9 Yélî Dnye as a syntactically ergative language

Distributed through this grammar are a number of observations that suggest that Yélî Dnye is a systematically ergative language on a number of different levels. Here I bring these observations together to suggest that Yélî Dnye is properly considered not only an ergative language at the level of case-marking, but also a syntactically ergative language (see also Levinson, nd).

9.1 Degree of 'morphological ergativity' (case marking)

Yélî Dnye clause agreement has both head-marking (verbal) and dependent-marking (nominal) properties (it can be said to be 'double-marked'). Recollect that at the case-marking level, all NPs in A-function – that is, subjects of transitive verbs – receive direct ergative case *obligatorily* (which is unusual for a Papuan language), with only the partial exception of personal pronouns. This is already unusual, as most ergative marking is 'split', in the sense that often pronouns or NPs revert to a nominative/accusative pattern in certain syntactic environments – in Yélî Dnye this happens only with personal pronouns in non-embedded contexts. It is true that the verbal cross-referencing system operates partially in a nominative way: the verbal subject-indicating proclitics have the same form regardless of transitivity. On the other hand, the verbal enclitics have alternate paradigms for transitive and intransitive verbs: in both cases, the enclitics are largely concerned with the marking of absolutive (S or O) properties. Overall, by comparison to other ergative languages, Yélî Dnye is pretty much as ergative as languages come at the 'morphological' level of case-marking.

9.2 Syntactic ergativity

Syntactic ergativity has been defined by Dixon (1994:143) as follows:

In some languages there are syntactic constraints on clause combination, or on the omission of coreferential constituents in **clause combinations**. If these constraints treat S and O in the same way and A differently, then the language is said to be "**syntactically ergative**", with an S/O pivot. (Where A is the subject and O the object of a transitive verb, and S the subject of an intransitive verb, emphasis added)

Yélî Dnye is not syntactically ergative by this definition. However, absolutive arguments (that is, S and O) are treated systematically together as a single category for the purpose of syntactic operations, while ergative (A) ones are treated

distinctly. It just so happens that these syntactic operations are clause-internal, and are not relevant for clause combining. This motivates considering Yélî Dnye as exhibiting a different kind of syntactic ergativity, namely an intra-clausal kind. Let us review the evidence.

9.2.1 Syntactic ergativity and quantifier floating

Henderson (1995:15, 41) noticed that the indefinite marker ngmê 'a, one' can be moved out of its NP and into the pre-verbal nucleus (before the proclitic) just in case the NP is in either S or O function - i.e. is Absolutive. This acts as an indirect way of marking Absolutive arguments, along the following lines, where 'input' characterizes the structure without this quantifier (Q) floating, and 'output' characterizes the floated-O structure:

```
]<sub>ABS</sub> Y [Proclitic Verb Enclitic] <sub>verb complex</sub>
(547)
        input:
                    X..[N..Q
        output: X.. [N....] ABS Y [Q-Proclitic Verb Enclitic] verb complex
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Although Yélî Dnye phrase order is very free, word order within phrases is very largely fixed and only one case marker occurs per NP, at the right flank. The verb complex – the verb (plus or minus compound verbs or incorporated objects) flanked by inflectional proclitic and enclitic – is a tightly closed structure. Given these facts, it is easy to detect Q-floating, especially as the Q sometimes phonologically assimilates to the proclitic.

Q-floating of this kind is not obligatory, but it is generally applied when the NP is indefinite. In fact, the phenomenon is both more general and more complex than Henderson (1995) had noted: other indefinite quantifiers can be similarly floated, and there are additional agreement consequences of this movement. 45 Consider the following examples with an indefinite NP (tp:ee nmgê 'a boy') in O function (i.e. as absolutive object of a transitive verb):

⁴⁵ Incidentally, I shall talk about 'lowering' both in the case that the quantifier is associated with a subject (S) and with an object (O), presuming that the parallel strengthens the case for a flat sentence structure, without a VP (for which there is no evidence).

