Dependent case and anti-identity in Yimas*

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1 Introduction

This paper examines the case and agreement system of Yimas (Lower Sepik; Papua New Guinea) and situates the properties of this system within a broader discussion of morphological case. In Yimas, morphological case distinctions determine the form of a series of preverbal agreement clitics. Moreover, because these clitics are largely optional, it can be shown that the case patterns that surface are controlled by the total number of clitics present——thus, computed internal to the clitics. I argue that the distributions of case on the Yimas clitics are exactly as predicted under a dependent theory of case assignment (e.g. Yip et al., 1987; Marantz, 1991; Bittner & Hale, 1996; Baker, 2015; Levin & Preminger, 2015). However, while dependent case is typically assumed to appear on nominals based on their structural configuration, the Yimas facts necessitate an extension to this theory: in Yimas, dependent case appears on doubled clitics, and is thus determined jointly by structural configuration and clitic context.

This point of variation provides a unique lens into the fundamental underpinnings of dependent case. In particular, it reveals that dependent case should be subsumed under a broader phenomenon of dissimilation (cf. Baker, 2015). Following Richards (2010) and Nevins (2012), I take the featural dissimilation of otherwise indistinguishable morphosyntactic objects as a response to a general anti-identity requirement imposed by the grammar. Thus, in this paper I motivate and defend the following properties surrounding the nature of dependent case:

(1) a. Languages are universally subject to an anti-identity requirement, such that the members of some prespecified domain must be featurally non-identical to one another.

b. Dependent case is fundamentally dissimilatory, and exists (alongside many other strategies) to satisfy this anti-identity requirement.

I show that the Yimas clitic system exemplifies both points in (1). The domain in which anti-identity holds is the span of preverbal clitics; dependent case assignment ensures that anti-identity is upheld, because it is calculated over multiple case-receiving elements (here, the clitics). I moreover demonstrate that the Yimas clitic system exhibits a wealth of dissimilatory strategies, which all ensure that the clitics are sufficiently distinct from one another. That dependent case assignment is one such strategy corroborates the current proposal.

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I structure this paper as follows. In §2, I introduce the case and agreement system of Yimas and provide arguments for a clitic doubling analysis of the morphology. In §3, I demonstrate that the distributions of case in Yimas mirror the patterns expected under dependent models of case assignment. I then propose that dependent case is assigned to the Yimas clitics to avoid sequences of multiple caseless clitics, which inevitably arise whenever multiple nominals are doubled. §4 explores this idea in greater detail, and unveils a number of other dissimilatory effects on the clitics corroborating the main proposal; that dependent case is one such effect strongly suggests that dependent case is fundamentally a dissimilatory strategy. §5 concludes.

2 Yimas morphosyntax

2.1 Basics of the agreement system

Yimas is morphologically highly complex, especially in the verbal system. Morpheme order within the verb is rigid and verbs alone can express propositional content, while word order at the sentence level is much freer. In this respect, Yimas behaves like a fairly typical polysynthetic language. Because nominals in Yimas are generally not morphologically marked for case (though they may be marked oblique) and are often dropped in discourse (Foley, 1991, p.93), grammatical relations are generally encoded directly on the verb as agreement morphology. The agreement morphology may, in turn, be organized into the paradigms in (2). (All examples in this paper come from Foley’s (1991) grammar of Yimas.)

(2) Agreement paradigms—human referents:

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<td>3pl</td>
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Each cell encodes number (SG/DL/PL)\(^1\) and person (1/2/3). I have chosen to organize the paradigms by case—specifically, absolutive (ABS), ergative (ERG), and dative (DAT)—loosely following previous work on Yimas by Phillips (1993, 1995) and Wunderlich (2001). This is a non-trivial decision, as there is some disagreement about this in the literature; many other analyses of Yimas (for instance, by Foley (1991), Woolford (2003), and Gluckman (2014)) do not make reference to case at all. As I will argue, however, the exact distributions of the paradigms may only be captured under a case-based account; case-neutral accounts, by contrast, lose important generalizations about these distributions.

In the straightforward constructions, agents of transitive verbs are cross-referenced with ERG morphology, objects and intransitive subjects are cross-referenced with ABS morphology,\(^1\) Yimas also has paucal number, though it is realized differently from the other number specifications. I will mostly set aside paucal number in this paper.
and indirect objects are cross-referenced with DAT morphology. This is shown in (3). When all three paradigms are referenced, as in (3c-d), the morphemes follow a strict ABS-ERG-DAT order, regardless of the position of the DAT morpheme (which is postverbal when 3rd person). This order is never violated.

(3)  
  a. pu-wa-t  
      3PL.ABS-go-PERF  
      ‘They went.’  
  (F195)  
  b. pu-n-tay  
      3PL.ABS-3SG.ERG-see  
      ‘He saw them.’  
  (F195)  
  c. k-mpu-ŋa-tkam-t  
      VII.SG.ABS-3PL.ERG-1SG.DAT-show-PERF  
      ‘They showed me it (the coconut).’  
  (F208)  
  d. k-ka-tkam-r-akn  
      VII.SG.ABS-1SG.ERG-show-PERF-3SG.DAT  
      ‘I showed him it (the coconut).’  
  (F211)  

The examples in (3) also illustrate that the nominals cross-referenced by the agreement morphology need not be overtly expressed; Yimas is ubiquitously pro drop. When the morphemes co-occur with their associated nominals, there is often a sense of topicalization or emphasis (Foley, 1991, p.4).

The ABS paradigm moreover differentiates between several other noun classes for non-human referents, which include animals, objects, and clausal complements. However, if a non-human referent is to be expressed with ERG or DAT case, its class is neutralized and it is encoded the same way as 3rd person human referents. This is illustrated below with arm ‘water,’ which is inherently plural and forms its own class. Its corresponding morphology is ima- when ABS, but takes the 3rd person plural form mpu- when ERG.

(4)  
  a. arm mnta ima-kwalca-kia-k  
      water then WATER.ABS-rise-NR.FUT-IRR  
      ‘Then the water rose.’  
  (F480)  
  b. arm i-mpu-tal-cnkt-t kay  
      water VIII.SG.ABS-3PL.ERG-CAUS-heavy-PERF canoe.VIII  
      ‘The water made the canoe heavy.’  
  (F204)  

As stated above, these are the straightforward constructions, in which the distributions of the three paradigms are as expected. Later, I introduce constructions in which these patterns break down.

2.2 Clitic doubling

Much recent work on agreement systems across languages has reanalyzed apparent instances of agreement as the product of clitic doubling, rather than as exponents of φ-feature valuation via Agree (e.g. Preminger, 2009, 2011; Nevins, 2011; Kramer, 2014). These analyses moreover propose various diagnostics to distinguish between the two. Based on the two properties in (5),

2Throughout this paper, the noun classes are glossed with Roman numerals.
I argue that what are usually called agreement morphemes in Yimas also instantiate doubled clitics. This runs counter to most previous accounts of Yimas, which assume that the morphology is true agreement (Phillips, 1993, 1995; Gluckman, 2014). That these morphemes are doubled clitics will be important for my overall analysis.

(5) **Diagnostics of clitic doubling in Yimas:**

a. The ABS paradigm is morphologically identical to the independent pronouns of the language.

b. The agreement morphology is non-obligatory, and whether it is present or absent is regulated by discourse factors.

First, as (6) shows, the ABS paradigm is nearly identical to the independent pronouns of the language; the identity between ABS clitics and their pronominal counterparts is also attested in a number of Mayan languages, e.g., Chol and Kichean (Coon, 2010, 2013; Preminger, 2011, 2014). This property supports a clitic doubling analysis, because it follows straightforwardly from the assumption that doubled clitics are simply reduced copies of their associates. That the Yimas pronominals are identical to the ABS paradigm in particular (as opposed to the ERG or DAT paradigms) falls out from the present analysis; I will elaborate upon this point in §3. ³

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<tr>
<td><strong>Pronoun</strong></td>
<td>ama</td>
<td>kapa</td>
<td>ipa</td>
<td>mi</td>
<td>kapwa</td>
<td>ipwa</td>
<td>na⁴</td>
<td>impa</td>
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Though I analyze all of the agreement morphemes as clitics, regardless of case, the data I have shown so far is also compatible with a weaker view, namely that only the ABS paradigm is clitic in nature (the rest, true agreement), as proposed by Woolford (2003). However, the non-obligatoriness of the agreement morphemes poses a challenge for this approach. That the agreement morphology in Yimas is generally non-obligatory is unsurprising under a clitic doubling analysis; the optionality of clitic doubling is attested in a variety of languages, such as Greek, Bulgarian, and Amharic (Franks & Rudin, 2005; Anagnostopoulou, 2006; Kramer, 2014).⁵

As shown below, Yimas allows verbs with no clitic doubling (7a), partial clitic doubling (7b), and full clitic doubling (7c). Each example in (7) thus contains two syntactic arguments but differs from the others in the total number of clitics present. Crucially, morphemes drawn from any of the three case paradigms in Yimas may be omitted (especially clear in the no doubling example), suggesting that all of the agreement morphemes—not only ABS—are clitic in nature. Moreover, as I will elaborate upon in §3, whether a clitic surfaces as ABS, ERG, or DAT is determined after clitic doubling takes place, meaning that there is no sense in analyzing ABS morphemes as arising from a different mechanism from the others.

(7) a. numn-mat Kampramanan wapal-cap-mpi

   villager-PL place name climb-CMPL-IRR

   ‘The villagers all climbed Kampramanan.’ (F471)

³The only non-identical form is 2SG: ma- vs. mi. I am not sure why there is this difference, and why it exists only for this form.

⁴Unlike the 1st and 2nd person pronouns, which are independent morphemes, the 3rd person pronouns are bound; they require a deictic suffix -k encoding proximity.

⁵As I will discuss later, clitic doubling in these languages is obligatory under specific circumstances, but we will see later that this is true for Yimas, too.
b. m-n impa-tay-mpi-kwalca-k paympan
   DEM-SG 3DL.ABS-see-SEQ-rise-IRR eagle
   ‘He, the eagle, saw them both and took off.’ (F453)

c. kacmpy payum ya-mpu-yamal-wat
   canoe.VIII.PL man.PL VIII.PL.ABS-3PL.ERG-carve-HAB
   ‘The men usually carve the canoes.’ (F228)

The occurrence (or non-occurrence) of clitic doubling is sensitive to discourse; as Foley (1991, pp.232-234) notes, Yimas clitics typically cross-reference discourse-established information and are thus omitted with new information. Consider the minimal pair in (8):

\[(8)\]

\[a.\]
   [impram pay-cu-mpwi] pia-n-kacapal
   [basket.VII.SG carry-NFN-CMP] COMP.ABS-3SG.ERG-forget
   ‘He forgot to carry the basket’

\[b.\]
   [impram pay-cu-mpwi] na-kacapal
   [basket.VII.SG carry-NFN-CMP] 3SG.ABS-forget
   ‘He forgot to carry the basket’

In (8a), there are two clitics on the verb, cross-referencing both the 3SG external argument and the embedded clause;\(^6\) this is the full clitic doubling pattern. In (8b), however, only the matrix subject is encoded on the verb; this is the partial clitic doubling pattern.\(^7\) These two constructions are used in slightly different contexts, which map to the established vs. new distinction. According to Foley, in (8a) “the intention expressed by the complement has been [previously] stated explicitly” (p.390), whereas this is not necessarily the case for (8b).

