Caha, Pavel. 2009. "The Nanosyntax of Case." PhD diss., University of Tromso.

Casagrande, June. 2008. Mortal Syntax: 101 Language Choices that Will Get You Clobbered by the Grammar Snobs - Even if You're Right. New York: Penguin Books.

Chomsky, Noam. 2013. "Problems of Projection." Lingua 130: 33-49. doi:10.1016/j. lingua.2012.12.003.

Comrie, Bernard, and Greville G. Corbett, eds. 2002. The Slavonic Languages. London: Routledge.

Embick, David. 2007. "Linearization and Local Dislocation: Derivational Mechanics and Interactions." Linguistic Analysis 33: 303-336.

Embick, David. 2010. Localism versus Globalism in Morphology and Phonology. Cambridge, Mass.: MIT Press.

Embick, David. 2015. The Morpheme: A Theoretical Introduction. Berlin: De Gruyter Mouton.

Emonds, Joseph. 1986. "Grammatically Deviant Prestige Constructions." In A Festschrift for Sol Saporta, edited by Michael Brame, Heles Contreras, and Fredrick J. Newmeyer, 93-129. Seattle: Noit Amrofer.

Emonds, Joseph, and Jan Terje Faarlund. 2014. English: The Language of the Vikings. Olomouc: Palacký University.

Garner, Brian A. 1998. A Dictionary of Modern American Usage. New York: Oxford University Press.

Grano, Thomas. 2006. "Me and her" meets "he and I": Case, person, and linear ordering in English coordinated pronouns. Undergraduate honors thesis, Stanford University.

Gregersen, Frans. 2009. "The Data and Design of the LANCHART Study." Acta Linguistica Hafniensia 41 (1): 4-37. doi:10.1080/03740460903364003.

Haider, Hubert. 2010. The Syntax of German. Cambridge: Cambridge University Press.

Hansen, Erik. 1988. Rigtigt dansk [Correct Danish]. K0benhavn: Hans Reitzel.

Hansen, Erik, and Lars Heltoft. 2011. Grammatik over det Danske Sprog [Grammar of the Danish Language]. Odense: Syddansk Universitetsforlag.

Hilton, Nanna Haug, and Jeffrey K. Parrott. 2009. "Pronominal Case-form Variation in Coordination: An Initial Comparison of Danish and Norwegian Using Sociolinguistic Interview Corpora." Paper presented at the 5th International Conference on Language Variation in Europe (ICLaVE 5), University of Copenhagen, Denmark.

Huddleston, Rodney, and Geoffrey K. Pullum. 2002. The Cambridge Grammar of the English Language. Cambridge: Cambridge University Press.

Johannessen, Janne Bondi. 1998. Coordination. New York: Oxford University Press.

Jorgensen, Henrik. 2000. Studien zur Morphologie und Syntax der festlandskandina-vischen Personalpronomina [Studies on the Morphology and Syntax of Mainland Scandinavian Personal Pronouns]. Arhus: Aarhus University Press.

Jorgensen, Henrik. 2012. "Incongruent Pronominal Case in the Swedish Dialect of Vastra Nyland (Finland)." Nordic Journal of Linguistics 35 (3): 251-268. doi:10.1017/S0332586513000073.

Lasnik, Howard. 2008. "On the Development of Case Theory: Triumphs and Challenges." In Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud, edited by Robert Freidin, Carlos P. Otero, and Maria Luisa Zubizarreta, 17-41. Cambridge, Mass.: MIT Press.

Lasnik, Howard, and Nicholas Sobin. 2000. "The who/whom Puzzle: On the Preservation of an Archaic Feature." Natural Language and Linguistic Theory 18 (2): 343-371. doi:10.1023/A:1006322600501.

Malchukov, Andrej, and Andrew Spencer, eds. 2009. The Oxford Handbook of Case. Oxford: Oxford University Press.

Marantz, Alec. 2000. "Case and Licensing." In Arguments and Case: Explaining Burzio's Generalization, edited by Eric Reuland, 11-30. Amsterdam: John Benjamins.

Marantz, Alec. 2013. "Locality Domains for Contextual Allomorphy across the Interfaces." In Distributed Morphology Today: Morphemes for Morris Halle, edited by Ora Matushansky and Alec Marantz, 95-115. Cambridge, Mass.: MIT Press.

McFadden, Thomas. 2004. "The Position of Morphological Case in the Derivation: A Study on the Syntax-Morphology Interface." PhD diss., University of Pennsylvania.

Munn, Alan. 1994. "Topics in the Syntax and Semantics of Coordinate Structures." PhD diss., University of Maryland.

Nevins, Andrew, and Jeffrey K. Parrott. 2010. "Variable Rules Meet Impoverishment Theory: Patterns of Agreement Leveling in English Varieties." Lingua 120 (5): 1135-1159. doi:**10.1016/j.lingua.2008.05.008**.