- b. Weta ngê tp:ee ngmê nkéli k:oo dê vy:a
 Weta ERG boy INDF boat inside 3IMMP hit..PROX
 'Weta hit a boy in the boat (earlier today)'
- c. Weta ngê tp:ee nkéli k:oo **ngmê** dê vy:a
 Weta ERG boy boat inside INDF 3IMMP hit..PROX
 'Weta hit **a** boy in the boat (earlier today)'
 (slight change of emphasis towards focus on the quantification)

The example in (548)a. can be pronounced either with a hard post-alveolar [t] on proclitic $d\hat{e}$, or as a post-alveolar flap [t], assimilating the indefinite $ngm\hat{e}$ to a single phonological word $ngm\hat{e}da$, [nmətæ]. The unassimilated version corresponds to the example in b., where $ngm\hat{e}$ is separated from $d\hat{e}$ by a PP, while the assimilated version corresponds to c., where $ngm\hat{e}$ has been moved out of the NP and over the PP into the pre-nucleus. Both b. and c. are good structures, which seem to have a slightly different semantic nuance, as indicated in the glosses.

The following example (549) shows that an exactly parallel thing happens to the indefinite quantifier when the NP it modifies is in S-function, i.e. also in Absolutive case: a. shows the unlowered quantifier, b. the optionally lowered version, while the rest of the examples show that the phenomenon generalizes to other quantifiers (including numerals) which can be read indefinitely:

- (549) a. *Yélî pi ngmê nkéli k:oo doo dpodo*Rosssel man INDF boat inside 3REM.CI work.ContAspect
 'A Rossel man was working in the boat (day before yesterday)'
- → b. Yélî pi nkéli k:oo ngmê-doo dpodo
 Rossel man boat inside INDF-3REM.CI work.ContAspect
 'A Rossel man was working in the boat (day before yesterday)'
 - c. *Yélî pi ngmidi nkéli k:oo doo dpodo*Rossel man one boat inside 3REM.CI work.ContAspect
 'One Rossel man was working in the boat (day before yesterday)'
- → d. Yélî pi nkéli k:oo ngmidi-doo dpodo Rossel man boat inside one-3REM.CI work.ContAspect 'One Rossel man was working in the boat (day before yesterday)'
 - e. *Yélî pi nkéli k:oo miyó-doo dpodo*Rossel man boat inside two-3REM.CI work.ContAspect
 'Two Rossel men were working in the boat (day before yesterday)'
 - f. *Yélî pi nkéli k:oo yilî-doo dpodo*Rossel man boat inside many-3REM.CI work.ContAspect
 'Many Rossel men were working in the boat (day before yesterday)'

- g. Yélî рi nkéli k:00 **vémi**-doo dpodo? Rossel man boat inside how.many-3REM.CI work.ContAspect 'How many Rossel men were working in the boat (day before yesterday)?'
- h. *Yélî* ni nkéli k:00 m:uu-doo dnodo? Rossel man boat inside another-3REM.CI work.ContAspect 'Were there any more Rossel men working in the boat (day before vesterday)?'

So far we have seen that indefinite NPs in either O-function or S-function allow their Quantifiers to float to the proclitic position within the verbal complex. Indefinite NPs in A-function do not allow this – any floated Q in proclitic position will always be understood as modifying the O-NP, not the A-NP, as in examples (550) a. and c. below (b. shows that independent marking of indefiniteness on the A-NP is also, not surprisingly, possible):

- (550) a. pi knî chêêpî (knî) ngmê dê *v*:00 (AUG) INDF person AUG ERG.PL stone 3IMMP d:ii ngmê throw.PROX MFS.3sO
 - 'People threw some stones' (not 'Some people threw the stones')

3IMMP

- ngmê knî v:00 chêêpî **ngmê** dê person INDF AUG ERG.PL stone INDF d:ii ngmê throw.PROX MFS.3sO 'Some people threw some stones'
- ngê nkéli k:00 ngmê vvâ person ERG boat inside INDF hit 'The man hit someone inside the boat' (not 'Some man hit him inside the boat')

In addition to acting as an indirect mode of case-marking, Q-floating also marks the absolutive NP as **indefinite**. Consequently, the universal quantifier *yintómu* does not happily float, or rather if it does it has to be given an indefinite reading, as in the example below:

(551) Yélî pi nkéli k:oo yintómu yémi doo
Rossel man boat inside all how.many 3REM.CI
dpodo?
work.ContAspect
'How many Rossel men all together were working in the boat (day before yesterday)?'

