# Person hierarchy effects: between syntax and morphology

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The languages under consideration: Kadiwéu (Guaykuruan), Chorote (Mataguayan), Mẽbengokre (Jê), Guarani (Tupian).

### 1 The phenomenon under consideration

Person hierarchies: what the verb agrees with is determined by the person, and not by its grammatical function. Take Kadiwéu.

- (1) jemaa "I love her"
- (2) aemaani "You love her"
- (3) id:emaa "She loves me"
- (4) yemaa "She loves her"
- (5) ad:emaani "You love me"
- (6) Gad:emaani "She loves you"
- (7) Gad:emaani "I love you"

## 2 Straw-man analyses

• So you have agreement with both subject and object, right?

$S\downarrow/O\rightarrow$	1	2	3
1		Gad:i	j-
2	ad:i		ai
3	id:-	Gad:i	у-

• Hmm, interesting syncretism.

#### 3 Person hierarchy

- With transitive verbs, one sees what are called person hierarchy effects:
  - If the subject is a discourse participant (1st or 2nd person) and the object isn't (3rd person), the verb agrees with the subject only, using the  $S_a$  affixes.
    - (8) j- emaa  $1S_a$  love "I love her"
    - (9) a- emaan- i $2S_{a}\text{- love-} \quad \text{2Pl}$  "You love her"
  - If the object is a discourse participant and the subject isn't, the verb agrees with the object only, using the  $S_o$  affixes.
    - (10) id:- emaa $1S_{o}\text{- love}$  "She loves me"
  - If both the subject and the object are third person, then agreement is by default with the subject.
    - (11) y- emaa  $3S_{a}$  love "She loves her"
  - We'll talk about what happens when both subject and object are discourse participants soon.
  - When both subject and object are discourse participants, more complicated things happen:
    - \* On the one hand, second seems to win over first.
    - \* On the other, even though the agreement looks most like second person, there prefix is still distinct, so there is agreement with both participants here.
  - That's not going to worry us now.

# 4 Competition for a slot

- Furthermore, let's compare with intransitive verbs.
- Intransitive verbs in this language are either "active" or "inactive".
- Active verbs agree with their subject with one set of prefixes or circumfixes, which we will call  $S_a$  for short:

	sg	pl
1	j-	jaGa
2	ai	ai
3	y/w-	naGa

• Inactive verbs agree with their subjects using a second set of prefixes or circumfixes, which we call  $S_o$  for short:

	sg	pl
1	id:-	God:-
2	Gad:i	Gad:i
3	Ø	naGa

- So the solution that seems to be suggested is that of competition between active and inactive agreement for a single slot.
- Summing up, person hierarchy effects amount to this:
  - A verb will agree with a discourse participant if one is available.
  - There is only one morphological slot for agreement, so one of the participants will be left out.

#### 5 Inverse voice and raising

- We saw in the last section that person hierarchy effects could arise from purely morphological constraints.
- However, there is some evidence that the argument that a verb agrees with in a language with person hierarchy effects always functions as a subject.
- In other words, rather than agreeing with the object when, say, it is 1st or 2nd person and the subject is 3rd, what really happens is that the verb goes into inverse voice, and agreement is with the subject.
- How is this any different from the other story?
- In our undergraduate syntax courses we don't spend much time on defining precisely what a subject is, because in the languages that have been studied most intensively within the formal framework that we use the question doesn't arise (except perhaps in Icelandic).
- But in other traditions, there has been some preoccupation to establish the "core properties" of syntactic subjects, as opposed to, e.g., topics or agents, beyond the language particular criterion of getting nominative case and being agreed with by the verb.
- Here are some of these:
  - Control of a subject-oriented reflexive or reciprocal within the clause.
  - Being the "pivot" for reference across clauses.
  - Controlling empty subjects in embedded clauses.
- To this one might add being promoted or demoted by operations that target the argument that is highest in the thematic hierarchy.
- For example: Icelandic quirky subjects behave like garden-variety subjects with respect to EPP and raising (passive?) So they are subjects despite their unexpected morphological case.
- Another example: most ergative languages are syntactically accusative, which means that their subjects are the same as in accusative languages, despite the different morphology. [Basque example of coordinated sentences, if there is time]
- Only a handful of ergative languages make their morphological absolutive argument a grammatical function, and make patients subject in transitive sentences, on par with intransitive subjects: [Katukina examples, if there is time]