The idea that clitic doubling is associated with information structural notions of topichood and givenness is also developed in Kallulli (2000, 2008) and Johns & Kučerová (to appear). I illustrate with Johns & Kučerová’s (to appear) analysis of Inuktutit (Eskimo-Aleut). As (9) shows, certain dialects of Inuktut such as Labrador Inuktut use transitive (subject/object), rather than the intransitive (subject), agreement morphology to cross-reference nominals established from previous discourse. Crucially, this dialect group normally uses intransitive morphology (no longer displaying an ERG-ABS alignment), meaning that transitive morphology is otherwise absent. Johns & Kučerová (to appear) suggest that, while the intransitive agreement in Labrador Inuktut is true agreement, the occurrences of transitive agreement actually instantiate discourse-triggered clitic doubling, explaining why it is used only when referring to an established referent in the discourse.

\[(9)\]

\[Labrador Inuktut:\]

\[a.\]
   John kata-i-\textit{juk} Kajotta-mik
   John drop-AP-INTR.PART.3S cup-MOD.S
   ‘John dropped the cup’

\[b.\]
   amma-lu Kajottak siKumi-mmat,
   also-and cup-ABS.S break-CAUS.3S
   ‘and then when the cup broke,’

---

\(^6\)Yimas possesses two additional doubled clitics that cross-reference embedded clauses: roughly, \textit{pia-} for embedded complements encoding speech reports and \textit{tia-} for embedded complements encoding actions.

\(^7\)Note also that a different paradigm is used to cross-reference the external argument in the two sentences—ERG in (8a) and ABS in (8b); this will be addressed properly in §3.
The idea behind discourse-sensitive clitic doubling is that these clitics functional like pronominals by referring back to some element in the discourse. This appears to be the function of the agreement morphology in Yimas, too, thus supporting a clitic doubling analysis.

To summarize what has been said so far, I take the agreement morphology in Yimas to be the result of clitic doubling, jointly based on the following: (i) the morphological similarity between the ABS paradigm and the pronominal system, and (ii) the fact that the occurrence of clitic doubling is sensitive to discourse and associated with old/established information. As for the mechanisms of clitic doubling in Yimas, I adopt the Big DP analysis of clitic doubling (Torrego, 1988; Uriagereka, 1995; Cecchetto, 2000; Arregi & Nevins, 2012, a.o.)—in particular, I follow a version of the implementation by Arregi & Nevins (2012). Under this view, clitics are D⁰ elements generated within a complex DP, and receive the φ-features of the doubled nominal via Agree, prior to movement out of the DP. This is schematized in (10).

(10)  
\[ \text{DP} \]  
\[ C I \]  
\[ \text{Arg} \]  
\[ D' \]  
\[ D \]  
\[ \text{AGREE} \]

In Yimas, only finite verbs may host clitics. As (11) shows, nominals originating in non-finite embedded clauses may either be cross-referenced (long distance) by matrix clitics or simply not be clitic doubled at all (recall that clitic doubling is non-obligatory in Yimas). The relevant factor contributing to this difference has to do with the position of the nominal patn ‘betelnut,’ which I will return to shortly.

(11)  
a. [na]-mpu-ŋa-tkam-t kpuc-t-wal \[ \text{patn} \] \[ \text{V.SG.ABS-3PL.ERG-1SG.DAT} \] \[ \text{show-PERF} \] \[ \text{chew-NFN-COMP} \] \[ \text{betelnut.V.SG} \]  
‘They showed me [how to chew betelnut].’ (F391)

b. pu-ŋa-tkam-t patn kpuc-t-wal \[ \text{3PL.ABS-1SG.DAT} \] \[ \text{show-PERF} \] \[ \text{betelnut.V.SG} \] \[ \text{chew-NFN-COMP} \]  
‘They showed me [how to chew betelnut].’ (F390)

This finiteness requirement suggests that clitics are targeted by finite heads, such as T⁰ and C⁰; Arregi & Nevins (2012) arrive at the same conclusion for Basque. For concreteness, I will specify here that the locus of cliticization is C⁰; this aligns with the information structural correlates of clitic doubling, plus I will later show that the doubled clitics interact with other CP-level morphemes expressing various forms of modality.

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8 An alternative is the A-movement analysis (Anagnostopoulou, 2003; Harizanov, 2014, a.o.) which takes a doubled clitic to be the head of an A-chain. While this analysis has been successfully implemented elsewhere, doubled clitics in Yimas do not exhibit properties of A-movement; for instance, the doubled clitics do not appear to feed binding relations, as expected under the A-movement analysis. Moreover, as I will show later, multiple doubled clitics may adjoin to the same head, yielding various dissimilatory effects.

9 I assume that Yimas is right-headed. Within the DP, nominal concord is suffixal; I will further show in §4 that tense, aspect, and adverbal morphology is also suffixal. The preverbal position of the clitics, then, is from left adjunction to the verb.
To summarize, in this section I argued that the agreement morphemes in Yimas are optionally doubled clitics; whether clitic doubling occurs is, in turn, determined by information structural properties. I suggested that a clitic in Yimas is an D₀-element originating within a complex DP and receives its associate’s φ-features via Agree (and, as I will discuss below, I take the clitics’ associates to be generated in argument positions). The clitic then undergoes movement out of the complex DP to a finite head, which I take for now to be C₀. That these morphemes are doubled clitics as opposed to exponents of true agreement will be crucial for the analysis of case to developed in this paper.

2.3 Syntactic configuration

Finally, a discussion of the distributions of case requires us to establish the general syntactic structure of the language. While Yimas bears many hallmarks of so-called non-configurational languages, and is taken to be non-configurational by Foley himself, this is problematic for the dependent theory of case assignment advocated for in this paper, which relies on case being assigned on the basis of c-command relationships between nominals. I assume for the purposes of this paper that Yimas is in fact configurational, though this is obscured by its relatively free word order and rampant pro drop.¹⁰ I moreover assume that subjects originate in Spec-vP; indirect objects, causees, and applicativized arguments are base-generated in Spec-AppP (Pylkkänen, 2002), and direct objects are complements to V.

Because the main focus of this paper is Yimas’ clitic system, I take this syntactic structure for granted. However, I briefly sketch out a possible argument in favour of the configurational view. Foley (1991, p.371) shows that word order in Yimas is extremely flexible, permitting various permutations of a construction containing subject, verb, and object. While this is a property typical of non-configurational languages, he nonetheless notes that SOV is the unmarked word order, while other word orders are marked, indicating pragmatic contrast; this is a first indication that the nominal constituents in the language are not hierarchically equal. Interestingly, the word order flexibility interacts with limitations on clitic doubling. I mentioned above that nominals originating in embedded non-finite clauses may be sometimes cross-referenced by clitics adjoined to the matrix clause; as (12) shows, however, whether clitic doubling of such a nominal is possible depends on the position of the nominal:

(12) a. [na]-mpu-ŋa-tkam-t kpuc-t-wal patn [V.SG.ABS]-3PL.ERG-1SG.DAT-show-PERF chew-NFN-COMP betelnut.V.SG

‘They showed me [how to chew betelnut].’  
(F391)

b. [patn] na-mpu-ŋa-tkam-t kpuc-t-wal betelnut.V.SG [V.SG.ABS]-3PL.ERG-1SG.DAT-show-PERF chew-NFN-COMP

‘They showed me [how to chew betelnut].’  
(F391)

c. pu-ŋa-tkam-t patn kpuc-t-wal 3PL.ABS-1SG.DAT-show-PERF betelnut.V.SG chew-NFN-COMP

‘They showed me [how to chew betelnut].’  
(F390)

The clitic doubled constructions in (12a-b) are only possible because the embedded nominal is linearly leftmost or rightmost in the structure; according to Foley, clitic doubling of an embedded nominal is otherwise unavailable (such as in (12c)). I suggest that we may reframe

¹⁰See also Legate (2001, 2002), Bruening (2001), Hamilton (2014), Haugen (to appear), and many others for configurational analyses of various languages previously assumed to be non-configurational.
this as a locality effect. Specifically, if the leftmost or rightmost position of the nominal is due to a scrambling process that makes an embedded nominal syntactically accessible to matrix C\textsuperscript{0}, then the data could be analyzed on par with long-distance agreement phenomena, as discussed by Polinsky & Potsdam (2001) and Branigan & MacKenzie (2002) for Tsez (Nakh-Daghestanian) and Innu-aimûn (Algonquian) respectively.\textsuperscript{11} In these languages, long-distance agreement between a matrix verb and an embedded nominal is possible only if the embedded nominal is interpreted as a topic and has moved to the edge of the clause to a position associated with topichood; its movement to this position makes it accessible for agreement with the matrix verb. In Innu-aimûn, for example, we know that the embedded nominal has undergone A-movement to Spec-CP, because it is able to precede an overt complementizer (underlined):

\begin{enumerate}
\item \textbf{Innu-aimûn:}
\begin{enumerate}
\item \texttt{tsh-uî-tshissenim-itinâu Pûn mâk tshîn tân ishpish tshi-nîtshipet-ütâu} \\
\hspace{1cm} 2-want-know-1/2PL, Paul and you when 2-stopped-2PL \\
\hspace{1cm} ‘I want to know when you and Paul stopped.’
\item \texttt{n-uî-tshissenim-àu kassinu kâuâpiikeshit tshetshî mûpishtâshkuenit} \\
\hspace{1cm} 1-want-know-3 every priest if visited-2/INV \\
\hspace{1cm} ‘I want to know of every priest if they visited you.’ (Branigan & MacKenzie, 2002)
\end{enumerate}
\end{enumerate}

It is possible that apparent cases of long-distance clitic doubling in Yimas are similarly fed by A-movement of the doubled nominal to the periphery of the clause. If this analysis is correct, then Yimas clitics are subject to locality constraints, in that the clitic and its host must be phasemates (cf. Iatridou, 1990; Preminger, 2009); moving an argument to the edge of an embedded clause creates this configuration.

Establishing a general syntactic structure for Yimas sets the stage for the rest of the paper. Below, I show that the surface form of the clitics depends on both morphological rules, calculated postsyntactically, and the syntactic positions of the arguments doubled by these clitics.

\section{Dependent case}

\subsection{Overview}

The dependent theory of case assignment developed by Yip et al. (1987), Marantz (1991) and Bittner & Hale (1996) (and elaborated upon in subsequent work by many others) is motivated by the following observations: (i) the realization of certain cases on a given nominal seems to require the presence of other nominals, and (ii) often (though not always), given two nominals within a domain of case assignment, one is morphologically marked and the other, unmarked.\textsuperscript{12} To capture these points, Marantz (1991) proposes a theory of case in which the realization of a case on a nominal is determined configurationally and on the basis of competition, rather than assigned by functional heads. For Marantz, the distributions of case are determined postsyntactically, but recent reformulations of this system instead assert that case is assigned configura-

\textsuperscript{11}On the surface, the data also looks like clitic climbing, which is permitted in restructuring contexts (e.g. Rizzi, 1982; Wurmbrand, 2001); that is, certain infinitival complements are structurally reduced enough that the matrix and embedded verbs comprise a monoclausal construction. I reject a clitic climbing analysis for the facts in (12), however, given the word order effects.

\textsuperscript{12}The latter point is especially noted in the functional literature, where the primary function of case is thought to be for identifying grammatical function.
tionally in the syntax proper (Baker & Vinokurova, 2010; Preminger, 2011; Baker, 2015; Levin & Preminger, 2015; Poole, 2015, a.o.). I will return to this difference later.

Under the Marantzian view, case is calculated according to the hierarchy given below:

(14) **The case realization disjunctive hierarchy**
   a. lexically governed case (quirky case)
   b. dependent case (ergative, accusative case)
   c. unmarked/default case (realized on any NP otherwise assigned case)

Nominals are in competition to be spelled out with one of the cases above, in the order given. Once a nominal receives case, it leaves the competition and is thus excluded from the rest of the competition. I will set aside lexical case for now, though I will revisit it in §3.5. The notion of case competition is especially important for dependent case, since it is assigned in the presence of *multiple nominals* within a given case assignment domain. The proposals by Yip et al. (1987) and Bittner & Hale (1996) are similar, though their exact implementations are different; for ease of exposition, I focus on Marantz’ theory in this paper.

