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# Topicality and pronominal ordering in two Manobo languages

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Approximately fifteen Manobo languages are spoken around the southern Philippines. Most of these require a single order if there are two personal pronouns. Two of these languages show widespread optional ordering; only in Obo Manobo and Kagayanen is there an ordering choice in the combination of two pronouns. Whereas the order with the more person-prominent pronoun first is unmarked, the opposite ordering is also found. Building on work by Brainard & Vander Molen (2005) and Pebley & Brainard (1999) on these two languages, respectively, we formalize a constraint that allows an abnormally topical pronoun to appear first. Normal topicality is derived from either grammatical person or semantic roles. Topicality can also be abnormally high: designated by the speaker in a given discourse. This paper also adds to the empirical picture, incorporating elicited data and other published material, reporting two new pronominal forms and ten new orders in Obo Manobo and two additional combinations of pronouns in Kagayanen.

Keywords: Austronesian, Manobo, Obo Manobo [obo], Kagayanen [cgc], pronoun, person, topicality, Optimality Theory, TOPIC-1ST, ME-1ST, YOU-1ST, ACTOR-1ST, SUBJECT-1ST.

The *Ethnologue* lists fifteen languages in the Manobo microgroup (Lewis 2009). All of these are spoken in the Philippines: mostly around Mindanao but with one outlier, Kagayanen, in the northern reaches of the Sulu Sea. The Manobo languages, according to Blust (1991), are a subgroup of Greater Central Philippine (GCPh). During the past several years, this paper's second author has been investigating the GCPh languages to determine the ordering of short personal pronouns; both of us have looked at the Manobo languages in this regard (Billings 2007, 2008a, 2008b/2010; Chen & Hung 2007; Peng & Billings 2008).

The second column of table 1 shows that, if two pronouns co-occur in a clause, most Manobo languages use grammatical person as the main criterion for ordering short personal pronouns relative to each other. Only Cotabato Manobo uses a different criterion: semantic roles.<sup>1</sup> That language categorically orders the GEN-case Actor pronoun first in the cluster.<sup>2</sup>

Table 1. Typology of pronominal ordering (and disformation) in the Manobo languages

Language types	Main cluster- internal ordering	Long NOM?	Disform NOM? If so, to what?	Long GEN?	Disform GEN? If so, to what?
Obo Manobo	person (preferred)	Yes	Yes: NOM	Yes	Yes: GEN
Kagayanen	person (preferred)	Yes	Yes: NOM	Yes	No
Ilianen Manobo Matigsalug Manobo Tagabawa	person	Yes	Yes: NOM	Yes	Yes: GEN
W. Bukidnon Manobo	person	Yes	Yes: NOM	No	(Yes: OBL)
Binukid (= Tala Andig) Higaunon Inimantu	person	Yes	Yes: OBL	No	Yes: OBL
Agusan Manobo Dibabawon Manobo	person	(Yes)	Yes: OBL	No	No
Cotabato Manobo	roles (Actor first)	Yes	Yes: NOM	No	Not applicable

Generally, the verb in Manobo (and other) Philippine languages is clause-initial, with both pronouns immediately following it. Negation and fronted adjuncts can affect this ordering, causing one or both of the pronouns to precede the verb; see (4a), (8a), and (23b) below for negated and (26b) for adjunct-fronting examples. These two phenomena can also co-occur (not shown in any examples below). The pronoun cluster's position within the clause is not the main issue of the current study, but see Peng & Billings (2008:185–192) re Binukid.

<sup>&</sup>lt;sup>1</sup> So far, we have sufficient pronoun-ordering data from thirteen of the fifteen Manobo languages. One of these, not listed in table 1, is Sarangani Manobo. Though the data from this language are extensive (DuBois 1976), the patterns of ordering are complicated by contact with non-Manobo languages (Burton 1996, 2003).

Abbreviations follow the Leipzig Glossing Rules. Additional abbreviations are listed in the appendix.

In Obo Manobo and Kagayanen, as in other languages of the area, two bound pronouns do not co-occur in the so-called Actor voice; in the other voices, which do allow pronominal co-occurrences, the pronoun encoding the Actor is in the GEN case and the other pronoun is in the NOM. These languages also attest an OBL case, which we do not discuss further. (These traditional Austronesianist voice and case names are merely pretheoretic.)

An additional complication in all of the Manobo languages—and many other GCPh languages, as well as the North-Central subgroup of Bunun, spoken in Taiwan (Lee & Li 2009)—has been dubbed DISFORMATION: the requirement that the second short pronoun in a clitic cluster be replaced by a form (with the same person/number features) from a long paradigm. The last four columns of table 1 summarize how disformation is realized in the Manobo languages. Of relevance to the current study is what kind of disformation is found in Obo Manobo and Kagayanen. As the third column indicates, these two languages attest a long NOM paradigm. (The full inventories of personal pronouns are shown in tables 2 and 4 below.) In both languages, a NOM pronoun usually appears in its short form if it does not co-occur with another personal pronoun. However, if it follows a GEN. SHORT pronoun, it is replaced by its corresponding person/number from the NOM.LONG paradigm. In other words, the NOM.SHORT pronoun disforms into its (NOM.)LONG counterpart. Furthermore, as the final column of table 1 shows, these two languages differ with regard to the existence of disformation in the GEN case. Whereas both languages attest a long paradigm of the GEN

pronoun (column 5, table 1), in Kagayanen the GEN.SHORT set does not undergo disformation. Accordingly, only in Obo Manobo, any GEN pronoun is forced to disform if it follows a NOM pronoun. Thus, if following another personal pronoun, in Obo Manobo both NOM and GEN pronouns must disform. By contrast, in a Kagayanen cluster only the NOM pronoun must disform (and only if that pronoun is the latter form in the pronominal cluster). All pronominal co-occurrences, and the disformations that result therefrom, are listed in tables 3 and 5 below.

The preceding paragraph notwithstanding, our paper doesn't account for disformation as such. We assume, based on evidence in related languages, that disformation is epiphenomenal to ordering.<sup>3</sup> From a derivational perspective, the two personal pronouns are first ordered relative to each other, and only then can the latter pronoun consider undergoing disformation.

The rest of this paper is structured as follows. Section 1 begins by presenting the facts in Obo Manobo, where for the first time two pronominal forms and ten combinations of pronouns are reported. Next, in section 2, we provide an analysis of Obo Manobo in the framework of Optimality Theory. Finally, section 3 deals with Kagayanen, where the essential ordering facts are the same but several additional complications are found (including portmanteaux, restrictions on certain co-occurrences, empirical gaps in the data, disformation being restricted to the NOM case, and so-called enclitic determiners). Due to such additional complications, no theoretical analysis is attempted for Kagayanen in the current study.

<sup>&</sup>lt;sup>3</sup> Re disformation in Binukid, see Peng & Billings (2008); in GCPh languages overall, Billings (2008b/2010).

### 1. Description of pronominal ordering in Obo Manobo

As reported in table 1 above, this language attests both short and long subparadigms of NOM and GEN pronouns. Table 2 presents the relevant pronominal forms in this language.<sup>4</sup>

Table 2. Pronominal inventories in Obo Manobo

PERSON	N/NUMBER		CASE				
Traditional labels			NOM long	GEN short	GEN long		
1sg	+me, -you, -pl	a	siyak	<u>ku</u>	<u>nikoddi</u>		
EXCL1PL	+me, -you, +pl	koy	sikami	<u>doy</u>	<u>nikami</u>		
INCL1PL	+me, +you, +pl	ki	siketa	<u>ta</u>	<u>niketa</u>		
2sg	-me, +you, -pl	ka	sikkow	<u>du</u>	<u>nikkow</u>		
2PL	-me, +you, +pl	kow	sikiyu	<u>dow</u>	<u>nikiyu</u>		
3sg	-me, -you, -pl	Ø	sikandin	<u>din</u>	<u>nikandin</u>		
3PL	-me, -you, +pl	Ø	sikandan	<u>dan</u>	<u>nikandan</u>		

[cf. Brainard & Vander Molen 2005:384; formal features follow McKaughan 1959]

Table 3 then shows all possible pronominal co-occurrences in this language.

<sup>&</sup>lt;sup>4</sup> Tables 2 and 3 follow a practical orthography (Brainard & Vander Molen 2005:365 fn. 4); the exceptions to IPA notation shown in the Obo Manobo data below are g [g], r [r], y [j], a [e], and o [5]; doubled vowel letters indicating long monophthongs, as in (8c) below; and double consonant letters designating geminates, found in each of (1a–b), (3a–b), (5a–b), (6a–b), (7a–b), and (8a–b, d–e). In addition, "Pronouns beginning with /d/ have [...] a [r]-initial allomorph that follows a vowel" (2005:384 fn. 26). In the pronouns, this allomorphy applies only in the GEN.SHORT column; see (8a, c) below. In addition, neither GEN.1SG.LONG *nikoddi* nor GEN.INCL1PL.LONG *niketa* is listed in Brainard & Vander Molen's pronoun-inventory table (2005:384). These two pronouns were elicited recently for us by Ena Vander Molen. As a result, in table 3 below all four clusters involving *nikoddi* and both clusters involving *niketa* are absent in that study's co-occurrence table (2005:405). In addition, none of the four pronominal clusters combining a NOM.3.LONG form with a GEN.2.LONG form in our table 3 is listed in their table (2005:405). All ten of these heretofore unpublished pronominal combinations were also elicited recently for us by Ena Vander Molen. Thus, this section revises the empirical facts about Obo Manobo considerably.

