

PARTICIPANT ACCESSIBILITY IN YALALAG ZAPOTEC¹

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1. INTRODUCTION

Part of the task of the storyteller is to make plain to his audience the identity of the participants through which the plot of the story is developed. This task will require greater attention at certain points of the story than at others. This is because the identity of participants will be less accessible in certain contexts than in others. A participant which has not been referred to for some interval or which must "share the stage" with other participants will be more difficult to identify than a participant which has been referred to in the immediately preceding context and does not have to be distinguished from other participants.

Talmy Givón (1983) proposed that the relative ease with which participants may be identified within a discourse constitutes a continuum of "topic (or participant) accessibility". His claim is that each language codes various points along the continuum through an ordered array of syntactic devices. Devices which are less marked syntactically and carry less semantic content correlate with less topic accessibility. Devices which are more marked and carry more semantic content correlate with greater topic accessibility, see Figure 1.

most continuous/accessable topic

- ↑ zero anaphora
- | unstressed/bound pronouns or grammatical agreement
- | stressed/independent pronouns
- | R-dislocated DEF-NP's
- | neutral-ordered DEF-NP's
- | L-dislocated DEF-NP's
- | Y-moved NP's
- | cleft/focus constructions
- ↓ referential indefinite NP's

most discontinuous/inaccessible topic

Figure 1. Scale of Topic Accessibility [after Givón 1983]

¹Yalálag Zapotec is spoken by approximately 2,000 residents of the town of Yalálag (officially Villa Hidalgo), which is located in the district of Villa Alta, Oaxaca. YZ is also spoken outside Yalálag by natives of the town who have emigrated as far away as Mexico City, the state of Veracruz, and even outside the Mexican Republic.

There are three factors which according to Givón affect the accessibility of a participant's identity and thus the syntactic device selected to code it. These three factors are Referential Distance, Potential Interference, and Persistence. Referential distance has to do with the amount of material which separates references to a given participant. Potential interference has to do with the degree of interference from other participants in the discourse. Persistence has to do with the number of uninterrupted references to a given participant in the immediately following context. As the first two factors increase and the third decreases it is assumed that the participant becomes less accessible to the audience and the speaker must choose a coding device which is more marked.

Givón has proposed a method for measuring each of these factors in relation to the occurrences of a coding device in actual text material. This provides a quantitative basis for ordering the devices along the continuum of participant accessibility.

In this paper I will present the results of applying this method to a corresponding set of devices occurring in a folk story in Yalálag Zapotec (YZ). I will also compare the use of pronouns in primary participant coding vs. secondary participant coding and claim that the participant which is given the greatest prominence in the narrative is a more accessible participant and consequently tends to be coded as such.

2. MEASUREMENT OF PARTICIPANT ACCESSIBILITY IN A ZAPOTEC FOLKTALE

This section describes the Zapotec grammatical coding devices for tracing human participants in a folktale narrative. Each coding device was measured for Referential Distance, Potential Interference, and Persistence.

The text used for this study is a traditional folk story consisting of approximately 290 clauses. The story was given orally by a speaker of YZ named Pedro Vásquez who was about 50 years old at the time. A transcription of the story was provided by another speaker of the language. The story consists of seven episodes and begins with a title which is "A story (example) of the person called Peter the Bad One." In each episode an incident occurs between Peter and an antagonist. Peter usually manages to cheat or cause harm to the other person or group. In two episodes however Peter is tricked by his antagonists.

The counting method used in the study took the average number of clauses which separate each occurrence of a particular coding device from its nearest preceding co-referent as the value for Referential Distance. To determine the value for Interference, if reference to another participant occurs in the same or immediately preceding clause the number one was assigned. If no other participant was referred to in the same or preceding clause the value 0 was assigned. The figures represent the average of these values for each device. The value for Persistence is

the average number of clauses immediately following the occurrence of a given coding device in which reference to the same participant occurs without interruption. Only references to human participants were considered. Table 1 presents the results of the quantification study.

Table 1. Measurements of Zapotec Coding Devices for Participants

Grammatical device	Ref. Dist	Interfer.	Persist.
clitic pronouns (179) (or free pronoun in unmarked construction)	1.3	.53	1.6
free pronounss (5)	2.0	1.0	2.2
generic pronoun (21) construction	2.4	.95	.8
neutral ordered (30) DEF NPs	3.4	.94	1.3
fronted DEF NPs (1)	9.0	1.0	3.0
indefinite NPs (7)	maximum	.86	.9

The figures for Referential Distance show an ordering of the devices which corresponds to the order which Givón proposes as a universal. The numbers for Interference show a significant and predictable distinction between clitic pronouns and other devices but make little distinction between the nonclitic devices. This could be due to the limited number of references counted or the impreciseness of the method used to calculate this factor. Another method which considers coding in a context of Subject/Agent shifting is described below as it is applied to a comparison of primary and secondary participant coding. This method however does not assign a value to every context in which a given device occurs as in the above method. The figures for Persistence do not seem to correlate in any meaningful way with the other results. Applying this count to additional texts would indicate whether there actually is any consistent ordering of the devices relative to this factor. Givón also observed that this indicator is not as significant. Evidently the preceding context is much more influential in the choice of coding device than the following context.

2.1. Clitic pronouns and unmarked use of free pronouns

Clitic pronouns most commonly occur in verbal constructions but may also occur in noun phrases, for example as the possessor of a noun. The Yalálag Zapotec clitic pronouns are shown in Figure 2.*

	singular	plural
1st pers.	-a'	-to' (exclusive) -llo (inclusive)
2nd pers.	-o'	-le
3rd pers.		
respect	-e'	
familiar	-be'	
animal	-ba'	
inanimate	-ŋ	

Figure 2. Zapotec Clitic Pronouns.