Dependent case is assigned to a nominal based on its structural (c-command) relationship with another nominal. Languages are parametrized as exhibiting an ergative or accusative alignment, according to the directionality of case assignment—i.e., whether dependent case is assigned to the higher (**ERG**) or lower (**ACC**) of two nominals in a case assignment domain:

(15) **Dependent case assignment:**
   Given two case-requiring DPs within a domain of case assignment,
   a. **Ergative** case is assigned to the higher of the two nominals (the c-commander)
   b. **Accusative** case is assigned to the lower of the two nominals (the c-commandee)

The realization of dependent case on a given nominal thus requires a case competitor in the form of another nominal. In the absence of such a competitor, dependent case is bled; nominals that cannot receive dependent case surface with *unmarked case*, i.e., nominative or absolutive. There are various ways to remove a case competitor; in the Icelandic example in (16), for instance, we see that lexical case on the embedded subject bleeds dependent **ACC** case on the embedded object, causing it to surface as **NOM**:

(16) **Icelandic:**
   
   `eg tel [henni hafa alltaf þótt Olafur leipinlegur]
   I believe [her.DAT to-have always thought Olafur.NOM boring.NOM]
   ‘I believe her to have always thought Olafur boring.’ (Marantz, 1991)

We can also diagnose dependent case from the opposite direction: *adding* a case competitor to the structure enables the realization of dependent case. This is shown for Finnish by Poole (2015), who demonstrates that adjunct nominals and non-adjunct nominals alike may compete for dependent genitive case; the syntactically highest nominal within a case assignment domain receives nominative case, while all other nominals surface with genitive case. Within the dependent case model, this means that genitive case is assigned to a nominal so long as it is c-commanded by another case-requiring nominal. This is illustrated below:

(17) **Finnish:**

---

13Other languages have been argued to exhibit a tripartite system; see Deal (2010).
a. Kekkose-en luote-ttiin [kolmas kerta]
Kekkonen-ILL trust-PASS.PST third.NOM time.NOM
‘Kekkonen was trusted for a third time.’

b. Kekkose-en luote-ttiin [yksi vuosi] [kolmannen kerran]
Kekkonen-ILL trust-PASS.PST [one.NOM year.NOM] [third.GEN time.GEN]
‘Kekkonen was trusted for a year for a third time.’

c. Tarja luotti Kekkose-n [yhden vuoden] [kolmannen kerran]
Tarja.NOM trusted.3SG Kekkonen-ILL [one.GEN year.GEN] [third.GEN time.GEN]
‘Tarja trusted Kekkonen for a year for a third time.’

In (17a), the adjunct ‘third time’ is NOM due to the absence of case competitors. In (17b), the same adjunct is GEN, not NOM; this is due to the presence of the second higher adjunct ‘one year’ (which surfaces with NOM). Finally, in (17c), the active counterpart of (17b), the subject ‘Tarja’ is an additional case competitor for the higher adjunct ‘one year’; as a result, it, too, surfaces with GEN case. Thus, the Finnish data demonstrates that, parallel to the removal of a case competitor bleeding dependent case assignment, adding a case competitor to the structure may feed dependent case assignment.

Though the dependent theory of case has gained much recent traction due to its ability to capture a wide range of cross-linguistic case patterns, a generally unexplored facet of this system concerns why languages make use of a system such that case assignment on a nominal, X, requires the presence of another nominal, Y. As far as I am aware, the only explicit discussion of this comes from Baker (2015), who describes dependent case assignment as a sharpening of the functionalist view that morphological case exists primarily to distinguish between nominals (cf. Comrie, 1978; Haspelmath, 2008). The idea is simple: given two nominals, it is often sufficient to case-mark only one of them to differentiate the two from each other; languages may moreover vary as to which of the two is marked, thus explaining nominative-accusative and ergative-absolutive alignments. Dependent case captures this idea by relating the nominals in terms of c-command.

In what follows, I show that Yimas provides remarkably clear evidence for this view of dependent case. Yimas differs from other languages analyzed under the dependent case model in that morphological case surfaces on the doubled clitics. The optionality of clitic doubling (introduced earlier in §2.2) allows for constructions in which there are fewer clitics on the verb than syntactic arguments in the clause; these constructions reveal that morphological case is computed internal to the clitics, as the case patterns change depending on the total number of clitics present, even when the sentence-level syntax stays constant. That case is assigned to the clitics in order to dissimilate them from one another comes from two (related) additional points. Unlike ERG and DAT, the ABS paradigm is not an assigned case, but is rather the default state of a clitic upon doubling. However, sequences of such caseless clitics never surface (against expectations, given the logic of clitic doubling), because the clitics are assigned case. This will be further discussed in §3.4. Later, in §4, I broaden the empirical landscape to include constructions in which dependent case does not apply over the clitics; in these constructions, the language avoids multiple caseless clitics using other strategies, which, importantly, are attested as dissimilatory repairs across languages. That they apply in place of dependent case assignment strongly suggests that dependent case is itself dissimilatory.
3.2 Ergative case

I begin the discussion of Yimas case assignment with dependent ergative case on external arguments (EAs). As illustrated earlier, and repeated below, subjects of transitive verbs (agents) and subjects of intransitive verbs are normally cross-referenced with ERG and ABS morphology respectively:

\[(18)\]
\[
\begin{align*}
\text{a. pu-wa-t} & \quad 3\text{SG.ABS-go-PERF} \\
& \quad \text{‘They went.’} \\
& \quad (F195)
\end{align*}
\[
\begin{align*}
\text{b. na-mpu-tay} & \quad 3\text{SG.ABS-3PL.ERG-see} \\
& \quad \text{‘They saw him.’} \\
& \quad (F195)
\end{align*}
\]

The examples in (18) suggest an ergative-absolutive alignment. However this is not entirely accurate; clitics cross-referencing transitive subjects are not always ERG, but are sometimes ABS, while clitics cross-referencing intransitive subjects are not always ABS, but may surface instead as ERG. I show that this patterning reveals the dependent nature of ERG, and summarize its distribution as follows:

\[(19)\] Distribution of ERG (descriptive):
ERG is realized on a clitic cross-referencing an external argument iff an ABS clitic is also present. Otherwise, ABS.

First, recall that clitic doubling is a non-obligatory process in Yimas, permitting what we might call partial clitic doubling constructions. In the minimal pair in (20), repeated from §2.2, the presence vs. absence of the ABS clitic cross-referencing the embedded complement determines the realization of the clitic cross-referencing the external argument. Its presence results in ERG on the EA clitic, while its absence causes the EA clitic to be ABS instead. The relevant contrast is highlighted by the boxed morphemes.

\[(20)\]
\[
\begin{align*}
\text{a. [impram pay-cu-mpwi] } & \quad \text{pia-[n]-kacapal} \\
& \quad [\text{basket.VII.SG carry-NFN-COMP}] \text{ COMP.ABS-[3SG.ERG]-forget} \\
& \quad \text{‘He forgot to carry the basket.’} \\
& \quad (F389)
\end{align*}
\[
\begin{align*}
\text{b. [impram pay-cu-mpwi] } & \quad \text{na-kacapal} \\
& \quad [\text{basket.VII.SG carry-NFN-COMP}] \text{ 3SG.ABS-forget} \\
& \quad \text{‘He forgot to carry the basket.’} \\
& \quad (F389)
\end{align*}
\]

However, ERG case assignment is not unavailable whenever a clitic is removed, as the data above might suggest. Rather, it depends on whether there is an ABS clitic remaining. For instance, in the partial doubling construction in (21), ERG is retained on the EA clitic, even though the clitic cross-referencing the direct object is removed. This is because the verb still hosts an indirect object clitic, realized here as ABS.

\[(21)\] irwa ḋaykum na-[mpu]-tmi-ampat
mat.IX.SG woman 3SG.ABS-3PL.ERG-CAUS-weave-PERF
‘The women got her to weave a mat.’ (F292)

\[14\text{We can infer that this clitic is ABS based on its word-initial position and the fact that non-human clitics only make class distinctions when ABS.}\]
Again, the realization of ERG hinges on the presence of another clitic; moreover, as stated in (19), this other clitic must be ABS. Under the dependent theory of case assignment argued for here, the ABS clitic is the case competitor for the EA clitic, such that the latter is assigned ERG.

The unavailability of ERG in the absence of a case competitor is shown in a different way in (22) and beyond. 1st/2nd person (participant) internal arguments (IAs) are always cross-referenced with DAT morphology (to be discussed in greater detail later). In such contexts, the clitic cross-referencing the EA cannot be ERG, but, again, surfaces as ABS.

(22) a. na-[mpu]-tay  
\[3SG.ABS-3PL.ERG\]-see  
‘They saw him.’  
(F195)

b. pu-[ga]-tay  
\[3PL.ABS-1SG.DAT\]-see  
‘They saw me.’  
(F196)

Thus, the presence of DAT case on the IA clitic bleeds ERG case assignment on the EA clitic, just like in the partial doubling data in (21). However, in the ditransitive construction in (23), the presence of DAT does not block ERG; this is because there are three clitics in total, the third clitic being the ABS clitic cross-referencing the direct object. Again, the presence of ERG requires that it co-occurs with ABS.

(23) trawsistm  tma-[mpu]-[na]-[kiantut]  
trouser.V.DL V.DL.ABS-3PL.ERG-1SG.DAT-give-FR.PST  
‘They gave me two pairs of trousers.’  
(F243)

The same point is made by the examples in (24). In Yimas, DAT on clitics cross-referencing inalienable possessors (regardless of person specification) behaves like DAT on participant object clitics. This is illustrated in the partial doubling construction in (24a), an analogue of (22b): the only clitics present are an EA clitic and an inalienable possessor clitic. The EA clitic is not ERG, but ABS, signaling that the DAT possessor clitic cannot count as a case competitor. However, when the verb hosts an additional clitic, the ABS possessee clitic, as in (24b), ERG case assignment is possible.

(24) a. narm  pu-[tpul-kamprak-r-akn]  
\[3SG.ABS\]-hit-break-PERF-3SG.DAT  
‘They hit and broke his skin.’  
(F324)

b. kuran  na-[ka]-tu-r-akn  
\[1SG.ABS\]-kill-PERF-3SG.DAT  
‘I killed his lice (on his own head).’  
(F302)

Finally, applicativizing an internal argument allows subjects of unaccusative verbs to be cross-referenced with ERG morphology:

(25) a. impa-n  kantk  na-[kwalca-t]  
\[3DL.FR.DIST\] with \[3SG.ABS\]-rise-PERF  
‘He got up with them both.’  
(F303)

b. impa-[m]-taj-kwalca-t  
\[3DL.ABS\]-3SG.ERG\]-APPL-rise-PERF  
‘He got up with them both.’  
(F303)
The contrast between (25a-b) is in the applicativization of the oblique argument in (25b), which ‘promotes’ it to core argument status and allows it to be clitic doubled. Because there are now two clitics on the verb in (25b), the subject of the intransitive verb (wa ‘go’) is cross-referenced by ERG, not ABS, morphology.

To summarize, ERG case assignment depends on case competition between two clitics (the other clitic surfacing as ABS). More broadly, the facts presented in this section show a dissociation between case and grammatical function/thematic role. Agents of transitive verbs are not always associated with ERG morphology, as this morphology is ABS whenever ERG is unavailable. Furthermore, ERG case assignment is not restricted to agents of transitive verbs, as subjects of unaccusative verbs may also be cross-referenced with ERG morphology under certain conditions. Therefore, agents are not always ERG, and ERG case is not exclusively assigned to agents. This is problematic for analyses of ERG case as inherent, assigned to external arguments based on thematic role (Woolford, 1997, 2006; Aldridge, 2008; Legate, 2008). More broadly, it also presents a general challenge for any analysis that takes ERG case to be assigned by a dedicated functional head (including structural Case analyses, e.g. Laka 2000; Rezac et al. 2014). This is because, as should be clear by now, ERG case in Yimas does not have a source in the sentence-level syntactic structure: ERG case assignment takes place after clitic doubling, may target intransitive and transitive subject clitics alike, and is computed internal to the sequence of doubled clitics. Conversely, treating ERG case as a dependent case assigned within the domain of case-requiring clitics captures all of these facts.