O'Conner, Patricia T. 1996. Woe Is I: The Grammarphobe's Guide to Better English in Plain English. New York: Putnam.

Parrott, Jeffrey K. 2006. "Beyond You and I: Distributed Morphological Mechanisms of Pronoun-case Variation." In University of Pennsylvania Working Papers in Linguistics, Volume 12.2: Papers from NWAV 34, edited by Michael L. Friesner and Maya Ravindranath, 173-187. Philadelphia, Pa.: Penn Graduate Linguistics Society.

Parrott, Jeffrey K. 2007. "Distributed Morphological Mechanisms of Labovian Variation in Morphosyntax." PhD diss., Georgetown University.

Parrott, Jeffrey K. 2009a. "Case Variation in Coordination: Danish vs. Faroese." Nordlyd 36 (2): 165-185. doi:**10.7557/12.231**

Parrott, Jeffrey K. 2009b. "Danish Vestigial Case and the Acquisition of Vocabulary in Distributed Morphology." Biolinguistics 3: 270-304.

Parrott, Jeffrey K. 2009c. "A Minimalist, Distributed Morphology Approach to Intra-Individual Variation: Expletives and Agreement in an Insular English Variety." Linguistic Analysis 35: 197-254.

Parrott, Jeffrey K. 2010. "Toward a Quantitative Socio-syntactic Analysis of Danish Case Variation in Coordination." Paper presented at the 18th Sociolinguistic Symposium (SS18), University of Southampton, UK.

Parrott, Jeffrey Keith. 2013. "Fieldwork Report on Case Variation in Northern Sweden and Bornholm." Paper presented at the 25th Scandinavian Conference of Linguistics (25-SCL), Reykjavik, Iceland, May 13, 2013.

Parrott, Jeffrey Keith. 2019. "Pronominal-case Typology and Variation in Bulgarian: A Pilot Study." Paper presented at Constructions of Identity 10: Cross-linguistic Challenges in Theoretical Linguistics, Babes-Bolyai University, Cluj-Napoca, Romania.

Parrott, Jeffrey Keith. 2020. "English Possessive Determiner Phrases and Coordination." Linguistica Brunensia 68 (2): 45-64. doi:10.5817/LB2020-2-4.

Pedersen, Karen Margrethe. 2009. "Bornholmsk dialektsyntaks [Bornholm dialect syntax]." In I mund og bog: 25 artikler om sprog tilegnet Inge Lise Pedersen pa 70-arsdagen d. 5. juni 2009, edited by Henrik Hovmark, 249-262. Copenhagen: Museum Tusculanum.

Pesetsky, David. 2013. Russian Case Morphology and the Syntactic Categories. Cambridge, Mass.: MIT Press.

Quinn, Heidi. 2005. The Distribution of Pronoun Case Forms in English. Amsterdam: John Benjamins.

Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. A Comprehensive Grammar of the English Language. Harlow: Longman.

Schütze, Carson T. 2001. "On the Nature of Default Case." Syntax 4 (3): 205-238. doi:10.1111/1467-9612.00044.

Sigurdsson, Halldór Ármann. 2006. "The Nom/Acc Alternation in Germanic." In Comparative Studies in Germanic Syntax, edited by Jutta M. Hartmann and László Molnárfi, 13-50. Amsterdam: John Benjamins.

Sigurdsson, Halldór Ármann. 2013. "Swedish Case Marking." Paper presented at the 25th Scandinavian Conference of Linguistics (25-SCL), Reykjavik, Iceland, May 13, 2013.

Sigurdsson, Halldór Ármann, and Joost van de Weijer. 2021. "Swedish Predicative Oblique Case: Default or Not?" Acta Linguistica Hafniensia 53 (2): 191-206.

Sobin, Nicholas. 1994. "An Acceptable Ungrammatical Construction." In The Reality of Linguistic Rules, edited by Susan D. Lima, Roberta L. Corrigan, and Gregory K. Iverson, 51-66. Amsterdam: John Benjamins.

Sobin, Nicholas. 1997. "Agreement, Default Rules, and Grammatical Viruses." Linguistic Inquiry 28: 318-343.

Svenska Spráknámnden. 2005. Sprakriktighetsboken. Stockholm: Norstedts.

Swan, Oscar E. 2003. "Polish Grammar in a Nutshell." Ms. University of Pittsburgh.

Thráinsson, Hoskuldur. 2007. The Syntax of Icelandic. Cambridge: Cambridge University Press.

Weisser, Philipp. 2020. "On the Symmetry of Case in Conjunction." Syntax 23 (1): 42-77. doi:**10.1111/synt.12188**.

Wood, Jim. 2015. Icelandic Morphosyntax and Argument Structure. Cham: Springer.