Table 3. Pronominal combinations in Obo Manobo

	Gen	+me –you –pl	+me -you +pl	+me +you +pl	–me +you –pl	-me +you +pl	–me –you –pl	-me -you +pl
Nom	<u>Scii</u>	<u>ku</u> ~ <u>nikoddi</u>	<u>doy</u> ~ <u>nikami</u>	<u>ta</u> ~ <u>niketa</u>	<u>du</u> ~ <u>nikkow</u>	<u>dow</u> ~ <u>nikiyu</u>	<u>din</u> ∼ <u>nikandin</u>	<u>dan</u> ~ <u>nikandan</u>
+me -you -pl	a ~ siyak				a <u>nikkow</u> <u>du</u> s <b>iyak</b>	a <u>nikiyu</u> <u>dow</u> s <b>iyak</b>	a <u>nikandin</u> <u>din</u> s <b>iyak</b>	a <u>nikandan</u> <u>dan</u> siyak
+me -you +pl	koy ~ sikami				koy <u>nikkow</u> <u>du</u> sikami	koy <u>nikiyu</u> dow sikami	koy <u>nikandin</u> <u>din</u> sikami	koy <u>nikandan</u> <u>dan</u> sikami
+me +you +pl	ki ~ <i>siketa</i>						ki <u>nikandin</u> <u>din</u> siketa	ki <u>nikandan</u> <u>dan</u> siketa
-me +you -pl	ka ~ sikkow	<u>ku</u> sikkow ka <u>nikoddi</u>	<u>doy</u> sikkow ka <u>nikami</u>				ka <u>nikandin</u> <u>din</u> s <b>ikkow</b>	ka <u>nikandan</u> dan sikkow
-me +you +pl	kow ~ sikiyu	<u>ku</u> sikiyu kow <u>nikoddi</u>	<u>doy</u> sikiyu kow <u>nikami</u>				kow <u>nikandin</u> din sikiyu	kow <u>nikandan</u> <u>dan</u> sikiyu
-me -you -pl	sikandin	<u>ku</u> sikandin sikandin <u>nikoddi</u>	doy sikandin sikandin nikami	<u>ta</u> sikandin sikandin <u>niketa</u>	<u>du</u> sikandin sikandin <u>nikkow</u>	dow sikandin sikandin nikiyu	din sikandin sikandin nikandin	dan sikandin sikandin nikandan
-me -you +pl	sikandan	<u>ku</u> sikandan sikandan <u>nikoddi</u>	doy sikandan sikandan nikami	<u>ta</u> sikandan sikandan <u>niketa</u>	du sikandan sikandan <u>nikkow</u>	dow sikandan sikandan <u>nikiyu</u>	din sikandan sikandan nikandin	dan sikandan sikandan nikandan

[cf. Brainard & Vander Molen 2005:405; person/number features follow McKaughan 1959]

In each cell of table 3, a hierarchy (involving grammatical persons thence semantic roles) determines the preferred order of two personal pronouns relative to each other. In the unmarked order (i) a first-person pronoun precedes the other pronoun; (ii) otherwise, a second-person pronoun precedes a third-person form; (iii) otherwise (i.e., if there are only third-person pronouns in the cluster, as the bottom-right corner of table 3 also shows), the GEN Actor precedes the NOM Undergoer. The opposite pronominal order, violating the same person/roles hierarchy, is marked—indicated along the bottom of each cell in table 3. (Incidentally, disformation is completely systematic; the latter of two personal pronouns takes the corresponding long form in the same case, with no change in its person/number features.)

<sup>&</sup>lt;sup>5</sup> Undergoer is a macrorole (Van Valin 2005) including Theme in (1a–b) and Patient in (2a–b). The terminology is trivial; suffice it to say that the other role is not the Actor: the most prominent semantic role in a given clause.

Starting with combinations of only third-person pronouns, Brainard & Vander Molen (2005:393) observe that both pronominal orders are possible, as (1a–b) show.<sup>6</sup>

```
sikandin.
(1) a. Od tommuwon
                         din
      od= tommu?-on
                        {din
                                         sikendin}
      IRR= meet-PV
                        GEN.3SG.SHORT NOM.3SG.LONG
       'She will meet him.'
                                                       [Brainard & Vander Molen 2005:393]
   b. Od tommuwon
                        sikandin
                                         nikandin.
                        {sikendin
                                         nikendin}
      od= tommu?-on
      IRR= meet-PV
                        NOM.3SG.LONG GEN.3SG.LONG
       'She will meet him.'
                                                       [Brainard & Vander Molen 2005:393]
```

The Actor-first order in (1a) is the unmarked choice. (Note that the NOM.3 pronouns in table 2 above have no overt short forms. As such, these utilize the relevant NOM.LONG form if they appear with another pronoun, even if the GEN Actor pronoun follows, as table 3 shows.) Two additional examples involving only third-person pronouns are shown as follows.

```
(2) a. Od suntukon
                         din
                                          sikandan.
       od= suntuk-on
                        {din
                                          sikenden}
       IRR= hit-PV
                         GEN.3SG.SHORT NOM.3PL.LONG
       'He will hit them.'
                                                        [Brainard & Vander Molen 2005:388]
   b. Od suntukon
                         sikandin
                                          nikandan.
       od= suntuk-on
                        {sikendin
                                          nikenden}
       IRR= hit-PV
                         NOM.3SG.LONG GEN.3PL.LONG
       'They will hit him.'
                                                        [Brainard & Vander Molen 2005:388]
```

Unlike (1a-b), which represent the two orders from the same cell in table 3, (2a-b) come from different cells of table 3. Still, (2a) is an unmarked order (where its marked cluster-internal

<sup>&</sup>lt;sup>6</sup> In the numbered examples, the first line shows the source in the original; the second line, phonemic notation and morphological analysis. Obo Manobo REAL(is) /id=/, in (4a) and (8c) below, and IRR(ealis) /ɔd=/, in nearly all the remaining Obo Manobo examples, are clitics (Brainard & Vander Molen 2005:372). As such, /id=/ and /ɔd=/ do not constitute potential hosts for the clitics. However, PROH /jp/ does host these clitics; see (4a) and (8a).

order would be *sikandan* <u>nikandin</u>), whereas (2b) is a marked order (with <u>dan</u> *sikandin* being its unmarked counterpart in terms of cluster-internal ordering).

Next, if the Actor is less person-prominent than the Undergoer, then Undergoer-Actor ordering is unmarked, as (3a) shows. The opposite order, in (3b), is thus marked.

```
(3) a. Od tommuwon
                                          nikkow.
      g nc-summct =bc
                                          nikkɔw}
                                          GEN.2SG.LONG
      IRR= meet-PV
                        NOM. 1SG. SHORT
       'You will meet me.'
                                                   [Brainard & Vander Molen 2005:377, 392]
   b. Od tommuwon
                        du
                                          siyak.
      d = tommu?-on \{du\}
                                           sigk}
      IRR= meet-PV
                         GEN.2SG.SHORT
                                          NOM.1SG.LONG
       'You will meet me.'
                                                       [Brainard & Vander Molen 2005:392]
```

Additional examples with the Actor being less person-prominent than the Undergoer—found either in the literature or during our corpus search—are listed in (4a–c).

```
(4) a. yo
                               nikiyu
                                               id
                                                      lumbag
                                                                 dutun
                                               id=
      ci
                               nikiu?
                                                      lumbeg
                                                                 dutun
             9}
      PROH NOM.1SG.SHORT
                               GEN.2PL.LONG REAL= throw.PV there
       '[...] don't <u>you</u> throw me in there [...]'
                                                                       [Sia 2005:234–235]
   b. Od suntukon
                                            nikandin.
       od= suntuk-on
                                            nikendin}
                         9}
       IRR= hit-PV
                         NOM.1SG.SHORT
                                            GEN.3SG.LONG
       'He will hit me.'
                                                         [Brainard & Vander Molen 2005:389]
   c. Od suntukon
                         ka
                                            nikandin.
       od= suntuk-on
                                            nikendin}
                         {kɐ
       IRR= hit-PV
                                            GEN.3SG.LONG
                         NOM.2SG.SHORT
       'He will hit you.'
                                                         [Brainard & Vander Molen 2005:388]
```

Each of (4a–c) happens to show the unmarked order of the pronouns relative to each other.