While the realization of ERG is sensitive to clitic context, it is also important that the nominal doubled by the clitic occupies a particular position in the syntax. As stated by Marantz (1991) and others, ERG corresponds to the higher of two nominals within a given of case assignment. In all the examples presented in this section, the argument cross-referenced by an ERG clitic crucially c-commands a lower argument in the syntax (this is especially clear given the applicative data in (25)). Thus, syntactic configuration is also relevant to the assignment of ERG case in Yimas. I define the ERG case assignment rule in Yimas as follows:

(26) *Ergative case assignment in Yimas:*
    Assigned to a clitic $\alpha$ that cooccurs with a clitic $\beta$, where the DP doubled by $\alpha$ c-commands the clitic doubled by $\beta$.

Note that this rule differs from the description in (19) in that there is no mention of the ABS case that surfaces on the case competitor clitic. That these other clitics are always ABS follows from the logic of the dependent case theory and therefore does not need to be explicitly stated; I will flesh out this point in §3.4.

### 3.3 Dative case

Unlike the ERG paradigm, the DAT paradigm behaves non-uniformly and can be divided into two subtypes:

(27) **Subtypes of dative (informal):**
    a. DAT case encodes 3rd person ‘intermediate’ arguments, if all three arguments are clitic doubled.
    b. DAT case *always* encodes participant internal arguments and inalienable possessors of all persons.

The proposal that there are two subtypes of a single paradigm is evidenced by the observation
that DAT behaves differently in the partial doubling constructions depending on what it cross-references. I argue that DAT case on intermediate argument (IntA) clitics is dependent case, while DAT case on clitics encoding participant internal arguments and inalienable possessors is lexical case. This distinction is important, because, although I have been assuming a case-based approach to the clitic morphology, nothing I have shown has actually forced this conclusion. For instance, Gluckman (2014) labels the paradigms atheoretically as Set I, II, and III: the data presented so far are also compatible with this approach, since, under this treatment, we could say instead that the Set I (ABS) paradigm is used by default, but it switches to either Set II (ERG) or Set III (DAT) when other clitics are present. However, the ability to divide DAT into the two subtypes mentioned confirms that the data we are dealing with are in fact about case. In contrast, case-free accounts cannot make sense of the distributions of this paradigm, nor do they provide insight into why this paradigm behaves as it does.

I will discuss (27a) here, and save (27b) for §3.5. I will call the DAT typified by (27a) ‘DAT_{INT}’ throughout this paper, to differentiate it from the other subtype(s) of DAT. DAT_{INT} may encode indirect objects, causees, and applicativized arguments, as shown in (28).

(28) a. k-ka-tkam-r-\textit{ākn}\n\quad VI\textsc{sg}.\textsc{abs}-1\textsc{sg}.\textsc{erg}-\textsc{show}-\textsc{perf}-3\textsc{sg}.\textsc{dat}\
‘I showed him it (the coconut).’ (\textit{IO}) (F211)

b. \textit{t}puk ka-ka-na-tmi-am-nt-\textit{ākn}\n\quad X.\textsc{sg}.\textsc{abs}-1\textsc{sg}.\textsc{erg}-\textsc{def}-\textsc{caus}-\textsc{eat}-\textsc{pres}-3\textsc{sg}.\textsc{dat}\
‘I made him eat a sago pancake.’ (\textit{causee}) (F292)

c. k-n-taq-pampt-\textit{ntuk-ākn}\n\quad VI\textsc{sg}.\textsc{abs}-3\textsc{sg}.\textsc{erg}-\textsc{appl}-\textsc{cook}-\textsc{rm}.\textsc{pst}-3\textsc{sg}.\textsc{dat}\
‘She cooked the heart for him.’ (\textit{appl.}) (F307)

DAT_{INT} is thus assigned to a clitic that cross-references a syntactically ‘intermediate’ argument (IntA)—the middle argument within a case domain containing three arguments in total, such that it simultaneously c-commands a lower argument and is c-commanded by a higher argument. Podobryaev (2013) argues that DAT case is an intermediate dependent case, in that the assignment of DAT requires this particular structural configuration and is otherwise unavailable if this configuration is not met. He illustrates this with the behaviour of DAT on IntAs in Alutor (Chukotko-Kamchatkan), which may be bled if another case-requiring nominal is removed.

(29) \textit{Alutor}:

a. \textit{gəm-nən} akka-[\textit{b}] tə-nə-svitku-va-tk-ən\n\quad 1\textsc{sg}.\textsc{erg} son-[\textsc{dat}] 1\textsc{sg}.\textsc{a}-\textsc{caus}-\textsc{cut}-\textsc{suff}-\textsc{pres}-3\textsc{sg}.\textsc{p} \textsc{wood}-\textsc{acc}\
‘I am making the son cut wood.’

b. \textit{gəm-nən} akak\n\quad 1\textsc{sg}.\textsc{erg} son.[\textsc{abs}] 1\textsc{sg}.\textsc{a}-\textsc{caus}-\textsc{wood}-\textsc{cut}-\textsc{suff}-\textsc{pres}-3\textsc{sg}.\textsc{p}\
‘I am making the son cut wood.’ (Podobryaev, 2013)

In (29), the normally-DAT causee is realized as ABS if the theme undergoes noun incorporation into the verbal complex; incorporation results in the loss of a case competitor and thus bleeds DAT assignment. This seems to be mirrored in Yimas, which also exhibits noun incorporation.\footnote{Foley (1991) similarly labels the paradigms by thematic role.} \footnote{However, Foley notes that noun incorporation in Yimas is not a productive process.}
In (30), ‘fire’ shows up with ABS morphology, not DAT, when the direct object (‘back’) has been incorporated into the verb.\(^{17}\)

\[(30)\]
\[
\text{ura-mpu-na-akpi-api-n} \\
\text{FIRE.ABS-3PL.ERG-DEF-back-put.in-PRES}
\]

‘They are putting their backs to the fire’ (to warm themselves) (F320)

Thus, as in Alutor, DAT in Yimas appears to require a particular syntactic configuration among the nominals cross-referenced by the clitics: the nominal cross-referenced by the DAT clitic must c-command and be c-commanded by two other nominals.\(^{18}\)

Moreover, DAT\(_{\text{INT}}\) is crucially assigned to a clitic in the presence of two other clitics, which surface as ERG and ABS respectively. This is summarized in the description below:

\[(31)\]

\text{Distribution of DAT\(_{\text{INT}}\) (descriptive):}

\text{DAT\(_{\text{INT}}\) is realized on a clitic cross-referencing a syntactically intermediate argument, iff both an ABS clitic and an ERG clitic are also present. Otherwise, ABS.}

This suggests that the intermediate structural position of a cross-referenced nominal is not enough for its doubled clitic to surface as DAT; DAT case assignment to this clitic additionally requires that all three arguments be cross-referenced on the verb as clitic morphology. This is shown in (32):

\[(32)\]

\begin{itemize}
\item a. \text{tpuk ka-ka-na-tmi-am-n\textbf{t}nt-akn} \\
\text{sago pancake.X X.SG.ABS-1SG.ERG-DEF-CAUS-eat-PRES-3SG.DAT} \\
\text{‘I made him eat a sago pancake.’ (F292)}
\item b. \text{irwa nyakum maj-mpu-tmi-ampa-t} \\
\text{mat.IX.SG woman 3SG.ABS-3PL.ERG-CAUS-weave-PERF} \\
\text{‘The women got her to weave a mat.’ (F292)}
\end{itemize}

Both constructions given in (32) are causatives. The causee clitic is realized as DAT in (32a) and as ABS in (32b), though in both constructions the nominals associated with the verb are a matrix subject (causer), causee, and embedded object. This is because (32b) has one fewer clitic (two in total), which prevents DAT\(_{\text{INT}}\) from being realized. Therefore, even though the nominal is in the correct structural position for its doubled clitic to be assigned DAT\(_{\text{INT}}\), DAT\(_{\text{INT}}\) only surfaces if three clitics are adjoined to the verb.

Finally, since both ERG and DAT\(_{\text{INT}}\) are dependently assigned, we must discuss the relative ordering of their respective assignments. I propose that DAT\(_{\text{INT}}\) is assigned earlier than ERG; this is because DAT\(_{\text{INT}}\) requires two case competitors, while ERG requires only one. Thus, in constructions that surface with both DAT\(_{\text{INT}}\) and ERG clitics, the derivation proceeds as follows: DAT\(_{\text{INT}}\) is assigned to the IntA clitic, whose associate c-commands a lower argument and is c-commanded by a higher argument. The clitic cross-referencing the higher argument (the external argument) then receives ERG, since its associate still c-commands a lower argument whose corresponding clitic has not yet received case (the direct object).\(^{19}\)

Put together, DAT\(_{\text{INT}}\) and ERG in Yimas are assigned via the following rules (the rule for

\[^{17}\]I lack data explicitly showing that ‘fire’ would be DAT if ‘back’ were not incorporated.

\[^{18}\]Note that this description is similar to the one I gave for ERG back in (19), except that DAT\(_{\text{INT}}\) must co-occur with both ERG and ABS. Just as with ERG, however, I will show later that the dependent case assignment rule for DAT\(_{\text{INT}}\) does not need to make reference to these other cases.

\[^{19}\]I assume that, once a clitic is assigned case, both the clitic and its associate leave the case competition.
ERG is repeated from §3.2):

(33)  Dependent case assignment in Yimas:

a. DAT\_INT: Assigned to a clitic \(\alpha\) that cooccurs with clitics \(\beta\) and \(\gamma\), where the DP doubled by \(\alpha\) c-commands the DP doubled by \(\beta\) and is c-commanded by the DP doubled by \(\gamma\).

b. ERG: Assigned to a clitic \(\alpha\) that cooccurs with a clitic \(\beta\), where the DP doubled by \(\alpha\) c-commands the clitic doubled by \(\beta\).

To summarize, I demonstrated that the distributions of case on the clitics in Yimas mirror the case patterns expected on nominals given dependent treatments of case. In Yimas, dependent case is jointly determined by the total number of clitics present on a given verb and the syntactic configuration of the arguments doubled by these clitics. The clitic environment controls whether a particular dependent case may be assigned at all, while the syntactic position of the doubled argument determines exactly which dependent case—ERG or DAT\_INT—gets assigned.

### 3.4 The status of ABS

Because ERG and DAT\_INT case are dependent, neither can be assigned if the appropriate morphosyntactic environment fails to obtain. In such circumstances, the clitics are realized instead as ABS. ABS thus has an elsewhere distribution; it surfaces precisely where ERG and DAT\_INT cannot. This is exemplified below in (34), in which ABS appears where ERG and DAT\_INT are blocked.

(34)  a. \text{pu}–\text{na}-\text{tay} \\
     \text{3PL.ABS-1SG.DAT-see} \\
     ‘They saw me.’ \hspace{1cm} (F196)

     b. \text{irwa} \text{\text{-}}}\text{nyakum} \text{na}–\text{mpu}-\text{tmi-ampa-t} \\
     \text{mat.IX.SG woman 3SG.ABS-3PL.ERG-CAUS-weave-PERF} \\
     ‘The women got \underline{her} to weave a mat.’ \hspace{1cm} (F292)

Moreover, since ERG and DAT\_INT assignment is based on case competition, it is unsurprising that ABS surfaces in verbs hosting only one clitic.