In addition, deictics do not normally collocate with floated quantifiers: thus the version of example (549)e. above with a deictic as well as a floated-Q is unacceptable:⁴⁶

(552) *kî pini nkéli k:oo **miyó-**doo dpodo

DEIC man boat inside two-3REM.CI work.ContAspect

'Those two men were working in the boat (day before yesterday)'

One additional structural point: NPs with floated-Qs are generally cross-referenced with singular agreement regardless of the semantic quantity (Quantified NPs can in general take singular agreement, but here the expectation is definitely stronger, although still not obligatory). Thus contrast the following, where the first sentence has the unfloated Q (*pyile* 'three') and the second has a floated Q:

a. Weta (553)Yidika v:00 tp:ee pvile skuli k:00 Weta Yidika ERG.PL three school inside bov а vyee tumo 3REM.PI hit.foll PFS.3plO.PI.REM 'Weta and Yidika hit 3 boys inside the school (the day before yesterday)'

⁴⁶ A deictic can co-occur with a floated Q from the same NP if it can be interpreted as not referring to a definite entity. For example, in the following the deictic is interpreted as qualifying the O:

⁽i) kî yélî pi nkéli k:oo **yilî** -doo dpodo

DEIC Rossel man boat inside many 3RempastCont work.Cont...

'That many Rossel men were working inside the boat'

b. Weta tp:ee skuli \rightarrow Yidika *y*:00 k:00 pyile Weta Yidika ERG.PL bov school inside three ngópu а vyee 3REM.PI hit.foll PFS.3sO.PI.REM 'Weta and Yidika hit 3 boys inside the school (the day before yesterday)'

The first sentence in example (553) has the enclitic tumo, which here codes for a polyfocal (plural non-1st person) subject and a 3rd plural (three or more) object in the Punctual indicative, Remote Past. The second sentence with the lowered Q uses instead the enclitic $ng\acute{o}pu$, which codes for a polyfocal subject and a singular 3rd person object in the same tense/mood ($ng\acute{o}pu$ could only be replaced here with tumo in restricted contexts, like asking a question). This quirk suggests that the NP is checked for agreement only 'after' Q-floating (i.e. the floated Q is somehow invisible to agreement processes).

What is the function of Q-floating? The clue is perhaps provided by the fact that it occurs only with indefinite NPs. Since indefinites are usually used to introduce referents, this fits the pattern noted by Du Bois (1987) whereby new referents tend to be introduced universally in O- or S-function. The following statistics in Table 9.1 show a similar pattern across languages, namely the small number of new referents introduced in A-function, regardless of accusative vs. ergative morphology:

Table 9.1: Percentage of newly-introduced referents in A-, S- and O-function.

-	Α	S	0
English new referents	0%	21%	79%
Sakapulteko	6%	55%	40%
Yélî Dnye	26%	47%	27%

Quantifier-lowering thus ensures that such referent-introducing NPs are now doubly flagged – once by the lack of overt case-marking (indicating O/S function), and secondly by Q-floating (indicating indefiniteness). Some cross-linguistic parallels in this area have been noted by Manning (1996:75) and others.

9.2.2 Review of other features of syntactic ergativity

Further features of syntactic ergativity have been covered elsewhere, and it will be sufficient here simply to remind the reader of the features in question.