So far, this section has shown pronouns either equal in terms of the person hierarchy, in (1) and (2), or with the Actor *less* person-prominent than the Undergoer, in (3) and (4). The rest of this section examines the one remaining combination: where the Actor is *more* person-prominent than the Undergoer. Here we discuss the person/number combinations in much greater detail. Consider the data in (5) through (7), each consisting of cellmate pairs.<sup>7</sup>

sikandin. (5) a. Od tommuwon du sikendin} od= tommu?-on {du IRR= meet-PV NOM.3SG.LONG GEN.2SG.SHORT 'You will meet him.' [Brainard & Vander Molen 2005:392] b. Od tommuwon sikandin nikkow. od= tommu?-on { sikendin nikkow} IRR= meet-PV NOM.3SG.LONG GEN.2SG.LONG 'You will meet him.' [cf. Brainard & Vander Molen 2005:392] sikandin. (6) a. Od tommuwon dow od= tommu?-on {dow sikendin} IRR= meet-PV NOM.3SG.LONG GEN.2PL.SHORT 'You will meet *him*.' [Brainard & Vander Molen 2005:392] b. Od tommuwon sikandin nikiyu. od= tommu?-on {sikendin nikiu? IRR= meet-PV NOM.3SG.LONG GEN.2PL.LONG 'You will meet him.' [cf. Brainard & Vander Molen 2005:392]

<sup>&</sup>lt;sup>7</sup> At this point in the discussion our data differ from those reported in Brainard & Vander Molen (2005). We agree with them that Actor-first ordering is always possible if the Actor is more person-prominent. We also agree with them that both orders are found if the Actor is EXCL1PL (2005:391–392, 405). However, in all other combinations where the Actor is more person-prominent than the Undergoer, Brainard & Vander Molen claim that *only* Actor-first ordering (or A-before-P ordering in their terms) is found, in a few cases even listing some forms below, (5b) and (6b), as *un*acceptable. Some orders with a more person-prominent Actor are impossible in Brainard & Vander Molen's system because GEN.1SG.LONG *nikoddi* and GEN.INCL1PL.LONG *niketa* do not exist in their pronominal inventory at all (2005:384). Ena Vander Molen has confirmed for us the acceptability of the combinations below which are claimed to be unacceptable in Brainard & Vander Molen (2005:391–392, 405).

```
(7) a. Od tommuwon
                                             sikkow.
                        doy
      od= tommu?-on
                       icb}
                                             sikkow}
      IRR= meet-PV
                        GEN.EXCL1PL.SHORT
                                             NOM.2SG.LONG
       'We will meet you.'
                                                       [Brainard & Vander Molen 2005:392]
   b. Od tommuwon
                                             nikami.
                        ka
      od= tommu?-on
                                             nikemi?
      IRR= meet-PV
                        NOM.2SG.SHORT
                                             GEN.EXCL1PL.LONG
       'We will meet you.'
                                                       [Brainard & Vander Molen 2005:392]
```

In each of (5) through (7), the (a) example is unmarked. Other examples from the literature and our corpus search are listed in (8a–e); each of these is in the unmarked Actor-first order.

```
(8) a.
      Yo
                               sikandin
                                               boggayi
             ru
      jэ
             {du
                               sikendin}
                                               Si-jaggcd
      PROH GEN.2SG.SHORT
                               NOM.3SG.LONG give-PV.IMPERATIVE
       'Do not give her [...]'
                                          [Bayawan 2005b:50–51; same pronominal order as (5a)]
   b. oddatan
                        du
                                        sikandan.
      oddet-en
                                        sikenden}
                       {du
      pay.respect-RV
                        GEN.2SG.SHORT NOM.3PL.LONG
       '[...] you are paying respect to them.'
                                                                 [Bayawan 2005a:150-151]
   c. Na.
             id
                    posadoo
                                                        sikandan
                                  roy
              id=
       ๆท
                     :cbsscq
                                 icb}
                                                        sikenden}
             REAL= inform.PV
                                  GEN.EXCL1PL.SHORT
                                                       NOM.3PL.LONG
       'Then we informed them [...]'
                                                             [Bayawan 2005c:172-173, 262]
   d. Od tommuwon
                         ku
                                          sikkow.
       od= tommu?-on
                                          sikkow}
                        {ku
       IRR= meet-PV
                         GEN.1SG.SHORT
                                          NOM.2SG.LONG
       'I will meet you.'
                                                        [Brainard & Vander Molen 2005:391]
   e. Od tommuwon
                         ku
                                          sikandin.
       od= tommu?-on
                                          sikendin}
                        {ku
       IRR= meet-PV
                         GEN.1SG.SHORT NOM.3SG.LONG
       'I will meet him.'
                                                        [Brainard & Vander Molen 2005:379]
```

In fact, all of the corpus examples we found with the Actor as the more person-prominent of the two pronouns (not all of which are listed here) exhibit the unmarked order. The marked order, with the less person-prominent Undergoer appearing first in the cluster, is indeed rare.

To summarize this section, if two pronouns co-occur in Obo Manobo, then there is a choice of orders. In each combination the unmarked order conforms to a hierarchy of persons (first > second > third) and, if both pronouns encode third person, semantic roles (Actor first).

## 2. Optimality-theoretic analysis of Obo Manobo

This section builds on conceptual proposals in Brainard & Vander Molen (2005) and Pebley & Brainard (1999). Our approach teases pragmatic topicality apart from other kinds of prominence in order to show how these factors compete as output constraints in the grammar.

By way of background, Billings & Kaufman (2004:15–18) sketch a typology of how two clitic pronouns are ordered relative to each other in Austronesian languages. Chen & Hung (2007) further formalize several constraints in the framework of Optimality Theory using three Manobo languages as their test bed: Ilianen Manobo, Tagabawa, and Kagayanen. Just a few toggle constraints are needed. To begin, a number of languages require the GEN-case

2008b/2010; Chen & Hung 2007; Kaufman, to appear; Peng & Billings 2008) shows that [+me, -you] pronouns precede [-me, +you] forms in all Manobo and Danao languages (except Cotabato Manobo and Iranun of Sabah).

<sup>&</sup>lt;sup>8</sup> Recent discoveries require a few of the observations in Billings & Kaufman (2004:16) to be updated. First, the literature on Isbukun Bunun at the time reported strict ACTOR-1ST ordering. Lee & Li (2009) and Li (to appear) now report that Isbukun Bunun (as well as an additional Bunun dialect, Takituduh) does not require the Actor pronoun to be cluster-initial. In addition, person-based ordering was thought to be limited to LOCAL-1ST; this is because Billings & Kaufman did not take orders with disformation into account in characterizing three Manobo languages (from DuBois 1976:50; Liao 2004; Weaver & Weaver 1964). Recent work (Billings 2007,

Actor to be first in the pronominal cluster. The relevant constraint in these languages is hereafter called ACTOR-1ST. Other languages require the opposite order. The constraint here is SUBJECT-1ST. As for grammatical person, a few languages require any first- or second-person pronoun (i.e., a speech-act participant) to precede any third-person pronoun in the clitic cluster. The relevant constraint here is LOCAL-1ST. Other languages require a more elaborate person-based ordering, where with two co-occurring local pronouns, the first-person pronoun categorically precedes the second-person form. Here a subhierarchy of constraints is needed: ME-1ST dominating YOU-1ST. One final way to order two clitic pronouns is based on prosodic weight, where a monosyllabic pronoun precedes a heavier form. The relevant constraint has been called LIGHT-1ST. Thus, a relatively small list of constraints have accounted for all the languages encountered so far in which pronominal clitics take a required cluster-internal order.

In Optimality Theory, a language's grammar can be defined as the ranking of violable constraints. For example, Binukid, Ilianen Manobo, and Tagabawa are characterized, without exception, by the hierarchy ME-1ST » YOU-1ST » ACTOR-1ST (Billings 2007, 2008b/2010;

<sup>&</sup>lt;sup>9</sup> The languages that exhibit ACTOR-1ST ordering are Mamanwa and Tausug, a subgroup of Central Philippine (Lee & Billings 2008); Cotabato Manobo (Billings 2007, 2008b/2010); most of the Palawanic microgroup (Billings 2008b/2010; Billings & Davis 2009); and the Central Luzon microgroup (Billings & Kaufman 2004:16–17, 25–26). As the preceding footnote mentions, ACTOR-1ST ordering is reported for Isbukun Bunun (Huang 1997:370; Li 1997:319; Zeitoun 2000:68—also cited by Billings & Kaufman 2004:16; Huang et al. 1999:186–188; Lee & Billings 2008:194); recently Lee & Li (2009) and Li (to appear) have reported exceptions. <sup>10</sup> Languages that utilize SUBJECT-1ST categorically are rare: Seediq, an Atayalic language of Taiwan (Holmer 1996, cf. Chang 1999; Li, to appear), and the Kalamianic group of the Philippines (Quakenbush & Ruch 2008). <sup>11</sup> Iranun (Danao), Malaysia (Billings 2007, 2008b/2010), and dialects of Atayal, Taiwan (Li, to appear; Liao 2004:282–296, 2005—cf. Huang 1989, 1995; Huang et al. 1999:187; Rau 1992:146–147), are exemplars.