(35)  a. \text{ama}-\text{wa-t} \\
     \text{1SG.ABS-go-PERF} \\
     ‘I went.’ \hspace{1cm} (F196)

     b. \text{nawn} \text{ma}-\text{tpul}? \\
     \text{who 2SG.ABS-hit} \\
     ‘Who did you hit?’ \hspace{1cm} (F235)

In this way, ABS behaves like unmarked case in the sense of Marantz (1991).\(^{20}\) The assignment of unmarked case takes place late in the case realization hierarchy, as nominals receive unmarked case only if lexical and dependent case have not been assigned to them—as just discussed, this is precisely how ABS patterns in Yimas.

There are logically two ways to capture the elsewhere distribution of ABS. First, as posited by Marantz (1991), ABS may be assigned to any argument that has not received lexical or

\(^{20}\) ABS also fits the morphological profile of unmarked case which, unsurprisingly, is morphologically unmarked.
dependent case. Under this view, ABS is a morphologically null case whose realizational environment is the complement set of the other cases. Conversely, Bittner & Hale (1996), Preminger (2011, 2014), Kornfilt & Preminger (2015), Levin (2015), and various others propose instead that NOM/ABS is really caselessness. That is, ABS is a label for nominals that do not receive case, thus automatically deriving its elsewhere distribution. I contend that the ‘ABS as caselessness’ view is correct for Yimas. The data in (36) below illustrates two things: first, Yimas nominals do not make morphological case distinctions, regardless of grammatical function,\(^{21}\) and, second, as mentioned back in §2, the ABS paradigm is identical to the pronominal paradigm.

(36) a. \[
\begin{array}{c}
\text{kapwa} \quad \text{tajka-mpi} \quad \text{kapwa-wa-t} \\
2\text{DL} \quad \text{where-ADV} \quad 2\text{DL}.\text{ABS-go-PERF}
\end{array}
\]

‘Where have you gone?’ (S) (F458)

b. \[
\begin{array}{c}
\text{kapwa} \quad \text{na-qkran-a-aykapija-n} \\
3\text{SG}.\text{ABS-2DL}.\text{ERG-DEF-know-PRES}
\end{array}
\]

‘Do you two know him?’ (A) (F462)

c. \[
\begin{array}{c}
\text{kapwa} \quad \text{nkut-ia-ira-kwalca-kia-k} \\
2\text{DL} \quad 2\text{DL}.\text{DAT-ALL-rise-FUT-IRR}
\end{array}
\]

‘I will come up on you.’ (O) (F460)

Recall our assumption that a doubled clitic is a D\(^0\) that spells out its associate’s φ-features. Coupling this with another assumption, that pronominals are also D\(^0\)s, an idea dating back to Postal (1966)\(^{22}\), we may account for the morphological identity between the ABS clitics and their pronominal counterparts. Thus, there is no reason to regard ABS as an unmarked case assigned to a clitic; ‘ABS’ is simply a clitic’s default state, surfacing if the clitic does not receive DAT or ERG.

This treatment of ABS also potentially explains why only the ABS paradigm makes distinctions for noun class and complementizer clitics; ABS is simply clitic doubling, so there are as many clitic class distinctions as there are noun classes. Moreover, recall that when such clitics are cross-referenced by non-ABS morphology, e.g. ERG, these distinctions are obviated. The data is repeated below:

(37) \[
\begin{array}{c}
\text{arm} \quad \text{i-mpu-tal-c} \quad \text{knkt-t} \\
\text{water} \quad \text{VIII.SG}.\text{ABS-3PL}.\text{ERG-CAUS-heavy-PERF}
\end{array}
\]

‘The water made the canoe heavy.’ (F204)

If dependent case is case assignment—a postsyntactic operation applied to caseless (‘ABS’) clitics—then it is not surprising that certain feature distinctions become neutralized during this process. That is not to say that such operations always impoverish φ-features across languages, only that they may do so.

The proposal that ABS is simply the appearance of a clitic without case has important consequences for our broader proposal that dependent case is fundamentally dissimilatory. Our starting point is Phillips’s (1993) observation that every Yimas verb contains an ABS morpheme; from this, Phillips proposes that every verb is required to have one ABS morpheme. However, this turns out to be not exactly true; as I will discuss shortly, DAT clitics cross-referencing in-

\(^{21}\)In fact, Yimas nominals are either morphologically bare or marked oblique or with possessive morphology; this, in turn, corresponds to a core vs. oblique distinction in terms of grammatical function.

\(^{22}\)See also Abney (1987), Stanton (to appear), and others.
alienable possessors and participant internal arguments may occur without other clitics present. It is thus more accurate to generalize that every verb in Yimas has a maximum of one ABS morpheme (the reader can verify that none of the examples contradict this generalization).

This is a striking conclusion. If ABS clitics are simply doubled clitics without case, then the clitic doubling of multiple nominals should inevitably yield multiple caseless ABS clitics. Yet, such constructions never surface, suggesting that these clitic sequences are eliminated somehow. Constructions with multiple caseless (ABS) clitics do not surface because the clitics in such constructions are assigned dependent case. From this, I propose that dependent case assignment applies in order to resolve illicit sequences of caseless clitics. This view explains why ERG and DAT are assigned under ‘case competition’ between caseless nominals, as well as why they require one and two competitors respectively. Recall:

(38) **Dependent case assignment rules (abridged):**
  a. ERG: assigned to EA clitics / _\[Cl\]
  b. DAT: Assigned to IntA clitics / _\[Cl, Cl\]
    (where ‘Cl’ = a clitic without m-case)

If two clitics appear on C^0, one of them (cross-referencing the higher syntactic argument) is assigned ERG, leaving the other caseless. If three clitics are present, both ERG and DAT are assigned, again leaving the third clitic caseless. This scenario explains the aforementioned generalization that Yimas verbs allow up to one ABS (caseless) clitic: there is no reason to case-mark this last clitic if dependent case assignment on the other clitic(s) resolves the issue. For convenience, I restate this issue as an OCP-type constraint, and will refer to it as such throughout the rest of the paper:23

(39) *M\[ULTIPLE\] CL[\-_CASE\]: No verb may contain a clitic sequence containing multiple morphologically caseless clitics.

The idea that dependent case assignment resolves the constraint in (39) recasts the notion of case competition in a slightly different light. Case-receiving elements are not in competition to receive a particular case, as the term might suggest. Rather, because case has a dissimilatory function, it is necessarily assigned among a group of case-receiving elements, thus yielding the appearance of competition. In §4, I provide further arguments for my proposal—that dependent case assignment is fundamentally a repair—by showing that Yimas employs a number of dissimilatory strategies in addition to dependent case assignment.

3.5 Lexical case

Before moving to §4, however, I return to the heterogeneous behaviour of DAT and how it bears on our broader discussion of dissimilation. As noted in §3.1, dependent case has its origins within a larger, hierarchical system of case assignment (Yip et al., 1987; Marantz, 1991). The idea that case may be organized into a hierarchy was first introduced in Yip et al. (1987), who propose a tiered system of case assignment mirroring autosegmental phonology (Goldsmith, 1976; McCarthy, 1981). This treatment captures data such as the following from Icelandic:

(40) **Icelandic:**

23That this is able to be formulated as a constraint suggests that it is amenable to an Optimality Theoretic account. Under this view, the constraint below would presumably interact with—and dominate—other constraints against changing the form of the clitics. I leave a development of this account for further research.
barninu batnaði veikin
cchild.DAT recovered.from disease.NOM
'The child recovered from the disease.' (Yip et al., 1987)

In (40), the quirky DAT subject co-occurs with a NOM, not ACC, object. According to Yip et al. (1987), quirky case occupies its own tier, and is always associated to the nominal tier first; NOM and ACC occupy the same tier but, in Icelandic, the directionality of association is such that NOM gets associated with the object nominal while ACC remains associated.

The tiered system of case assignment is similar to the competition-based system in Marantz (1991), whose case realization hierarchy is repeated in (41) for reference. Marantz’ system also captures the aforementioned observation; assigning lexical case to the subject in (40) removes it from the case competition, which, in turn, bleeds dependent ACC case on the object.

(41) The case realization disjunctive hierarchy
   a. lexically governed case (quirky case)
   b. dependent case (ergative, accusative case)
   c. unmarked/default case (realized on any NP otherwise assigned case)

Returning now to Yimas, I mentioned earlier that we may diagnose the existence of two distinct subtypes of DAT based on its variable behaviour in the partial clitic doubling constructions. Dependent DAT_{INT} on clitics cross-referencing intermediate arguments was shown to be lost in such constructions; however, as I will now illustrate, the second subtype of DAT is retained in these contexts. This distinction is important because, as mentioned above, the mapping of the clitic morphology to multiple levels of the case hierarchy shows that the paradigms are indeed organized by case. Establishing that the clitics make case distinctions is important for setting the foundation for the paper’s broader analytical point: that Yimas clitics reveal the fundamentally dissimilatory nature of case.

In Yimas, DAT is exceptionlessly realized on clitics cross-referencing participant internal arguments (42) and inalienable possessors (of all persons) (43),24 I will call these usages of DAT case ‘DAT\_{PART}’ and ‘DAT\_{POSS}’ respectively.

(42) DAT\_{PART}:
   a. na-mpu-tay
      3SG.ABS-3PL.ERG-see
      ‘They saw him.’
   (F195)
   b. pu-[pä]-tay
      3PL.ABS-[1SG.DAT]-see
      ‘They saw me.’
   (F196)

(43) DAT\_{POSS}:
   a. narm p-[kra]-nanan-[kacakapi]-ncut
      skin.VII.SG VIL.SG.ABS-[1PL.DAT]-DUR-hide-RM.PST
      ‘Our skin is deteriorating.’
   (F301)
   b. kuran na-ka-tu-r-[akn]
      louse.V.SG V.SG.ABS-1SG.ERG-kill-PERF-3SG.DAT

24Inalienably possessed entities include body parts, entities on body parts (e.g. bugs or injuries), and personal characteristics (Foley, 1991, pp.301-302). While inalienable possessors are cross-referenced on the verb as DAT clitics, alienable possessors occur with possessive morphology and are not cross-referenced on the verb (recall that oblique-marked arguments cannot be clitic doubled).
As stated above, some characteristics of lexical case include its idiosyncratic appearance and its ability to bleed the assignment of other cases (where normally expected). Both are evidenced in the Yimas data. Earlier in §3.2, I showed that the presence of the DAT participant IA clitic in (42b) causes the EA clitic to be realized with ABS rather than ERG case. This effect is not visible for the DATPOSS data in (43b) because the possessee is also clitic doubled and thus serves as an additional case competitor. However, (44) demonstrates that the presence of DATPOSS may also bleed dependent ERG assignment on an EA clitic (here, cross-referencing a 3PL referent), if no other clitics are present.

(44) \begin{align*}
\text{narm} & \quad \text{pu-tpul-kamprak-r-} \text{akn} \\
\text{skin.VIISG} & \quad \text{3PL.ABS-hit-break-PERF-} \text{3SG.DAT} \\
\text{‘They hit and broke [his] skin.’} & \quad \text{(F324)}
\end{align*}

Another property of lexical case is that, because it is assigned idiosyncratically (e.g., due to special requirements of the verb, as in Icelandic), it is insensitive to its morphosyntactic environment. This is especially clear in Yimas, in which its morphosyntactic environment, the span of doubled clitics, is variable due to the optionality of clitic doubling. Earlier, I showed that the rule assigning dependent DATINT case is bled in partial doubling constructions. Conversely, DA TPART and DATPOSS are preserved in such constructions. The data in (45)-(46) demonstrate that the assignment of DATPART and DATPOSS is insensitive to clitic context, and thus does not rely on case competition.