9.2.2.1 Focus constructions

In §8.6, we showed that there are two main focus constructions in the language. The $vy\hat{i}lo$ construction picks out only absolutive NPs as the NP in focus, regardless of the position of the $vy\hat{i}lo$ constructional elements. In contrast, the $yin\hat{e}$ construction picks out only ergative NPs. In other words, the scope of the focus operation is determined by choice of construction, not word order, and for these purposes S- and O-arguments form a single class, and A-arguments another, and each class feeds a totally different construction. That it is case-marking and not underlying thematic role that determines the focus is clear from intransitivized structures, as in the following where the object (mbwo) in a. is incorporated within the verbal complex in b. as arrowed, so rendering the structure intransitive (example repeated from (519)a. (§8.6)):

(554) a. Monki Tili v:00 mbwo **vinê** kuwo Monki Tili ERG+PL betel \ FOC-ERG chew.trans ngmê Trans.PFS.3sO.CIPROX 'Monki and Tilly were the ones who were chewing betel' b. Monki Tili **vvîlo** νi mbwo kuwo Monki Tili FOC-ABS Dual ANAPH betel chew.intrans mo Intrans.d.CIPROX 'Monki and Tilly were the ones who were betel-chewing'

In this case, the focus construction must change to match the surface case. Verbal doublets, one transitive and the other intransitive, show the same pattern – the choice of focus construction depends on the surface case. Finally, exceptional case structures as found in experiencer constructions, still follow the pattern: the NP in absolutive case is the one focussed on by the *vyîlo* construction.

9.2.2.2 Control of the arguments of nominalizations

In §8.7, we reviewed the facts about the arguments of nominalizations of gerunds. Although there are some complexities, the basic generalization is that only Absolutive arguments (O- or S-function NPs) are preserved as unmarked arguments. There are various types of nominalization, e.g. the resultative construction, and the same pattern holds. Nominalization is thus a syntactic operation that systematically picks out the class of Absolutive NPs as surviving arguments. Here we review some further coreferential constraints pointing to the importance of this pattern. It should be noted in advance that although some non-ergative lan-

guages display ergative-like patterning of the arguments of gerunds (specifically by marking O and S with possessives, Koptjevskaja-Tamm 2013), nevertheless the Yélî Dnye patterns are different and distinctive.

The resultative construction produces nominalizations from transitive verbs and a number of inchoative intransitives (hence it is not a passive). In this construction the O-argument of the transitive is preserved, and behaves like an S-argument, as in example (555)a. below which can stand as a whole clause:

- (555) a. *ke'ne kpêm*î ngmê door openTV RES 'The door is open/unlocked (go and get the thing I left behind)'
 - h. ke'ne kwe'ne kalê ngmê door openIV Causative RES 'The door is open (in its usual state)'

The sentence in example (555)b. shows that an intransitive verb counterpart (here 'open.intransitive') of the transitive verb can be first transitivized with the causative construction described in §8.7.1.4, then nominalized with the resultative construction, with just slight meaning differences (captured in the glosses). In this case, the original S-argument of the intransitive becomes first an O-argument, then an S-argument again. An alternative way to express very much the same state of affairs converts the nominalization into an adverbial on a positional verb (normally used in existential and locative constructions):

(556) ke'ne kwe'ne kalê tóó ngmê ngê door openIV Causative RES ADV CERT3sPRSCI sitting 'The door stays open (habitually)', lit. 'The door sits having-caused-to-beopened'

Here the S-subject of the positional verb, ke'ne 'door', is also understood as the O-subject of the resultative nominalization, itself derived from an S-subject of an intransitive under causativization. The constancy behind these changes in argument-status is that ke'ne 'door' remains Absolutive throughout. Notice that in this positional construction we have a coreferential relation between the thing 'sitting' and the thing 'opened':

$[S_1 [O_1 \text{ open.caused.RESULT}]_{ADV} \text{ sit}]$

In the normal case, where an underived transitive is used in a positional construction, the same pattern is observed:

(557) *péliti pwaa ngmê ka kwo* plate broken RES CERT3sCI.PROX stands 'The broken plate is there'

Now, as mentioned, there are exceptional inchoative intransitive verbs that take the resultative construction, meaning e.g. 'become bigger', 'become old, 'sit down':

(558) ya ngmê ngê ka tóó sit.down RES ADV CERT.3CI.PROX sitting 'They are already sat down', lit. 'Having sat.down they are sitting'

In this case the construal pattern is as follows:

$$[S_1 [S_1 \text{ sit.down.RES}]_{ADV} \text{ sit}]$$

The generalization of course is that it is absolutive arguments that corefer – instead of picking out the O-argument of a transitive, in this case it is the S-argument of the inchoative verb that is identified with the S-argument of the positional verb.