<sup>&</sup>lt;sup>12</sup> Manobo and Danao (all but Cotabato Manobo and Iranun, mentioned in footnotes above) each categorically order first before second before third person (Billings 2007, 2008b/2010; Brichoux & Brichoux 1977; Chen & Hung 2007; Kaufman, to appear; Liao 2004:459–468; Peng & Billings 2008; Weaver & Weaver 1964).

<sup>&</sup>lt;sup>13</sup> Most Central Philippine languages (e.g., aside from the Tausug-Mamanwa subgroup) require LIGHT-1ST ordering (Billings 2005; Bloomfield 1917:143, 181; Lee 2009; Lee & Billings 2008, McFarland 2001).

Chen & Hung 2007; Peng & Billings 2008). Namely, if there is a first-person pronoun in the cluster, it will go first, satisfying ME-1ST; thereafter, only if there is no first-person pronoun, then any second-person form will go first, satisfying YOU-1ST; and only if both pronouns encode the third person, then the GEN-case Actor will go first, satisfying ACTOR-1ST.

An Optimality-theoretic grammar includes many types of constraints (e.g., to account for phonotactics). This section mentions only the constraints relevant to pronominal ordering. For the current purposes, we don't attempt an analysis of which *form* the pronouns take. The constraints in this paper merely assess the pronouns' *order* relative to each other.<sup>14</sup>

As part of an Optimality-theoretic grammar, the constraints that assess pronominal ordering compete with each other. For example, in (3a–b) above, one pronoun bears the role property of Undergoer, the case property of NOM, and the person properties of [+me, -you], whereas the properties of Actor, GEN, and [-me, +you] characterize the other pronoun. In this combination of roles, cases, and persons, the order in (3a) satisfies each of SUBJECT-1ST and ME-1ST, whereas the opposite order, in (3b), satisfies each of ACTOR-1ST and YOU-1ST.

<sup>&</sup>lt;sup>14</sup> The constraints above fall into two groups in terms of whether they can describe a language categorically. For example, as the highest-ranking constraint in a particular language, ACTOR-1ST and SUBJECT-1ST cause all pronominal clusters to begin with either an Actor or a subject, respectively. This is because in a cluster of pronouns, there is always only one Actor and only one subject. That is, one of these two constraints, if at the top of the hierarchy, invariably decides all the ordering. Only in Bunun, to our knowledge, can the same pronoun be both the Actor and the subject (Li, to appear). By contrast, the remaining constraints weigh in on only some clusters but not others. For example, in most languages where LIGHT-1ST is the dominant constraint, the inventories of pronouns include heavy forms. It is therefore possible for both pronouns in a cluster to be heavy; in such combinations, another constraint emerges to decide the ordering. For instance, Tagalog requires a monosyllabic pronoun to precede a disyllabic form, but if there are two disyllables, the two orders violate LIGHT-1ST equally, thus not selecting one order over the other. As a result, lower-ranking ACTOR-1ST emerges to order the two forms (without exception according to a corpus study reported in McFarland 2001). By contrast, Atayal (Squliq and Mayrinax C'uli') shows emergence of LIGHT-1ST if LOCAL-1ST is controlled for (Liao 2004, 2005; also Li, to appear—contra foregoing analyses by Huang 1989, 1995; Huang et al. 1999; and Rau 1992).

Of relevance to the two languages investigated in this paper (and the Manobo group overall) are only three constraints mentioned so far: ME-1ST, YOU-1ST, and ACTOR-1ST. Cotabato Manobo orders all pronominal combinations using ACTOR-1ST (Billings 2007, 2008b/2010). The other Manobo languages investigated so far—that is, all but Obo Manobo and Kagayanen—*categorically* conform to the hierarchy ME-1ST » YOU-1ST » ACTOR-1ST (Billings 2007, 2008b/2010; Chen & Hung 2007; Peng & Billings 2008). In other words, Obo Manobo and Kagayanen are problematic because of the variability in their pronominal orders.

Now, in Obo Manobo, the same ME-1ST » YOU-1ST » ACTOR-1ST hierarchy accounts for the *unmarked* orders (written along the top of each cell in table 3 above). Still unexplained are the opposite, *marked* orders (written along the bottom of each cell in the same table).

The insight we wish to adopt from Brainard & Vander Molen (2005:391) and Pebley & Brainard (1999:77) is that pragmatic topicality should be considered. Both of these studies discuss three kinds of prominence. The first of these is encoded in a person hierarchy: 1st > 2nd > 3rd person. The second type of prominence involves semantic roles. The final

<sup>&</sup>lt;sup>15</sup> Not all languages utilize the same hierarchy. In many of the Algonquian languages of North America, the pattern is 2nd > 1st > 3rd; clauses that violate this hierarchy are distinguished by a verbal affix known as an inverse marker (Brainard & Vander Molen 2005:366). Other linguists have extended this idea to constructions that deviate from the normal hierarchy in most other (i.e., non-Algonquian) languages—namely, 1st > 2nd > 3rd person. For example, in Nocte (Tibeto-Burman, India) the verb agrees with the ERG-case Actor if this argument is more person-prominent than the Undergoer. However, if the Undergoer is more person-prominent than the Actor, then the verb takes the inverse-marking affix /-h/ and agrees with the Undergoer rather than with Actor (Thompson 1994:58, citing DeLancey 1981, in turn citing Das Gupta 1971). Using the constraints presented above in this section, the Algonquian 2nd > 1st > 3rd pattern results from You-1st dominating ME-1st; non-Algonquian languages can be captured by the opposite ranking (namely: ME-1st » You-1st).

<sup>&</sup>lt;sup>16</sup> The idea that an Actor is more prominent than an Undergoer has been dubbed the thematic hierarchy, where Agent > Experiencer and so on. See in particular Grimshaw (1990:7–30) for a model of how thematic and aspectual subhierarchies come together in order for Causer to be above Agent. Allan (2007:264–266) summarizes how functionalist frameworks deal with the same type of issue. In Brainard & Vander Molen's

type of prominence is topicality itself. Here we mean the prominence of a particular referent in the discourse separate from any topicality that might be derived from the pronoun's grammatical person or semantic role. That is, a third-person pronoun is less topical than a local pronoun, and the Undergoer is less topical than the Actor. The topicality we mean here is the kind that a speaker can assign to a given referent independent of either its person features or its semantic role. For example, though a third-person Undergoer may have minimal topicality normally, it can be imbued with extra topicality—as it were, in order to demonstrate that this referent is particularly important to what the speaker is talking about.<sup>17</sup>

approach, the relative prominence of semantic roles is encoded not in their person-and-topicality hierarchy, "1 > 2 > 3 > pronouns > full NPs" (2005:391), but rather in an active/inverse distinction. In their analysis, an active clause is defined as A before P; an inverse, as P before A. They point out that A and P are not semantic roles but grammatical relations (2005:368, 373; Pebley & Brainard 1999:118 n. 6). In fact, they use the labels VAP and VPA, where V stands for the verb, suggesting that the verb precedes both arguments. The labels VAP and VPA are somewhat misleading in that the verb occasionally appears *after* the two pronouns, as in (8a) above: NEGAPV, where the PROH marker is a special kind of NEG. Moreover, if the clause has each of NEG, a pronoun, and a nonpronominal, then the verb appears *between* the pronoun and the other nominal: NEGAVP or NEGPAV. Brainard & Vander Molen's model also differs from how "inverse" is understood in the literature. According to Thompson (1994:60), "Traditional uses of the word 'inverse' have been limited to those languages in which inverse constructions are based on the ranking of persons." (See the preceding footnote's exemplar languages.) Brainard & Vander Molen's definition is closer to Thompson's, where "the non-agent [our Undergoer] is more topical than a typical non-agent in a direct [= Brainard & Vander Molen's active] clause" (1994:62).

<sup>17</sup> The kind of topics we are concerned with are those that are already established in the discourse—because either the entity is mentioned recently or it refers to a speech-act participant (speaker or addressee). It is also possible to impose a new topic into the discourse; separate (nonclitic) pronouns are used for this purpose:

(i) Siyak kos od tommu kandin.

sięk kos od= tommu? kandin

NOM.1SG.LONG NMR IRR= meet.AV OBL.3SG

'I am the one who will meet him.' [Bra

[Brainard & Vander Molen 2005:379]

(ii) Danen i ubos may sawa.

danin =i ubos maj sawa?

NOM.3PL.LONG DEF all EXT.INDF spouse

'They both had wives.'

[Pebley 1999b:30]

Obo Manobo

Kagayanen

The pronouns encoding new topics in (i) and (ii) appear in sentence-initial position, from the NOM.LONG set.