(45) \text{DATPART}:
\begin{enumerate}
\item \begin{align*}
\text{patn} & \quad \text{pu-} \text{nan-ya-t} \\
\text{betelnut.VSG} & \quad \text{3PL.ABS-} \text{2SG.DAT} \quad \text{give-PERF} \\
\text{‘They gave [you] betelnut.’} & \quad \text{(F233)}
\end{align*}
\item \begin{align*}
\text{Mitchell} & \quad \text{kra-tay} \\
\text{Mitchell} & \quad 1\text{PL.DAT-see} \\
\text{‘Mitchell saw us.’} & \quad \text{(F,p.c.)}
\end{align*}
\item \begin{align*}
\text{Mitchell} & \quad \text{ipa-tay} \\
\text{Mitchell} & \quad 1\text{PL.ABS-see} \\
\text{‘We saw Mitchell.’ (cannot mean ‘Mitchell saw us.’)} & \quad \text{(F,p.c.)}
\end{align*}
\end{enumerate}

(46) \text{DATPOSS}:
\begin{enumerate}
\item \begin{align*}
\text{narm} & \quad \text{p-} \text{mpu-tpul-kamprak-r-} \text{akn} \\
\text{skin.VIISG} & \quad \text{VIISG.ABS-3PL.ERG-hit-break-PERF-} \text{3SG.DAT} \\
\text{‘They hit and broke [his] skin.’} & \quad \text{(F283)}
\end{align*}
\item \begin{align*}
\text{narm} & \quad \text{pu-tpul-kamprak-r-} \text{akn} \\
\text{skin.VIISG} & \quad \text{3SG.ABS-hit-break-PERF-} \text{3SG.DAT} \\
\text{‘They hit and broke [his] skin.’} & \quad \text{(F324)}
\end{align*}
\item \begin{align*}
\text{narm} & \quad \text{tpul-kamprak-r-} \text{akn} \\
\text{skin.VIISG} & \quad \text{hit-break-PERF-} \text{3SG.DAT} \\
\text{‘They hit and broke [his] skin.’} & \quad \text{(F,p.c.)}
\end{align*}
\end{enumerate}

These types of DAT therefore cannot be analyzed as dependent case, but match what we expect...
of lexical case. A hallmark of lexical (quirky) case (e.g. in Icelandic) is that it is preserved even when other aspects of the syntax change; for instance, quirky case in Icelandic is unaffected by A-movement operations such as passivization. Similarly, DAT\textsubscript{PART} and DAT\textsubscript{POSS} are preserved regardless of which and how many other clitics are present.

Finally, while the other clitics in Yimas are generally optionally doubled, the DAT\textsubscript{PART}/DAT\textsubscript{POSS} clitics are \textit{obligatorily doubled}. This is not mentioned in Foley’s (1991) grammar, but Foley (p.c.) informs me that the (b) sentences below, in which these clitics are absent, are ungrammatical:

\begin{align*}
\text{(47) a. } & \text{na-} \text{kra-tay} \\
& \text{3SG.ABS-[1PL.DAT]-see} \\
& \text{‘He saw us.’ (F205)} \\
\text{b. } & \text{*ipa na-tay} \\
& \text{1PL 3SG.ABS-see} \\
& \text{Intended: ‘He saw us.’ (F,p.c.)}
\end{align*}

\begin{align*}
\text{(48) a. } & \text{yampa} \text{k-mpu-} \text{na} \text{-kra-t} \\
& \text{head.VI.SG VI.SG.ABS-3PL.ERG-[1SG.DAT]-cut-PERF} \\
& \text{‘They cut my hair.’ (F301)} \\
\text{b. } & \text{*yampa} \text{ama} \text{k-mpu-kra-t} \\
& \text{head.VI.SG VI.SG.ABS-3PL.ERG-cut-PERF} \\
& \text{Intended: ‘They cut my hair.’ (F,p.c.)}
\end{align*}

This therefore reveals a striking behavioural difference between the non-ABS clitics. Clitics that are \textit{optionally doubled} may surface as ERG, DAT\textsubscript{INT}, or ABS, modulo the dependent case assignment rules operating over the clitics. In contrast, clitics that cross-reference specific kinds of nominals are obligatorily doubled and moreover obligatorily surface with DAT morphology. Note that this is not an isolated phenomenon specific to Yimas; the obligatoriness is also exhibited in Amharic, in which object clitic doubling is generally optional but also becomes obligatory when an inalienable possessor is doubled.\footnote{The same has been claimed to hold for Rioplatense Spanish, as well (Jaeggli, 1982, 33ff.).} This is illustrated below:

\begin{align*}
\text{(49) Amharic:} \\
\text{a. } & \text{Almaz tāmari-w-i-n ayy-ātʃf-(iw)} \\
& \text{Almaz.F student-DEF.M-ACC see-3FS.S-(3MS.O)} \\
& \text{‘Almaz saw the male student.’} \\
\text{b. } & \text{bār-r-u t’at-e-n k’är-t’āf-ā-*(nīn)} \\
& \text{door-DEF.M finger-my-ACC pinch-3MS.S.-*(1S.O)} \\
& \text{‘The door pinched my finger.’ (Kramer, 2014)}
\end{align*}

Earlier, I argued that dependent case exists to dissimilate between otherwise identical elements; in Yimas, these elements are the doubled caseless clitics on the verb. In light of the properties of DAT\textsubscript{PART} and DAT\textsubscript{POSS}, I propose that lexical case is outside of the purview of our discussion of anti-identity, because it serves a different purpose. Whereas dependent case is globally calculated over the span of doubled clitics, after clitic doubling takes place, it is not immediately obvious that the same could be said for lexical case; clitics that surface with lexical DAT appear to be “born” DAT. I speculate that participant internal arguments and inalienable possessors are obligatorily doubled for argument licensing reasons (cf. Sportiche, 1996), and that the usage
of DAT is a morphological signal that these clitics are doubled for a different reason, though I leave the specifics of this idea for future research.

Because these clitics are DAT by default, they do not need to be dissimilated from the other clitics. This treatment of lexical case extends to lexical case on nominals in other languages. It is generally thought that lexical case is assigned under sisterhood upon First Merge of the case-assigning head (McFadden, 2004; Rezac, 2008; Preminger, 2011, 2014); in other words, nominals with lexical case receive case almost immediately upon entering the derivation themselves. Under the dissimilation-based story advocated for here, these nominals do not need to be dissimilated from the other (caseless) nominals in the derivation, because these lexical case-bearing nominals are already sufficiently distinct.

This idea requires some refining of the interaction between dependent case and lexical case. Under the Marantzian version of the dependent theory of case, all nominals within a particular domain of case assignment are in competition to receive lexical and then dependent case; once lexical case is assigned to a nominal, this nominal leaves the competition (upon which the dependent case algorithm examines the remaining nominals in the structure). The current proposal, however, holds that lexically-assigned nominals are entirely outside of the case competition to begin with. As stated earlier, caseless nominals are not competing to receive case, per se, but rather may receive case as part of a general anti-identity requirement imposed by the grammar. This anti-identity requirement is satisfied when the anti-identity domain contains a lexical DAT element and a caseless (ABS) element, because these elements are distinct to begin with.

### 3.6 Section summary

In this section, I demonstrated that the distributions of the clitic paradigms in Yimas match the distributions of case under a dependent theory of case assignment. The dependent nature of case is especially clear in light of the possibility of optional clitic doubling; dependent case in Yimas is sensitive to both the syntactic position of the nominal being cross-referenced by the clitic and the total number of clitics present, suggesting that case is assigned after clitic doubling takes place. Specifically, ERG case is assigned to a clitic cross-referencing a c-commanding nominal if this clitic co-occurs with another clitic (cross-referencing the lower nominal), while DAT\textsubscript{int} case is assigned to a clitic cross-referencing a syntactically intermediate nominal, if all three nominals are clitic doubled. Finally, I argued that the elsewhere distribution of the ABS paradigm can be captured by analyzing it as the absence of morphological case altogether—under this treatment, ABS is simply a label for doubled clitics that do not receive dependent or lexical case.

This led to the observation that, although the clitic doubling of multiple nominals should logically yield multiple ABS clitics, Yimas verbs seem to be restricted to having maximum one ABS clitic; the other clitics surface as ERG or DAT. I proposed that we should view dependent case assignment to the clitics as a response to multiple clitic doubling, which the grammar rules out due to a morphosyntactic anti-identity condition. This, in turn, informs the broader point of this paper that dependent case is fundamentally dissimilatory. The dissimilating nature of dependent case is especially obvious in Yimas because it is calculated internal to the clitics, but the same could be said for languages in which case is marked on nominals.

Indeed, I mentioned earlier that dependent case assignment on nominals has been recently reanalyzed as taking place in the syntax rather than the postsyntax, starting with Baker & Vinokurova (2010), given that case assignment on nominals feeds uncontroversially syntactic processes such as movement (e.g. Preminger, 2011, 2014). However, the dependent cases in
Yimas must occur postsyntactically, since they are computed only after clitic doubling takes place. This nonetheless remains compatible with the syntactic treatments of dependent case on nominals; the current proposal is agnostic to when exactly case assignment takes place, and additionally allows for cross-linguistic variation in this respect.

### 4 Morphosyntactic anti-identity

#### 4.1 Overview

Earlier, I noted Baker’s (2015) point that dependent case is essentially a generative reformulation of the functional view that morphological case exists to differentiate nominals of one another. In §3, I showed that case need not only mark nominals, but may also mark clitics (perhaps anything that can bear case) for the same purpose. In this section, I argue that we may generalize even further: dependent case assignment is one of many strategies languages may use to differentiate morphosyntactic objects from one another. Morphosyntactic anti-identity (or dissimilation), for the purposes of this paper, is a ban on syntactic elements with identical syntactic features in some prespecified domain (see Nevins (2012) for an overview). We may consider this notion of morphosyntactic anti-identity as a subpart of the Obligatory Contour Principle (OCP). The OCP was originally proposed as a ban on consecutive identical phonological features (Leben, 1973; Goldsmith, 1976; McCarthy, 1986) in autosegmental phonology, but has been more recently extended to the syntactic component of the grammar by Grimshaw (1997), Ackema (2001), Walter (2007), Richards (2010), and many others. The syntactic version of the OCP is traditionally thought to ban adjacent identical syntactic features, though Richards (2010) notably argues that non-adjacent identical features within the same syntactic phase may also trigger an OCP violation.

I contend that a syntactic phase is one type of domain in which anti-identity must hold, but that such domains need not be syntactic phases. In Yimas, then, the relevant domain comprises the clitics on C₀. I show below how this accounts for various morphological effects that arise when doubled clitics co-occur with modal clitics on C₀ (§4.2), and then later extend the analysis to potentially account for a participant dissimilation effect.