I should note that, although these two kinds of nominalization (gerund, resultative) are not strictly clauses but merely nominalizations, this is the nearest we seem to come in Yélî Dnye to the absolutive 'pivot' that Dixon (1994) takes to be the hallmark of syntactic ergativity.

9.2.2.3 Absence of 'universal subject' constructions

Many authors have followed Dixon (1979, 1994) in thinking that there are universal subject properties shared by A and S arguments in all languages, for example the control of PRO-like structures (null subjects of infinite complements), the binding of reflexives, or the understood subjects of imperatives. Even syntactically ergative languages were thus assumed to display universal subject properties in these kinds of structures. Yélî Dnye is interesting here because it is does not clearly conform to these expectations (acknowledging though that the verbal proclitics are identical for S and A). Dixon's expectations and the corresponding Yélî Dnye facts are as follows:

(a) Imperatives are universally the same construction for transitive and intransitive verbs, so that e.g., "imperatives in every language have a second person as (stated or understood) S or A NP" (Dixon 1994: 131)

The Yélî Dnye imperative §7.2.1 is a construction with distinct forms for transitive and intransitive sentences – although the proclitics (where relevant, especially in the continuous aspect) are shared, the enclitics are distinct (as throughout the tense/aspect/mood paradigms). Since there are distinct constructions for A- vs. S-subjects, there is no special evidence here for S/A conflation in Yélî Dnye. It is true (as Bernard Comrie pers. comm. reminds me) that Dixon allows that A and S may behave morphologically somewhat differently in the transitive/intransitive imperatives (1994:133) but he assumes that the imperative construction has some unity and commonality across varied transitivity, and that doesn't seem to be the case in Yélî: That we call both constructions 'imperatives' is due to a commonality of function not of grammar. Moreover, in Yélî Dnye the imperative is just another (deontic) mood, with a full 3 person * 3 numbers paradigm, plus two tenses (immediate and deferred imperatives) - there is thus no particular association with 2nd person singular (perhaps calling the two constructions 'imperative' at all is misleading).

(b) 'Want'-constructions (and similar constructions) where verbally expressed tend universally to have e.g., an 'S-wants-A/S do something', where coreferentiality may be stipulated from S to either S or A indifferently (i.e. from Subject to Subject) (Dixon 1994: 134–137)

But in Yélî Dnye we find just very specific constructions in these cases. For example, the English sentence Jim wants to go is expressed in effect as: 'To Jim desire is standing "I go" - i.e. with a direct quotation specifying the desire from the perspective of the wanter (see §7.5). The wanter is not in surface subject position but rather in a 'dative'-like experiencer case, and first-person signals subjective identity with the desirer (the thing or event wanted need not be an action by the desirer of course). In general, it is hard to find control (PRO-like) structures in the language – the best case might be the understood subjects of gerunds or nominalizations as described above §8.7; §9.2.2.2), and this yields an absolutive pattern (collapsing S- or O-function NPs), not a pattern easily interpreted in terms of universal subject properties.

(c) Where reflexivity is coded by a reflexive pronoun, then the antecedent tends to be indifferently in A- or S-function, i.e. reflexives tend to be controlled by universal subjects (Dixon 1994: 138)

Yélî Dnye reflexives are indeed of the pronominal type. They are often ambiguous between an emphatic and a reflexive reading. But reflexives (as opposed to emphatics) typically have antecedents in A-function, so they offer little evidence for universal subject as binder of reflexives. The binding of reflexives is actually curious – consider again an example from §7.8.1:

(559) *chóó(chóó) u mî ngê dê vy:a Ø*3s.self his father ERG 3IMM.PI hit MFS3sO.PROX 'Himself's father hit him' (i.e. 'His own father hit him')

The reflexive here seems to be bound from an unusual position: the absolutive object (coded in the zero enclitic) appears to be binding an adjunct to the subject ('Himself's father hit him'), contrary to the predictions in a lot of the theoretical literature. This might favour the view that absolutive arguments may be underlying subjects. Note though that Jackendoff (1972) observed that English sentences like The photos of himself with a mask infuriated Trump also violates various binding predictions, suggesting that a hierarchy of thematic roles rather than syntactic position is what licenses binding. In any case, reflexives can also be bound by oblique NPs, e.g. experiencer or dative-like subjects. Reciprocals are also telling: they cannot be bound by an Ergative NP in the central construction (as in 'They hit each other') – the construction is obligatorily intransitivized, so the binder is an Absolutive NP §7.8.2). Further, reciprocals can be bound from oblique positions, e.g. absolutive arguments can bind possessives on absolutive NPs, and possessors on absolutive NPs can bind experiencer subjects §7.8.2). The relevant point here is that there is no particular support for a universal subject notion (a conflation of A and S) in the behaviour of Yélî reflexives and reciprocals.