The diagram in (9), simplified slightly from one in Thompson (1994:48), describes how a referent can have increased (\(\frac{1}{2}\)) or decreased (\(\frac{1}{2}\)) topicality compared to normal. \(^{18}\)

- (9) a. Actor Undergoer
  - b. Actor↑ Undergoer↑
  - c. Actor Undergoer↑
  - d. Actor↓ Undergoer↑
  - e. Actor Undergoer
  - f. Actor↓ Undergoer↓
  - g. Actor Undergoer
  - h. Actor↑ Undergoer↓
  - i. Actor↑ Undergoer

Thompson (1994:50) also discusses two ways to measure (pre-existing) topicality—by counting coreferential expressions in either the preceding or the following discourse. <sup>19</sup>

Thus, in addition to constraints that assess person (Local-1st, decomposed into ME-1st and You-1st) or semantic roles (Actor-1st), we propose Topic-1st. If the initial pronoun in the cluster exhibits more than normal topicality (in the sense of Thompson 1994:48–49) then this Topic-1st constraint is satisfied. That is, this pronoun need not be more topical than the other; the two referents' degrees of topicality are not compared as such. In this paper, we show the underlying diacritic ↑ to indicate higher-than-normal topicality.

<sup>&</sup>lt;sup>18</sup> Thompson uses A and P instead of our Actor and Undergoer, respectively—not a crucial difference. Additionally, in Thompson's diagram all three P↑ rows are labeled as inverse; the P↓ rows, as antipassive, and the A↓ rows, as passive. We find it interesting that there is no separate label for the three A↑ rows, suggesting that linguists generally have not sought a special mechanism for the greater-than-normal topicality of the Actor. (In our own Optimality-theoretic analysis below, the notion of ↓, or decreased topicality, is not utilized at all.)

<sup>19</sup> A topic's importance (or persistence) can be measured by counting the number of clauses out of the following ten in which a coreferential expression occurs. By contrast, a topic's predictability in the discourse is measured through referential distance: "counting the number of clauses back until one finds a coreferential argument" (Thompson 1994:50). Thompson concludes that importance—looking at the following stretch of text rather than the preceding bit—is more useful in gauging the topicality of a given pronoun.

Our first Optimality-theoretic tableau shows two third-person pronouns. (Each tableau in this study corresponds to a sentential example above—e.g., where glosses can be verified.)

[cf. (1a) above]

∽ <u>din</u> sikandin	*	*	*		*
Input: PV; Actor [-me, -you, -pl]; Undergoer [-me, -you, -pl].	TOPIC- 1ST	ME- 1ST	You- 1st	ACTOR- 1ST	SUBJECT- 1ST
sikandin <u>nikandin</u>	*	*	*	*! W	L

None of Topic-1ST, ME-1ST, or YOU-1ST is crucial in this tableau—because neither pronoun encodes \( \), [+me], or [+you] (respectively). Both candidates violate these three constraints equally (once each). The attested candidate, written along the top of this tableau, satisfies ACTOR-1ST and violates SUBJECT-1ST. The candidate with the opposite order, written along the bottom, violates ACTOR-1ST and satisfies SUBJECT-1ST. In order for the attested candidate to be the optimum, it must be true that ACTOR-1ST dominates SUBJECT-1ST. In the shorthand used by Optimality theorists, ACTOR-1ST » SUBJECT-1ST. (Indeed, SUBJECT-1ST does not decide any pronominal ordering in Obo Manobo. It is shown here primarily to demonstrate how one constraint dominates another in an Optimality-theoretic tableau.)

The next two tableaux each demonstrate the interaction of some third constraint:

[cf. (4b) above]

∽a <u>nikandin</u>	*		*	*	
Input: PV; Actor [-me, -you, -pl]; Undergoer [+me, -you, -pl].	TOPIC- 1ST	ME- 1st	You- 1st	ACTOR- 1ST	SUBJECT- 1ST
din siyak	*	*! W	*	L	* W

In order for the attested order in (11), a <u>nikandin</u>, to be the optimum, it must be true that ACTOR-1ST is dominated by at least one of ME-1ST and SUBJECT-1ST. Inasmuch as Hung & Billings (page 17 of 41)

ACTOR-1ST » SUBJECT-1ST, from tableau (10), it must be ME-1ST that dominates ACTOR-1ST.

Thus we now know from tableaux (10) and (11) that ME-1ST » ACTOR-1ST » SUBJECT-1ST.

(Grey shading in our tableaux is based on cumulative rankings so far in the paper.)

Similarly, tableau (12) demonstrates—given that ACTOR-1ST » SUBJECT-1ST, again from tableau (10)—that it must be YOU-1ST that dominates ACTOR-1ST.

(12)					[0	cf. (4c) ab	ove]
	<b>∽ka</b> <u>nikandin</u>	*	*		*		
	Input: PV; Actor [-me, -you, -pl]; Undergoer [-me, +you, -pl].	TOPIC- 1ST	ME- 1ST	You- 1st	ACTOR- 1ST	SUBJECT- 1ST	
	din sikkow	*	*	*! W	L	* W	

Combining tableaux (10) through (12) results in the ranking of four constraints so far:

(13) **Preliminary:** {ME-1ST, YOU-1ST} » ACTOR-1ST » SUBJECT-1ST

The curly braces in (13) indicate that there is no ranking of ME-1ST and YOU-1ST relative to

each other. The next two tableaux each demonstrate that ME-1ST in fact dominates You-1ST.

Obo Manobo

[cf. (3a) above] (14)*∽*a <u>nikkow</u> Input: PV; Actor [-me, +you, -pl]; TOPIC-You-ACTOR-SUBJECT-ME-Undergoer [+me, -you, -pl]. 1st 1st 1st 1st 1st W L W du siyak

In tableau (14)—inasmuch as YOU-1ST » ACTOR-1ST » SUBJECT-1ST, from (13)—then in order for attested a <u>nikkow</u> to be the optimum, it must be true that ME-1ST » YOU-1ST.

[cf. (8d) above]

∽ <u>ku</u> sikkow	*		*		*
Input: PV; Actor [+me, -you, -pl]; Undergoer [-me, +you, -pl].	TOPIC- 1ST	ME- 1st	You- 1st	ACTOR- 1ST	SUBJECT- 1ST
ka <u>nikoddi</u>	*	*! W	L	* W	L

Similarly, tableau (15) shows that—inasmuch as YOU-1ST » ACTOR-1ST, also from (13)—then if attested <u>ku</u> *sikkow* is the optimum, it must be true that ME-1ST » YOU-1ST. The ranking so far can thus be updated as in (16), including all the constraints except TOPIC-1ST.

(16) **Preliminary:** ME-1ST » YOU-1ST » ACTOR-1ST » SUBJECT-1ST **Obo Manobo** 

The hierarchy in (16) is sufficient to handle most Manobo languages—e.g., Binukid (Peng & Billings 2008) or Ilianen Manobo and Tagabawa (Chen & Hung 2007).

What sets apart Obo Manobo (and Kagayanen, discussed separately below) is how pragmatic topicality can, so to speak, override person and semantic roles to produce the alternative orders in the bottom each cell in table 3 above. This idea is formalized in (17), the input of which matches that of tableau (14) above, except for the \(^{\dagger}\) diacritic on the Actor.

[cf. (3b) above]

<u>∽du</u> siyak		*			*
Input: PV; Actor [-me, +you, -pl] \(^;\) Undergoer [+me, -you, -pl].	TOPIC- 1ST	Me- 1st	You- 1st	ACTOR- 1ST	SUBJECT- 1ST
<b>a</b> <u>nikkow</u>	*! W	L	* W	* W	L

Tableau (17) shows that—inasmuch as ME-1ST » YOU-1ST » ACTOR-1ST, from (16)—then in order for attested <u>du</u> *siyak* to be the optimum, it must be true that TOPIC-1ST » ME-1ST. This completes the rankings of the five constraints in this language, displayed in (20) below.

Note that the pronoun that is *more* person-prominent—e.g., the NOM-case Undergoer in (3a–b) and tableaux (14) and (17)—can also be more topical than normal. In tableau (18) only the NOM Undergoer is more topical than normal and therefore is marked with the ↑ diacritic.

[cf. tableau (14) above]

<i>▽</i> <b>a</b> <u>nikkow</u>			*	*	
Input: PV; Actor [-me, +you, -pl]; Undergoer [+me, -you, -pl] ↑.	TOPIC- 1ST	ME- 1st	You- 1st	ACTOR- 1ST	SUBJECT- 1ST
<u>du</u> siyak	*! W	* W	L	L	* W

As (18) shows, we get the same optimum form as in (14). The difference between these two tableaux is that TOPIC-1ST decides the relative order in (18), whereas in (14) it is ME-1ST that makes the same determination. See the exclamation points and shading in each tableau.