#### 4.2 Conspiratorial repairs

Yimas has a small set of modal-like elements, which I refer to here as MODS. When present, they yield the morpheme order MOD-AGR-VERB. They are as follows:

(50) a. *ka-* ‘likelihood’
    b. *ant-* ‘potential’
    c. *ta-* ‘negation’
    d. *m-* ‘relativizer’

The first three are discussed by Foley (1991) as ‘modality prefixes’, and in subsequent work, Phillips (1993, 1995) adds the relative clause element *m-* to this group. I assume, following Phillips (1993, 1995), that these morphemes occupy the CP domain. They are important for the present discussion, because their presence triggers different, apparently idiosyncratic, effects on the adjacent agreement clitic, depending jointly on the feature specifications of this agree-
moment clitic and on the choice of MOD.26 This is shown in (51), by comparing the MODS *ka-* ‘likelihood’ and *ant-* ‘potential’:

(51) a. pu-ŋa-tay
   3PL.ABS-1SG.DAT-see
   ‘They saw me.’ (F196)

b. ka-[mpu]-ŋa-tput-n
   LIKE-3PL.ERG-1SG.DAT-hit-PRES
   ‘They are going to hit me.’ (→ ERG) (F266)

c. ant-[n]ŋa-tpul-c-um
   POT-3PL.ERG-1SG.DAT-hit-PERF-PL
   ‘They almost hit me.’ (→ ∅) (F264)

The examples in (51) demonstrate that the clitic cross-referencing the 3PL subject does not surface as ABS in either (51b) or (51c), though ABS is normally used in the absence of a MOD (51a). The presence of *ka-* ‘likelihood’ causes this clitic to be realized as ERG, while the presence of *ant-* ‘potential’ causes the clitic to be deleted.27

I analyze these MODS as clitics, though they are not obviously doubled from anything overt in the syntax. This comes from the fact that they are preverbal and are obligatorily leftmost in the word when present, while other functional material in Yimas tends to be postverbal and are ordered according to their position in the syntax; for instance, aspect, tense, and omnivorous paucal number agreement are ordered increasingly further from the verb root (52).28 Therefore, I assume that the preverbal MODS are clitics, while the postverbal tense, aspect, and agreement morphemes are true suffixes, spelling out hierarchically ordered syntactic heads.

(52) a. katris ya-mpu-wayk-rap-jcut
   cartridge.V.PL V.PL.ABS-3PL.ERG-buy-CMPL-RM.PST
   ‘They bought all the cartridges.’ (completive aspect < remote past) (F249)

b. pia-kra-i-kia-ntuk-ŋkt
   TALK.ABS-1PL.ERG-NIGHT-RM.PST-PC
   ‘(At night) They told us that...’ (temporal adv. < remote past < paucal agr.) (F410)

That these morphemes are clitics will be important for the overall analysis, as I will explain shortly. For now, I continue to detail the nature of the effects that arise when the MODS are present. I showed above that the various MODS may trigger different effects on the agreement clitics; additionally, as (53) shows, a single MOD may also produce multiple patterns, depending on the feature specifications of the agreement clitics. This is exemplified below with *ta-* ‘negation’ and *ant-* ‘potential’; I will also illustrate other patterns later when relevant.

In (53), we see three different effects surfacing under negation. The effect in (53a) shows the adjacent agreement proclitic surfacing as ERG despite cross-referencing an intransitive subject,
while the pattern in (53b) shows the adjacent clitic (now cross-referencing the direct object) being deleted. Finally, in (53c), the agreement clitic is realized as pu-, which happens to be identical to the 3PL ABS form. Foley characterizes this as a default form; I adopt this view and take this as an instance of Impoverishment.29

(53)  
Negation:

a. \[\text{ta-} \underbrace{\text{ka}}_{\text{NEG}} \text{-wa-t} \]
\[\text{1SG.ERG} \text{-go-PERF} \]
'I didn’t go.’ (→ ERG)  \(\text{(F251)}\)

b. \[\text{ta-} \underbrace{\varnothing}_{\text{NEG}} \text{-} \overbrace{\text{mpu}}_{\text{3DL}} -\text{tpul-c} \overbrace{\text{rm}}_{\text{DL}} \]
\[\text{3PL.ERG} -\text{hit-PERF-DL} \]
'They didn’t hit those two.’ (→ \(\emptyset\))  \(\text{(F255)}\)

c. \[\text{ta-} \underbrace{\text{pu}}_{\text{NEG}} \text{-wa-t} \]
\[\text{3} \text{-go-PERF} \]
'He didn’t go.’ (→ impoverished)  \(\text{(F258)}\)

In (54), we see once again three distinct patterns. The patterns in (54a-b) with ant- ‘potential’ are the same as with ta- ‘negation.’ In (54c), however, the agreement clitic remains unchanged (in fact, still ABS), but the morpheme expressing potential surfaces as a- rather than as ant-; Foley describes this change as allomorphy (p.197). I will return to this data point later on.

(54)  
Potential:

a. \[\text{ant-} \underbrace{\text{ka}}_{\text{POT}} \text{-wa-ntut} \]
\[\text{1SG.ERG} \text{-go-RM.PST} \]
'I would have gone.’ (→ ERG)  \(\text{(F265)}\)

b. \[\text{ant-} \underbrace{\varnothing}_{\text{POT}} \text{-} \overbrace{\text{ka}}_{\text{3PL}} -\text{tu-r-} \underbrace{\text{um}}_{\text{PL}} \]
\[\text{1SG.ERG} -\text{kill-PERF-PL} \]
'I almost killed them.’ (→ \(\emptyset\))  \(\text{(F264)}\)

c. \[\underbrace{\text{pu}}_{\text{3PL.ABS}} \text{-tmuk-r-um} \]
\[\text{3PL.fall-PERF-PL} \]
'They almost fell down.’ (ant- \(\rightarrow a\)-)  \(\text{(F197)}\)

An important generalization emerges from this data: the MODS never co-occur with an ABS agreement clitic.30 This generalization is also discussed by Phillips (1993, 1995), who attributes this effect to competition between the MOD and the ABS morpheme to check the same feature: Phillips suggests that the MOD wins, thus usurping the position that the ABS morpheme would normally occupy and causing the ABS morpheme to be surface in an alternative way.

This account, however, is problematic: as I have argued in this paper, what actually surfaces as ABS is determined postsyntactically after clitic doubling takes place, and, moreover, all doubled clitics are by default ABS (caseless) upon doubling. Therefore, though Phillips’

29 While [\(\text{PL}\)] is standardly asserted to be more marked than [\(\text{SG}\)] (Harley & Ritter, 2002; Nevins, 2011), this is based on the feature geometries of ‘plural’ and ‘singular’ respectively. I assume that plural could be, in principle, less marked than singular, if this could be plausibly built into the featural makeups of the language’s number systems. I leave this for further research.

30 Apparent counterexamples would be what we see in (53c) and (54c). However, I noted above that the morpheme pu- in (53c) is treated as a default by Foley and can be viewed as impoverished or reduced; I will suggest later that the realization of the potential morpheme a- in (54c) is also a case of impoverishment. Thus, neither example is a true counterexample to our generalization.
generalization that an ABS morpheme may not co-occur with a MOD is correct, it cannot be explained by his account. Thus, I reframe the generalization slightly: a MOD may not co-occur with a caseless agreement clitic.

This sounds suspiciously similar to our *MULTIPLE CL[-CASE] constraint from (39), which I repeat below as (55) for reference:

(55)  *MULTIPLE CL[-CASE]: No verb may contain a clitic sequence containing multiple morphologically caseless clitics.

Both ABS-ABS and MOD-ABS sequences are banned and are resolved with the same means; as repeated below, the presence of certain MODS such as negation feeds dependent ERG case on EA clitics, even when the verb is intransitive:

(56)  ta-[ka]-wa-t  
     NEG-[1SG.ERG]-go-PERF  
     'I didn’t go.’ (→ ERG)  (F251)

Thus, I propose that the MOD data fits into our existing constraint because they, too, are caseless clitics occupying C0; they are, then, taken by the grammar to be morphosyntactically identical to the ABS clitics and therefore also subject to dissimilation. Note that this does not mean that the MODS and ABS clitics are identical in every single way (just as two ABS clitics with different φ-specifications are not totally identical); rather, they are non-distinct only with respect to both lacking case. As a result, the co-occurrence of a MOD and an ABS doubled clitic violates *MULTIPLE CL[-CASE] in the same way that two doubled agreement clitics do.

Let us now consider how the effects triggered by the MODS fit with the current proposal. I stated earlier that these effects all take place to resolve *MULTIPLE CL[-CASE]. As it turns out, impoverishment and deletion are strategies for ensuring morphosyntactic dissimilation cross-linguistically. I present a few examples here, but see Walter (2007) and Nevins (2012) for more thorough overviews of dissimilatory repairs.

A well-known example of dissimilatory impoverishment comes from the Spanish spurious se effect (Perlmutter, 1971; Bonet, 1991; Nevins, 2007). In Spanish, DAT and ACC clitics may exist independently, but not together; in order to express them simultaneously, the DAT clitic is impoverished, realized as se. This is illustrated below. Bonet (1991) and Nevins (2007) argue that se surfaces in this context by impoverishing the DAT feature. Nevins (2007) furthermore takes this phenomenon to be fundamentally dissimilating; impoverishing one of the two clitics ensures that they are sufficiently distinct.

(57)  Spanish:

a.  *A Pedro, el premio, le lo dieron ayer  
    to Pedro the prize 3SG.DAT 3SG.ACC gave-PL yesterday  
    Intended: ‘To Pedro, the prize, they gave it to him yesterday.’

b.  A Pedro, el premio, se lo dieron ayer  
    to Pedro the prize se 3SG.ACC gave-PL yesterday  
    ‘To Pedro, the prize, they gave it to him yesterday.’  (Nevins, 2007)

The deletion of an entire morpheme is also attested as a dissimilatory repair. Arregi & Nevins (2012) show that certain varieties of Basque exhibit participant dissimilation (an effect also exhibited in many other languages), such that the language bans certain combinations of two sequences of [PARTICIPANT] features. In the Ondarru dialect of Basque, participant dissimila-
tion effect is resolved by deleting a 1PL dative or absolutive morpheme in the presence of a 2nd person ergative morpheme. They term this process Obliteration, and define it as the deletion of an entire terminal node, rather than deleting specific features of that node (Impoverishment). The effect is illustrated below with dative Obliteration:

(58)  
Ondarru (Basque):

a. *su-k gu-ri liburu-∅ emo-∅ d-o-ku-su
   Intended: ‘You have given us the book.’

b. su-k gu-ri liburu-∅ emo-∅ d-o-su
   you-ERG us-DAT book-ABS give-PRF L-PRS.3.SG-CL.E.2.SG
   ‘You have given us the book.’ (Arregi & Nevins, 2012)

Arregi & Nevins also discuss how different varieties of Basque display minimally different effects with regard to participant dissimilation. For instance, the Zamudio dialect allows deletion of 1PL dative and ergative morphemes, when a 2nd person clitic of the opposite case is present. That is, a 2nd person ERG clitic may trigger deletion of a 1st person plural DAT clitic, and a 2nd person DAT clitic may additionally trigger deletion of a 1st person plural ERG clitic. Interestingly, Yimas MODS parallel this effect. When the choice of MOD is ant- ‘potential,’ either the MOD itself or the agreement clitic may be altered:

(59)  
Potential:

a. ant-[ka]-wa-ntut
   POT-1SG.ERG-go-RM.PST
   ‘I would have gone.’ (agr → ERG) (F265)

b. ant-[∅]-ka-tu-r-um
   POT-3PL.-1SG.ERG-kill-PERF-PL
   ‘I almost killed them.’ (agr → ∅) (F264)

c. a-[pu]-tmuk-r-um
   POT-3PL.-ABS-fall-PERF-PL
   ‘They almost fell down.’ (ant- → a-) (F197)

In (59a), the presence of the potential-encoding clitic causes the 3PL object clitic to be deleted, while in (59b) the clitic surfaces as ERG. In (59c), however, the 3PL clitic remains intact and moreover remains ABS. This might be surprising, given that I had stated earlier that MODS and ABS clitics seem to be in complementary distribution. However, in (59c), the form of the MOD itself changes: it surfaces here as a- rather than its full form ant-. I take this to mean that the MOD is reduced. I propose that this is analogous to the Zamudio Basque facts; while usually the presence of a MOD triggers an effect on the agreement clitic, in certain cases the opposite obtains, in that the agreement clitic triggers an effect on the MOD. The fact that the agreement clitic is still ABS when the MOD is reduced signals that the two clitics are distinct enough to avoid a *MULTIPLE CL[-CASE] violation.