- So, to reiterate what was said above: if it's just agreement, then it shouldn't interfere with the idea that the agent is the subject everywhere we see it. On the other hand, if the verb goes into inverse voice and thus always agrees with the subject, the agreed-with element should have subject properties.
- This is what we show happens in the following data set, from Iyo'awujwa Chorote.

Future and nonfuture alignment in Iyo'awujwa Chorote (Chaco region, Argentina): Marking for person in Chorote is active/inactive, depending on the verb:

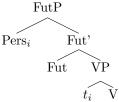
- $\begin{array}{cccc} \text{(12)} & \text{a. a} & \text{-lakyen} \\ & & \text{1AG -dance} \\ & & \text{``I dance.''} \end{array}$ 
  - b. s -um 1IN -drunk "I'm drunk."

In the future, however, person is always inactive:

- (13) a. si -lakyan -hayi 1IN -dance -FUT "I will dance."
  - b. s -um -hayi
    1IN -drunk -FUT
    "I'm going to be drunk."

That is, we could say that "inactive" person marking is determined by the future mark, even if the person in question is still the subject of the main verb.

This is kind of like raising:



The added quirk is, of course, that instead of raising to always get nominative, as in English, the raised argument will get a case that's associated with the particular raising predicate.

Things get really interesting with transitive verbs:

- (14) 1 2/3
  - a. a -lan 1AG -kill "I killed you/him."
  - b. si -lan -hayi 1IN -kill -FUT

"I will kill you/him."

- $(15) \qquad 2/3 \to 1$ 
  - a. si -lan 1IN -kill "He/you killed me."

- b. si -lan -hayi 1IN -kill -FUT
  - "He/you will kill me."
- $(16) \qquad 2 \to 3$ 
  - a. ji -lan

2AG -kill

"You killed him."

b. in -lan -hayi

2IN -kill -FUT

"You will kill him."

- $(17) 3 \to 2$ 
  - a. in -lan

2IN -kill

"He killed you."

b. in -lan -hayi

2IN -kill -FUT

"He will kill you."

#### 6 Temporal and aspectual auxiliaries as raising or control verbs

In Mēbengokre there is a progressive construction that involves a stative auxiliary. Roughly, we could translate an example such as (18b) as "I'm standing (with my) dancing."

As you can see, you get your regular ergative-absolutive alignment in the clause. Plus, you get agreement with the subject on the verb.

(18) a. ije tεp krẽn ɔ=i-μῶr

1ERG fish eat.SG.N TR=1-sit.SG.N

'I've been eating fish.'

b. i-tər ə=i-dʒam

1-dance.N TR=1-stand.SG.N

'I've been dancing.'

This is kind of like the agreement pattern of the  $pass\'{e}$  compos\'{e}. The thing is, i- is normally absolutive agreement; you shouldn't get it with ergative subjects.

The reason why we think this happens is that the first person is simultaneously the subject of the main verb and of the auxiliary.

That is:

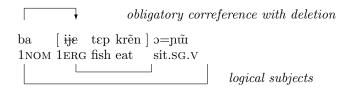


We have an argument for this in that if we change the aspect of the auxiliary, we get an unexpected nominative case.

- (19) a. ba tep kren  $\mathfrak{p}=\mathfrak{p}\mathfrak{w}$ 1NOM fish eat.SG.N TR=sit.SG.V 'I'm eating fish.'
  - b. ba i-tər ə=dʒa
    1NOM 1-dance.N TR=stand.SG.V
    'I'm dancing.'

So what we think is going on here is this:

(20) a. Ergative pronouns are deleted under correference



b. Absolutive isn't deleted, because it is agreement