It is also possible in principle for *both* pronouns to be more topical than normal:

[cf. tableaux (14) and (18) above]

∽ <b>a</b> <u>nikkow</u>			*	*	
Input: PV; Actor [-me, +you, -pl] ↑; Undergoer [+me, -you, -pl] ↑.	TOPIC- 1ST	ME- 1st	You- 1st	ACTOR- 1ST	SUBJECT- 1ST
<u>du</u> siyak		*! W	L	L	* W

Again, we also get the same optimum in (19) as in tableaux (14) and (18). In (19) ME-1ST is the crucial factor. In (14) both candidates *violate* TOPIC-1ST, whereas in (19) both candidates *satisfy* the same constraint. Tableaux (14) and (17) through (19) demonstrate that there are only two possible outcomes in a given pair of pronouns. From our experience, three tableaux will generate the same optimum: where neither or both pronouns have the \(\gamma\) diacritic, as well as where only the more prominent pronoun (on the hierarchy of person features and semantic roles) has the \(\gamma\) diacritic. Only one of the permutations—namely, where only the pronoun that

is less person-prominent is marked with the ↑ diacritic—results in the opposite order. (We leave it to the reader to verify this fact in the remaining cells of table 3.)

From the tableaux above, the resulting ranking of the five constraints is as follows:

(20) **Final:** TOPIC-1ST » ME-1ST » YOU-1ST » ACTOR-1ST » SUBJECT-1ST *Obo Manobo*Unlike in most of the other Manobo languages, for which the three-constraint hierarchy

ME-1ST » YOU-1ST » ACTOR-1ST suffices to account for a single allowed relative order per pair of pronouns, in Obo Manobo the constraint TOPIC-1ST is also proposed, and ranked above the other constraints, requiring an abnormally topical pronoun to appear first in the cluster.

## 3. Description of pronominal ordering in Kagayanen

Though Obo Manobo and Kagayanen share the same ordering of pronouns, a number of additional complications obscure this commonality. This section lays out the facts in Kagayanen, showing the similarities along with the various complications in Kagayanen.

The pronominal forms in Kagayanen relevant to the current study are listed in table 4. Note that, like Obo Manobo, there are inaudible NOM.3.SHORT pronouns in Kagayanen. For these, the corresponding NOM.3.LONG forms are often (though not always) used. The only syncretism to be concerned with is on the bottom (3PL) row of this table. According to Harmon (1977:87), /dqn+n/ serves as either the NOM.LONG or the GEN.SHORT form.<sup>20</sup>

Tables 4 and 5 follow a practical orthography (Pebley & Brainard 1999:118 n. 5); the exceptions to IPA shown in the Kagayanen data below are a [ $\alpha$ ]; e [i], g [g], i [i]  $\sim$  [i], e [i], e[i], e[i],

Table 4. Pronominal inventories in Kagayanen

PERSO	N/NUMBER	CASE			
Traditional labels			NOM long	GEN short	
1sg	+me, -you, -pl	a	yaken	<u>ko</u>	
EXCL1PL	+me, -you, +pl	kay	kami	<u>nay</u>	
INCL1PL	+me, +you, +pl	ki	kiten	<u>ta</u>	
2sg	-me, +you, -pl	ka	kaon	<u>no</u>	
2PL	-me, +you, +pl	kaw	kyo	nyo	
3sg	-me, -you, -pl	Ø	kanen	din	
3PL	-me, -you, +pl	Ø	danen	danen	

[based on Harmon 1977:87, cf. Pebley 1999a:57; formal features follow McKaughan 1959]

Harmon (1977:86) also provides a table of co-occurring "enclitic pronouns"; we take this term to mean that both pronouns are required to attach to the preceding (clause-initial) word. This issue is especially relevant if the latter of the two pronouns is from the NOM.LONG paradigm.<sup>21</sup> Table 5 shows that overt combinations, which include any of the NOM.3.SHORT pronouns from table 4, utilize the relevant NOM.LONG form of the same person and number. Harmon (1977:86) reports no overt combinations involving a NOM.3 pronoun. Pebley & Brainard (1999:83) provide an example with co-occurring third-person forms, in (21a). Our search of recently published scripture translations (*KTC* 2007) yielded another overt

hyphen for /7/ (only between a consonant and vowel but not shown intervocalically or at edges of words). In addition, for ease of reference, GEN-case pronouns are underlined; all NOM-case pronouns, emboldened; and only long pronouns, italicized. The paradigm labeled as NOM.LONG in table 1—which Harmon labels as "independent" (1977:87)—includes other functions. For example, preceding its members with /ki/ makes it OBL,

as in (25d) below. (This OBL-marking /ki/ should not be confused with the NOM.INCL1PL.SHORT pronoun ki.)

21 Several examples of pronominal clusters show the second (disformed) pronoun either preceding or following a non-initial verb (e.g., in a negated clause). This suggests that a disformed pronoun in Kagayanen is only optionally in clitic position (as are OBL-case pronouns in this language); see also Pebley (1998:45 n. 5).

co-occurrence of this kind, in (21b). In such a clause, the GEN.SHORT form, encoding the Actor, appears first in the pronominal cluster and then the NOM.LONG form must be used.<sup>22</sup>

```
(21) a. Paatagan
                         din
                                         danen
                                                         (an)
                                                                ta
                                                                     tinapay.
        pa-atag-an
                        {din
                                         danin
                                                         (an)}
                                                                ta
                                                                     tinapaj
        REAL-give-RV
                         GEN.3SG.SHORT NOM.3PL.LONG
                                                                GEN bread
                                                         DEF
        'She gave them some bread.'
                                                                [Pebley & Brainard 1999:83]
    b. Painsaan
                       danen
                                                              i
                                       isab
                                              kanen
                                                              i}
        pa-insa-an
                      {dan+n
                                       isab
                                              kanin
        REAL-ask-RV GEN.3PL.SHORT again NOM.3SG.LONG DEF
        'They asked him again [...]'
                                                                  [John 1:21, KTC 2007:369]
```

In fact, these are the only overt combinations of third-person pronouns in Kagayanen. All of the co-occurrences of personal pronouns in Kagayanen are listed schematically in table 5.

**Table 5. Pronominal combinations in Kagayanen** 

	<u>Gen</u>	+me -you -pl	+me -you +pl	+me +you +pl	-me +you -pl	-me +you +pl	-me -you -pl	-me -you +pl
Nom		<u>ko</u>	<u>nay</u>	<u>ta</u>	<u>no</u>	<u>nyo</u>	<u>din</u>	<u>danen</u>
+me -you -pl	a ~ <i>yaken</i>				a <u>no</u> <u>no</u> yaken	a <u>nyo</u> nyo yaken	a <u>din</u> <u>din</u> yaken	a <u>danen</u> <u>danen</u> yaken
+me -you +pl	kay ~ <i>kami</i>				kay <u>no</u> <u>no</u> kami	kay <u>nyo</u> nyo kami	kay <u>din</u> <u>din</u> kami	kay <u>danen</u> <u>danen</u> kami
+me +you +pl	ki ~ <i>kiten</i>						ki <u>din</u> <u>din</u> kiten	ki <u>danen</u> danen kiten
-me +you -pl	ka ~ <i>kaon</i>	ta kaw <u>ko</u> <i>kaon</i>	nay kaon ka nay				ka <u>din</u> <u>din</u> kaon	ka <u>danen</u> danen kaon
-me +you +pl	kaw ~ <i>kyo</i>	ta kyo <u>ko</u> <i>kyo</i>	<u>nay</u> <i>kyo</i> kaw <u>nay</u>				kaw <u>din</u> <u>din</u> <i>kyo</i>	kaw <u>danen</u> <u>danen</u> kyo
-me -you -pl	Ø ~ kanen	<u>ko</u> kanen ∼Ø <u>ko</u>	nay kanen ~ Ø nay	<u>ta</u> kanen ∼ Ø <u>ta</u>	<u>no</u> kanen ∼Ø <u>no</u>	nyo kanen ~ Ø nyo	— Ø <u>din</u>	danen kanen ~ Ø danen
-me -you +pl	Ø ~ danen	<u>ko</u> danen ∼ Ø <u>ko</u>	nay danen ~ Ø nay	<u>ta</u> danen ∼ Ø <u>ta</u>	<u>no</u> danen ∼ Ø <u>no</u>	nyo danen ~ Ø nyo	din danen ∼Ødin	— Ø <u>danen</u>

[based loosely on Harmon 1977:86; person/number features follow McKaughan 1959]

<sup>&</sup>lt;sup>22</sup> We have modified interlinear glosses in numbered Kagayanen examples while still generally following Pebley & Brainard (1999:104) re verbal morphology and Pebley (1999c:20) re *dili* as NEG.IRR in (23b) below.

Several of the complications in Kagayanen, alluded to above, are apparent even from glancing at table 5. For instance, if either two 3sG or two 3pL pronouns co-occur, then no overt cluster is possible.<sup>23</sup> This is indicated by a dash (—), twice, in the lower-right part of the table. Also, as the bottom two rows of cells in table 5 show, the NOM.3.SHORT forms are inaudible, as in Obo Manobo. As these two rows of cells show, a NOM.3.LONG pronoun clearly co-occurs in an overt cluster with a preceding GEN.SHORT pronoun (as long as the two pronouns aren't both 3sG or both 3pL, as already mentioned immediately above). It is also possible for just the GEN.SHORT pronoun to be overt but with an understood NOM.3 pronoun. Thus, we postulate, the expected opposite order, with a NOM.SHORT preceding a GEN.SHORT, is represented by a Ø NOM.3 followed by an overt GEN.SHORT pronoun. However, nothing in our analysis hinges on this proposal; it merely accounts for the two opposite pronominal orders.