The operations behind these effects—deleting features (Impoverishment) or entire terminal nodes (Obliteration)—are generally assumed to be postsyntactic under Distributed Morphology frameworks, suggesting that the evaluation of anti-identity (whether *MULTIPLE CL[-CASE] is upheld) is also postsyntactic (cf. Richards, 2010).31

31 Specifically, Richards’ proposal is that anti-identity is a condition on linearization, in that elements must be
4.3 Extension: Participant dissimilation in Yimas

In the remainder of this paper, I discuss participant dissimilation effects in Yimas—again, the intolerance of two participant clitics—as an extension of our discussion of anti-identity. I will suggest that this data requires expanding our analysis to allow the evaluation of anti-identity to apply in cycles, an idea which I will elaborate upon shortly. Yimas exhibits participant dissimilation effects in trivalent constructions in which three clitics are adjoined to the verb, and in which two of the clitics are ERG and DAT\textsubscript{PART}. First, as a point of reference, the examples in (60a-c) are all grammatical:

(60) a. na-\textsubscript{mpi}tkam-r-\textsubscript{akn}\\3SG.ABS-[3DL.ERG]-show-PERF-[3SG.DAT]\\‘They two showed it to him.’ (F212)

b. k-\textsubscript{mpu}[\text{\{ja\}}tkam-t\\V1.SG.ABS-[3PL.ERG]-1SG.DAT-show-PERF\\‘They showed me it (the coconut).’ (F208)

c. k-[\text{\{ka\}}tkam-r-\textsubscript{akn}\\V1.SG.ABS-[1SG.ERG]-show-PERF-[3SG.DAT]\\‘I showed him it (the coconut).’ (F211)

Focusing on the person specifications of the ERG and DAT clitics (boxed), we see in (60) that 3/3 (a), 3/participant (b), and participant/3 (c) combinations are all permitted in Yimas. However, constructions in which both ERG and DAT are participants, as in (61), are illicit; the ERG clitic is obligatorily absent (note that, although we cannot actually see that the missing clitic would be ERG if present, this is inferrable from analogous constructions that do not trigger participant dissimilation).

(61) a. kapwa makaw wa-[\text{\{\text{n}kra\}}\text{\{ja\}}t\\2DL fish.IX.SG IX.SG.ABS-[2DL.ERG-1DL.DAT]-give-PERF\\‘You two gave us two makau.’ (F214)

b. kapa makaw wa-[\text{\{\text{k}ul\}}\text{\{ja\}}t\\1DL fish.IX.SG IX.SG.ABS-[1DL.ERG-2PL.DAT]-give-PERF\\‘We two gave you all makau.’ (F215)

c. ta-[\text{\{\text{n}kra\}}\text{\{pul\}}\\NEG=2SG.ERG-1DL.DAT=-hit\\‘You didn’t hit us two.’ (F258)

The absence of ERG case holds regardless of whether the verb is truly ditransitive (cross-referencing three syntactic arguments), as in (61a-b), or transitive (cross-referencing two syntactic arguments) but co-occurring with a MOD, as in (61c). Thus, participant dissimilation in Yimas is sensitive to the morphological case of the clitic, rather than grammatical function or syntactic position of the clitic’s associate. Moreover, participant ABS-DAT sequences do not yield participant dissimilation effects, as shown in (62);\textsuperscript{32} this again shows that participant dissimilation is sensitive to the morphological case of the clitic.

\textsuperscript{32}I note, however, that ABS-DAT sequences disallow 1>2 participant combinations, such that the ABS clitic is deleted. I take this effect to be distinct from the participant dissimilation effect, which bans both 1>2 and 2>1. Indeed, the illicitness of 1>2 (though not 2>1) is attested in a number of languages (Heath, 1998; Woolford, to appear). Woolford (to appear) derives this effect as a combination of person hierarchical considerations (such that
dissimilation takes place after dependent (ERG) case assignment.

I propose that ERG and DAT interact in this way because they instantiate morphological case, while ABS is simply caselessness. I moreover suggest that we can view participant dissimilation in Yimas as an extension of the general anti-identity requirement on clitics. In a construction consisting of three clitics in which one of them is \( \text{DAT}_{\text{PART}} \), one of the remaining two clitics will surface as ERG, because the assignment of ERG on one of the clitics resolves the violation of \(*\text{MULTIPLE CL}_{[-\text{CASE}]}\). However, this then results in the co-occurrence of two morphologically cased clitics—DAT and ERG. If Yimas clitics are subject to a general ban on featurally identical clitics, then just as multiple caseless clitics are illicit, multiple cased clitics should also be ruled out.

This is what drives participant dissimilation. In the event that a verb hosts two cased clitics, the grammar can distinguish between these clitics by looking at their \( \phi \)-specifications. When the \( \phi \)-specifications of the clitics are different (e.g., \( 3/PART \) and \( PART/3 \) combinations), the clitics are sufficiently distinct. However, when both clitics are \( \text{PART} \), they must be further dissimilated. Deletion of the ERG clitic resolves this issue.

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Participant dissimilation in Yimas: Given two \([\text{PARTICIPANT}]\text{Cl}_{[+\text{CASE}]}\)s, delete \(\text{Cl}_{\text{ERG}}\).

At this point, I must spell out the nature of the evaluation of anti-identity more specifically. As mentioned, I take this participant dissimilation effect to suggest that anti-identity is evaluated cyclically, or, in rounds. We see from this data that anti-identity in Yimas is evaluated twice; this is diagnosable by the existence of two different dissimilatory repairs that apply at different points in the postsyntax. In the first round, multiple caseless clitics are circumvented by dependent case assignment, or, in certain \( \text{MOD-AGR} \) combinations, Impoverishment or Obliteration. Once the relevant repair applies, the grammar once again checks whether anti-identity is upheld. In the event that there are two participant cased (dependent ERG and lexical DAT) clitics, the ERG clitic is deleted. This is summarized below:

\[\text{(64)}\]

\[\begin{align*}
\text{a. } & \text{ANTI-IDENTITY EVALUATION 1} \\
& \text{If violated, REPAIR 1 }\rightarrow\text{ dependent case assignment} \\
\text{b. } & \text{ANTI-IDENTITY EVALUATION 2} \\
& \text{If still violated, check for } \phi \text{-feature specifications of the offending elements.} \\
& \text{If still violated, REPAIR 2 }\rightarrow\text{ deletion of ERG clitic}
\end{align*}\]

An interesting aspect of this proposal concerns non-participant sequences of ERG and DAT clitics. As I mentioned earlier, in the second round of evaluation, the grammar may be satisfied with differing \( \phi \)-specifications, explaining why ERG and DAT sequences in which one is 3rd person and the other is participant are allowed. However, ERG and DAT sequences in which both clitics are 3rd person are also allowed—a surprising result, since these clitics have identical \( \phi \)-specifications. I posit that the fundamental difference between two participant cased clitics and two 3rd person cased clitics has to do with the surface position of these clitics. Specifically,

\[1\text{st person is privileged above 2nd and 3rd person)}\] and a desire to align local person morphemes at the left edge of the word.

\(33\text{It is worth wondering why the repair is to fully delete the entire clitic, rather than impoverishing it or doing something else. I leave this as an open question for future research.}\)
3rd person DAT morphemes are always postverbal. While I have nothing insightful to say about why this is, it obviates the anti-identity requirement, which holds within a prespecified domain, namely the span of preverbal clitics. The 3rd person DAT clitic is thus in a separate domain of anti-identity evaluation from the rest. More broadly, the result is that only sequences of participant ERG and DAT clitics need repairing.

4.4 Discussion

I showed that dependent case in Yimas functions as a dissimilatory repair for sequences of caseless clitics, which the language bans as a violation of a featural anti-identity requirement. The basis for this claim comes from the observation that a number of different processes apply over the Yimas clitics when a MOD is present. These processes—Impoverishment, Obliteration, and, importantly, dependent case assignment—conspire to block co-occurrences of MODS and caseless doubled clitics, suggesting that they are all triggered by the aforementioned anti-identity requirement. I moreover illustrated a participant dissimilation effect among ERG and DAT clitic sequences, and suggested that this, too, be taken as an anti-identity repair. However, this requires adopting the crucially derivational view that the evaluation of anti-identity may take place multiple times and be sensitive to different levels of identity during each cycle.

I propose more generally that the findings in this paper necessitate a reconceptualization of dependent case as fundamentally dissimilatory, as also alluded to by Baker (2015). This crosses different views of dependent case as syntactically vs. postsyntactically assigned, or assigned to arguments vs. clitics—all of these views are compatible with the basic insight that dependent case functions to dissimilate. A view that is not compatible with this paper, however, is one in which case is assigned dependently but without any morphological reflexes.

Before concluding, I provide some brief examples of other instances of anti-identity-driven case marking, within the realm of Differential Object Marking. The first example comes from Malayalam, in which [+ANIMATE] objects typically receive ACC case (this is animacy-triggered DOM). However, De Swart (2007) points out that we do find certain instances of non-animate objects also receiving ACC—when both arguments are inanimate, and both arguments could conceivably be interpreted as subject or object. This is illustrated below:

(65) **Malayalam:**

a. Raman kappal-(*)ine piLarthi
   Raman ship-(*)ACC split.PST
   **Intended:** ‘Raman split the ship.’

b. kappal tiramaalakaL-(*)piLarthi
   ship.NOM waves-(*)ACC split.PST
   ‘The ship split the waves.’

c. tiramaalakaL kappal-(*)ine piLarthi
   waves.NOM ship-(*)ACC split.PST
   ‘The waves split the ship.’

(Athulya Aravind, p.c.)

These data points show that inanimate objects may receive DOM just in case ambiguity might arise otherwise; the absence of ACC in (65b-c) is ungrammatical (Athulya Aravind, p.c.).

Another instance of this comes from Yongren Lolo (Tibeto-Burman), which exhibits what
Gerner (2008) terms ambiguity-driven DOM. In Yongren Lolo, word order is very flexible, so ambiguity readily arises. As a response to this, objects in Yongren Lolo may be differentially case-marked, though this seems to be optional; unlike in Malayalam, DOM in Yongren Lolo is solely for avoiding ambiguity. Potentially ambiguous cases such as (66a) are disambiguated, as in (66b), if the object is marked with ṭhie:

\[(66)\] **Yongren Lolo:**

- a. ṭo čemo tɕɔ zi
  *I follow the snake.* / *The snake follows me.*
- b. ṭo [čemo ṭhie] tɕɔ zi
  *I [snake OBJ] follow go*
  *I follow the snake.* (*‘The snake follows me.’*)

(Gerner, 2008)

These facts moreover support recent proposals by Baker & Vinokurova (2010), Pesetsky (2011), Baker (2015), and others that DOM is assigned dependently. They moreover support the crux of this paper—that dependent case exists to dissimilate.

## 5 Conclusion

In this paper, I defended the claim that dependent case is fundamentally dissimilatory, and, relatedly, that dissimilation via dependent case assignment takes place to satisfy a general requirement that all elements within a domain be morphosyntactically non-identical. The Yimas clitic system reveals that morphologically case is assigned dependently, and may moreover be assigned directly to doubled clitics, bypassing their associates. In Yimas, dependent case—as well as other dissimilatory processes—takes place to avoid sequences of caseless clitics, which the grammar rules out due to the aforementioned anti-identity requirement.

From a language-internal standpoint, this paper offers a comprehensive analysis of the case and agreement system of Yimas and demonstrates that, despite the system’s morphological complexity (and idiosyncrasy), systematicity is revealed upon closer examination. On a theoretical front, the analysis presented within the paper provides novel and straightforward evidence for the dependent theory of case assignment (and against other means of case assignment), as well as addresses the question of why such a system exists at all.

## References