(d) In many languages there are constraints on relativization, question-formation or other major extraction procedures that apply exclusively to a 'subject' (S/A) category of argument

Many languages that are morphologically ergative (but by no means all) have what Dixon calls an S/A pivot (i.e. they are not syntactically ergative), so that syntactic operations like relativization, coordination and subordination require an NP shared by the two clauses and they must be in either A or S function (Dixon 1994:155, 172ff). In contrast syntactically ergative languages have S/O pivots according to Dixon, with corresponding constraints now in terms of shared NPs in S or O function in e.g. relativization (Dixon 1994:169). The generative tradition has generalized this characterization of syntactic ergativity to configurational constraints on relativization and extraction of A-arguments: ergative NPs do not extract (see Deal 2016; Polinsky 2017 for review).

Yélî Dnye shows no sign of an S/A pivot. But it also shows no constraints on A-argument relativization. Relativization (§8.1) is entirely catholic – NPs in ergative, absolutive, experiencer or oblique cases in the matrix sentence can all be relativized, and they seem to be able to be in any of the other cases in the embedded clause. Interrogatives likewise can be formed on NPs in any case (§7.2.2), ergative, absolutive, dative, experiencer, comitative, etc. Nevertheless, many syntactic operations treat S/O arguments identically, and A arguments differently.

Summarizing, the more obvious manifestations of a universal subject category (uniting A- and S-functions), or indeed of a language-specific S/A pivot, seem to be largely lacking in Yélî Dnye, setting aside the verbal proclitics. Rather, the overall generalizations seem to be that syntactic operations in Yélî Dnye are either restricted to S/O, or apply only to A, or apply equally to A, S, O and often oblique NPs as well. There is thus no major role for a subject category understood as a union of S and A functions in the syntax of Yélî Dnye.

9.2.3 Yélî Dnye as exhibiting a distinct type of syntactic ergativity

At the time of writing, there is a growing literature on syntactic ergativity (e.g. Plank 1979, Dixon 1994, Manning 1996, and Deal 2016 and Polinsky 2017 for recent reviews). Much effort has gone into trying to find a structural difference that might explain the syntactic phenomena, e.g. by treating S/O as superficial subjects and A as oblique (Dixon 1972; Manning 1996), or more recently in terms of underlying movement of subjects, so blocking movements of various kinds like Wh-extraction (see Deal 2016, Polinsky 2017 for review). A lot of this work assumes the languages are configurational, and specifically have a VP node, but there is no such evidence for Yélî Dnye. In addition, much of this effort (and certainly that in Dixon 1972, 1994 and Manning 1996) is directed at languages which show 'pivot'-like behaviour of an S/O category in coordination reduction, relativization, clefts and so on – i.e. constraints on building bi-clausal constructions. Yélî Dnye shows few such constraints. In contrast, Yélî Dnye shows largely intra-clausal syntactic ergativity, in focus constructions, quantifier floating, and the construal of the arguments of gerunds. Only the latter might be interpreted as bi-clausal constructions. The details of the S/O constraints are sufficiently intricate, and sufficiently hooked to surface case, to indeed suggest a deep connection between the morphology and sentence structure (as suggested by Deal 2016). Moreover, the relatively small role that an S/A category plays in any level of linguistic organization save the verbal proclitics is cross-linguistically remarkable. It seems hard to escape the conclusion that, in its own distinctive way, the language is as ergative in its syntax as any language yet described.