An additional complication in Kagayanen (about which there is no disagreement in the literature) has to do with so-called portmanteaux: a single form representing a combination of cases, persons, and numbers. Namely, if a GEN.1SG pronoun is combined with a NOM.2 form, then special forms—*ta kaw*, in (22a), and *ta kyo*, in (23a)—are used. In fact, a second pattern is also found for each of these respective combinations of semantic roles as well as person/number features, in (22b) and (23b).

<sup>&</sup>lt;sup>23</sup> Carol Pebley (p.c.) confirms that overt combinations of either two 3SG or two 3PL pronouns in the same clause do not occur. In fact, we found an example of GEN.3SG.SHORT <u>din</u> followed by NOM.3SG.LONG *kanen* (Gen. 34:19, *KTC* 2007:75) but these words do not form a constituent as they are not from the same clitic cluster.

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(22) a. nakita ta kaw en na-kita? {takaw in}

REAL.PV-see 1sG>2sG already

'[...] I already saw you [...]'

[John 1:48, KTC 2007:371]

b. Napakala ko en kaon yan ki danen
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- b. Napakala ko en kaon yan ki danen na-pa-kala {ku in ka?un jan} ki danin REAL.PV-CAUS-acquaint GEN.1SG.SHORT already NOM.2SG.LONG DEF OBL.3PL 'I have told them about you [...]' [John 17:26, KTC 2007:422]
- (23) a. Paatagan ta kyo man ta uturidad
  pa-atag-an {takju man} ta uturidad
  REAL-give-RV 1SG>2PL also OBL authority
  'I have also given you [...]' [Luke 10:19, KTC 2007:311]
  - b. dili ko man kyo yan talikuran. dili?  $\{\underline{ku} \quad \text{man } k\underline{ju} \quad \text{jan}\}$  talikud-an NEG.IRR GEN.1SG.SHORT also NOM.2PL.LONG DEF forsake-IRR.RV '[...] nor will  $\underline{I}$  forsake you.' [Heb. 13:5, KTC 2007:766]

Although the Kagayanen orthography punctuates *ta kaw* and *ta kyo* as two-word combinations, we analyze them as single, fused morphemes: /takaw/ and /takju/. The first support for this analysis comes from how a monosyllabic adverbial clitic is positioned relative to two personal pronouns. For example, *en* 'already' must follow all of /takaw/ in (22a) and *man* 'also' must follow all of /takju/ in (23a). However, these adverbial clitics must be ordered between <u>ko</u> and either *kaon* in (22b) or *kyo* in (23b). In every combination of a GEN pronoun preceding a disformed (i.e., long) NOM pronoun, adverbial clitics can appear in between. If the latter syllable of /takju/ in (23a) were the NOM.2PL.LONG pronoun, then the expected order would be \**ta man kyo*; in fact, no instance of *ta kyo* found in our corpus search was interrupted—by an adverbial clitic or, for that matter, anything else. (The same holds of our corpus search of

ta kaw.) The second argument in favor of our /takaw/ and /takju/ analysis comes from the composition of ta kaw in (22a). Modern Kagayanen uses [kaw] only as a plural (i.e., NOM.2PL.SHORT) form; in (22a) if ta kaw were a synchronic combination of two pronouns, [kaw] would be both a SG and a PL form. If ta kaw in table 5 were somehow polymorphemic, with GEN.INCL1PL.SHORT ta as its first member (some sort of politeness marking, with GEN.INCL1PL ta replacing GEN.1SG ko), then one would still expect \*ta kaon, because in every cell of table 5 where a GEN.SHORT pronoun is cluster-initial, the second pronoun is a long form of the NOM pronoun. In the relevant cell of table 5, NOM.2SG.LONG kaon is preceded only by GEN.1SG.SHORT ko. Thus, /takaw/ and /takju/ are synchronically monomorphemic.<sup>24</sup>

Yet another complication found in Kagayanen are the so-called enclitic determiners. Examples (24a–b) show two ways to order the same combinations of persons, numbers, cases, and semantic roles but with opposite orders. As already discussed above, (24b) shows that the latter pronoun is disformed. It is also immediately followed by such an enclitic determiner.

(24) a. Patiro din. din} pa-tiru {a REAL.PV-hit NOM.1SG.SHORT GEN.3SG.SHORT 'He hit me.' [Pebley & Brainard 1999:78; glossing corrected] b. Patiro din yaken i. pa-tiru {din iakɨn i} REAL.PV-hit GEN.3SG.SHORT NOM.1SG.LONG DEF 'He hit *me*.' [Pebley & Brainard 1999:77]

<sup>&</sup>lt;sup>24</sup> The two portmanteaux appear to be in complementary distribution with the NOM.SHORT-before-GEN.SHORT orders in table 5. That is, *ta kaw* and *ta kyo* appear to block \*ka ko and \*kaw ko morphologically (respectively).

The enclitic determiners so far in this paper have been i in (21b) and (24b), van in (22b) and (23b), and an in (21a). All of these have been glossed so far simply as DEF(inite). Pebley (1999a:52) glosses i more precisely as 'here (near speaker)' and an as 'here (near both speaker and addressee)'. However, Pebley (1999a) does not mention yan as an enclitic determiner.<sup>25</sup> Carol Pebley (p.c.) reports that after a disformed NOM.2.LONG pronoun, the enclitic-determiner form *yan* is required.<sup>26</sup> In the aforementioned examples a pattern emerges. The i form, in both (21b) and (24b), follows NOM.1SG.LONG yaken; the yan form follows a NOM.2.LONG form, either SG kaon in (22b) or PL kyo in (23b); and the an form, in (21a), follows NOM.3PL.LONG danen. Yet another enclitic determiner, occasionally found immediately after NOM.3.LONG pronouns in our corpus search, is ya, glossed by Pebley (1999a:52) as 'far (from both speaker and addressee)'. The possible match-ups of enclitic-determiner forms with NOM.LONG pronouns is not central to our study. Nor is the meaning encoded by using enclitic determiners. However, their existence, apparently within the clitic cluster, is directly relevant.<sup>27</sup> How can a pronominal clitic host a clitic of its own?

<sup>&</sup>lt;sup>25</sup> According to Pebley (1999a:69), enclitic demonstratives immediately follow the head of a nominal expression and encode definiteness; see also Pebley & Brainard (1999:81). Pebley (1999a) does not discuss *yan* after a NOM.LONG pronoun. The text collection at the end of the same volume as Pebley (1999a) also lists an instance of *yan* glossed as 'here' (near both speaker and addressee); this instance appears not to modify any (pro)noun; the free translation renders this determiner as '*That* is how [...]' (MacGregor & Pebley 1999:107, our bold italics). In addition, Pebley & Brainard (1999:79) list one example of *yan*, positioned immediately after NOM.2SG.LONG *kaon*. Pebley (1999a:56) also lists an example of *yan* after (unclustered) NOM.2SG.SHORT *ka* and glosses it as a marker of ATT(itude). Inasmuch as both this ATT *yan* and the enclitic determiner *yan* elsewhere invariably follow NOM.2 pronouns, we suspect that the two might be stored in the lexicon as the same element.

<sup>&</sup>lt;sup>26</sup> Based on Pebley's comment, the form *an* at the end of Harmon's example in (25a) would be unacceptable. <sup>27</sup> For instance, the clause in (23b) above is negated. As such, we have a reliable indicator of where the clitic cluster ends: immediately before the verb. Therefore, *yan* in (23b) must be part of the cluster of clausal clitics.

At this point we merely observe that NOM.LONG forms can and often do take enclitic determiners, which are positioned after the NOM.LONG form, at the end of the clitic cluster.

Additional Kagayanen examples are listed in (25a–e). Note the position of the NOM.2SG.LONG pronoun and enclitic determiner in (25a), separated from the GEN.1SG pronoun: evidence that the NOM.2SG.LONG pronoun is not in clitic position.

(25) a. pa-pilak-an-ku kabatagan papil kaun ta ta an {<u>ku</u>} pa-pilak-an kabata?an ka?un ta papil ta an REAL-throw-RV GEN.1SG.SHORT GEN children GEN paper NOM.2SG.LONG DEF 'I will have children throw away paper for *you*.' [Harmon 1977:49] b. Patiro ko kanen an. pa-tiru kanin {<u>ku</u> an} REAL.PV-hit GEN. 1SG. SHORT NOM.3SG.LONG DEF 'I hit *him*.' [Pebley & Brainard 1999:77] c. na-kita-nay kanen an na-kita? {nai kanin an} REAL.PV-see GEN.EXCL1PL.SHORT NOM.3SG.LONG DEF 'We saw him.' [Harmon 1977:80] d. i-pa-kala-nu danen an ki kami i-pa-kala {<u>nu</u> danɨn an} ki *kami* IV-caus-know GEN.2SG.SHORT NOM.3PL.LONG DEF OBL.EXCL1PL 'Introduce them to us.' [Harmon 1977:83] e. pa-sinar-an-no kami ta bata pa-sin?ad-an {<u>nu</u> kami} bata? CAUS-cook-RV GEN.2SG.SHORT NOM.EXCL1PL.LONG OBL child 'Have a child cook for us.' [Harmon 1977:80]

Note in addition that in (25e) there is no enclitic determiner after the disformed NOM pronoun.

Pebley & Brainard (1999:77) claim that if the Actor is more person-prominent than the Undergoer (A and P in their terminology, resp.), then the Actor must precede the Undergoer.

Using (25b) above as an example, if GEN.1SG ko and NOM.3SG kanen co-occur, then ko

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precedes *kanen*, because 1sG <u>ko</u> is more person-prominent and the Actor.<sup>28</sup> On the other hand, if the Undergoer is more person-prominent, Pebley & Brainard contend, then both relative orders are found but the Actor-first order is marked. As an example of this configuration, (24a–b) above are used. The unmarked order has the Undergoer (NOM.1sg.short <u>a</u>) before the Actor (GEN.3sg.short <u>din</u>), whereas the opposite order (with disformation) is marked.<sup>29</sup>

The model summarized in the preceding paragraph is accurate for the most part but does not account for four aspects of the data in table 5. To begin, Pebley (1999a:57) and Pebley & Brainard (1999:97) list only overt NOM.3 forms in their pronominal inventories. We follow Harmon (1977:86–87) in positing inaudible NOM.3.SHORT forms in table 4 above. As a consequence, one way of combining a NOM.3 pronoun with a GEN pronoun—listed in the last two rows of cells in table 5 above—is with only the GEN pronoun overtly pronounced. We have nothing to add about this inaudible-NOM.3 option because no overt ordering of pronouns results.<sup>30</sup> Next, Pebley & Brainard (1999) do not explicitly discuss how an overt cluster of

<sup>&</sup>lt;sup>28</sup> As table 4 above shows, no overt short form of the NOM.3SG pronoun exists; it is therefore a moot point whether disformation has taken place in (25b): from  $\emptyset$  to *kanen* (following GEN.1SG.SHORT <u>ko</u> in the cluster).

<sup>&</sup>lt;sup>29</sup> Pebley & Brainard (1999) deal not just with pronominal ordering. Their claims apply to any combination of an A and a P: both of them pronouns, both nonpronominal expressions, or either combination of the two.

<sup>&</sup>lt;sup>30</sup> Note the missing Obo Manobo NOM.3.SHORT forms above in table 2 not listed in table 3. Brainard & Vander Molen (2005) list *sikandin* and *sikandan* under *two* subparadigms—what we call NOM.SHORT and NOM.LONG, resp.—in their inventory and co-occurrence tables (2005:384, 405). However, in a few instances in our corpus search of Obo Manobo, we have found instances of PV clauses where the NOM.3 pronoun is inaudible (e.g., sentences 22 and 41 in Suhat 2005:236–239). We have not investigated whether in Obo Manobo a NOM.3 referent can be realized as Ø if it co-occurs with a GEN pronoun. However, such a co-occurrence would not result in an overt cluster. As such, it would be impossible to determine the relative order of these two pronouns.

two third-person pronouns is ordered.<sup>31</sup> They list (21a) above but for a different purpose. This is not a serious problem; we propose in section 2 above that where neither pronoun is more person-prominent than the other, semantic roles emerge to decide the ordering. In addition, though Pebley & Brainard (1999:97) list the portmanteaux presented above in (22a) and (23a), they do not explain how these fused forms fit into their framework, which clearly predicts the orders in (22b) and (23b) but is silent about the existence of the portmanteau option in these two cells of table 5. Nor do we offer a solution as such, other than to observe that in our corpus search the portmanteaux are more frequent.<sup>32</sup> Our final concern with Pebley & Brainard's approach has to do with the two cells in table 5 immediately to the right of the ones containing the portmanteaux. For example, their account predicts only the Actor-Undergoer ordering in (26a), not the Undergoer-Actor ordering in (26b).

<sup>&</sup>lt;sup>31</sup> This issue *is* addressed in an excerpt of a grammar in preparation (shared with us by Carol Pebley).

<sup>&</sup>lt;sup>32</sup> We found 52 instances of *ta kaw*, incl. (22a), but only 22 of <u>ko</u> (...) *kaon*, incl. (22b); also 155 of *ta kyo*, incl. (23a), but only 19 of ko (...) kyo, incl. (23b). The ellipses here stand for one or more adverbial clitics. (As mentioned above, these can appear between the pronouns.) Regarding these portmanteaux, we follow Billings & Konopasky's analysis of the analogous 1SG>2SG portmanteau pronoun kita in Tagalog (2002:31–32, 2003:22). A single form encoding the properties of both pronouns is more economical than using two separate forms. (The syntax contains no phonological information. After spelling out to the morphology, the grammar consults the lexicon to determine the best match of vocabulary items to morphemes. If a single, portmanteau form matches the same features that two separate forms would encode, then the portmanteau is preferred.) In addition, because there is no actual sequence of forms if a portmanteau is used, the constraints ME-1ST, YOU-1st, and Actor-1ST (presented above in section 2) are all satisfied, albeit vacuously. Applying this rationale to Kagayanen, using the portmanteaux in (22a) and (23a) is apparently preferable to unattested overt combinations of the two monosyllabic pronouns: ko plus either ka or kaw, respectively. What remains to be explained is under what conditions the alternative, less frequent order in the same cells of table 5 (ko ... kaon and ko ... kyo, resp.) are used. Our corpus search shows that ko ... kaon and ko ... kyo precede an enclitic determiner, though in one instance there is a noun separating the disformed NOM pronoun from the enclitic determiner (Acts 21:28, KTC 2007:505). In only one token does a portmanteau precede an enclitic determiner (2 Cor. 13:10, KTC 2007:631).

```
(26) a. paatagan
                           nay
                                                   kaon
                                                                    yan
                                                                                 waig
                                                   ka?un
        pa-atag-an
                          <u>{nai</u>
                                                                    jan}
                                                                                 waig
                                                                           ta
        REAL-give-RV
                           GEN.EXCL1PL.SHORT
                                                  NOM.2SG.LONG DEF
                                                                           OBL water
         '[...] we gave you water [...]'
                                                    [Matt. 25:37 (cf. 25:37 again, 38), KTC 2007:197]
     b. kan-o
                 ka
                                    nakita
                                                    nay
        kan?u \{ka\}
                                    na-kita?
                                                   {<u>nai</u>}
                 NOM.2SG.SHORT REAL.PV-see
        when
                                                   GEN.EXCL1PL.SHORT
         '[...] when did <u>we</u> see you [...]?'
                                                     [Matt. 25:37 (also 25:38, 39, 44), KTC 2007:197]
```

Indeed, in the corpus, the pattern in (26a) is more frequent, but (26b) is also found.<sup>33</sup> In addition to corpus examples like (26b); Harmon (1977:86) lists **ka** nay (as well as **kaw** nay).

To summarize section 3, we have added to the empirical picture, using portmanteaux and two additional pronominal combinations to refute the claim that if the Actor is the more person-prominent pronoun, only Actor-first ordering is found. Once several complications are accounted for, Kagayanen appears to have the same relative order of personal pronouns.

Overall, this paper has dealt with pronominal ordering in two Manobo languages. In Obo Manobo and Kagayanen there is a choice in their relative ordering. Whereas the order with the more person-prominent pronoun first is unmarked, the opposite order is also found. We have proposed a way to incorporate topicality into an Optimality-theoretic approach in order to account for the marked pronominal orders in these languages.

each of these missing pairs is either confirmed by Carol Pebley (p.c.) or listed in Harmon (1977:86).

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<sup>&</sup>lt;sup>33</sup> We found 7 instances of <u>nay</u> (...) *kaon*, incl. (26a), but only 4 instances of <u>ka</u> ... <u>nay</u>, incl. (26b). We also found 13 instances of <u>nay</u> (...) *kyo*. (The ellipses within parentheses stand for zero or more adverbial clitics; the ellipses without parentheses stand for the verb—in all four tokens.) The only combinations listed in table 5 but not found during our corpus search are <u>kaw</u> <u>nay</u>, <u>no</u> *yaken*, <u>danen</u> *kiten*, <u>din</u> *kaon*, and <u>danen</u> *kaon*; nonetheless,

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#### **Abbreviations**

We follow the Leipzig Glossing Rules. Additional abbreviations not listed there are AV Actor voice, EXT existential, IV Instrument voice, NMR nominalizer, PV Patient voice, REAL realis, RV referent voice (where *referent* combines beneficiary with where to/at/from).

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