Up to three clitic pronouns may attach to a verb stem. The first pronoun to occur following the stem is the Subject of the verb. One or two more pronouns realizing Indirect Object and Direct Object, in that order, may attach to the Subject pronoun provided that each additional pronoun is of a lower rank than the pronoun it follows according to the following hierarchy:

first and second person
third person respect
third person familiar
third person animal
third person inanimate

The following are examples of permitted sequences of clitic pronouns:†

- (1) b-et-a'-ba'
C-kill-1s-3a
I killed it (animal)

*The YZ phonemes are listed here with the orthographical symbols, where different, given in parentheses.

Fortis Obstruents: p, t, č (ch), s, š (x), k, kw (cu).

Lenis Obstruents: b, d, dʒ (ll), z, ž (ll), ʒ (x), g, gw (gu/u).

Resonants: m, n, l, r, uvular fricative R (ʁ), Rw (ʁu), y, ʔ (').

Lenis Resonants: ŋ, ɲ. Vowels: a, e, i, o. Tones, not written in the orthography: high, low, mid, and mid-falling. Syllable nuclei V and V'.

†The abbreviations used in the glosses are: C completive aspect, DEF definite, H habitual aspect, INDEF indefinite, PL plural, POSS possessive S stative aspect; a - animal, f - familiar, i - inanimate, r - respect, s - singular, 1 - first person, 2 - second person, 3 - third person.

- (2) u-dao-ba'-n
C-eat-3a-3i
it (animal) ate it (inanimate)
- (3) be'-e'-be'-ba'
C.give-3r-3f-3a
He/she gave it (animal) to him/her

Each additional pronoun which is not of a lower rank than the one it follows may not attach as a clitic but may occur as an free pronoun. The free pronouns are given in Figure 3.

	singular	plural
1st pers.	nada'	neto' (exc.) lli'o (inc.)
2nd pers.	lue'e	le'
3rd pers.		
respect	le'e	
familiar	lebe'	
animal	leba'	
inanimate	len	

Figure 3. Zapotec Independent Pronouns.

The following are examples of sequences of clitic and free pronoun:

- (4) ll-e-be' lebe' *ll-e-be'-be'
C-say-3f 3f
He says to him
- (5) u-di'n-ba' le'e *u-din-ba'-e'
C-bite-3a 3r
It bit him
- (6) b-le'l-a' lue'e *b-le'l-a'-o'
C-see-1s 2s
I saw you

Because this co-occurrence restriction is an obligatory clause level constraint the free pronouns occurring in such constructions were not treated as significant occurrences of this device. The counting results for the unmarked occurrences were grouped with the clitic pronouns.

Normally the clitic pronoun is the least marked device used for coding participants. All of the human participants in the story were coded by clitic pronouns. And, with the exception of one reference to Peter in which the familiar form was used, the third person respect form occurs in every case.

In narrative, once a participant has been introduced he is then referred to through the use of clitic pronouns until the speaker reckons that the participant's identity is sufficiently obscured by the presence of other participants. Notice the use of pronouns to code Peter in the following story.

- (7) A story of a man named Peter the Bad One
 He was a thief
 and he made camp at the edge of a river
 where there were many travelers
 and he sat
 people passed
 and he had made his camp
 but he was a thief
 he was
 and he sat.
 And a time arrived
 when the river rose in the rainy season
 and he was sitting there
 when a priest arrived
 and the priest said to him:
 --Will I be able to cross the river?
 And he said to him:
 --You won't be able to cross with your horse,
 but you will be able to cross,
 I will take you across
 -he said to the priest
 --but first your horse I will take across
 -he said to the priest
 --Ok said the priest
 And he got down from the horse
 and Peter got right up on it,
 he just rode it across the river...

Zero anaphora does occur in infinitives and certain result clause constructions which indicate that a quantity of some item has become depleted. In both cases the identity of the participant is always marked in the immediately preceding clause. This device then would correlate with the highest degree of participant accessibility. There were no occurrences of zero anaphora in the narrative studied; examples (8) and (9) come from outside the text.

- (8) zǫ-ak-e' guatas
 S.go-PL-3r to.sleep
 they went (some where) to sleep
- (9) quasa't xid -ka' bayate
 C.die cat -PL C-run.out
 the cats died and became depleted

2.2. Marked use of free pronouns

In addition to the unmarked use of free pronouns described above these forms serve to give emphasis to a particular participant. Most commonly the free pronoun occurs where more than one participant is being referred to. (Note the high Interference count and relatively low Referential Distance count.) In such cases the free pronoun, which may occur either preceding or following the verb, serves to resolve a potential ambiguity or to underline the role of a particular participant in the action.

- (10) The one (bird) I'm holding here is sold
 but the one in the hat there,
 if you want to buy it (leba')...
- (11) and Peter got up
 and followed
 but it was him (le'e) they were afraid of...

2.3. Generic pronouns

Generic nouns which are used as pronouns are generic pronouns. Yz has four generic pronouns, as in Figure 4.

human adult	be'n
human child	bi
animal	ba
inanimate	da

Figure 4. Zapotec Generic Pronouns.

These pronouns generally occur attached to some modifying element such as a definite article, adjective or relative clause to form a complete nominal construction. Presumably generic pronoun constructions can code various points along the scale of participant accessibility depending on how extensively modified they are. In the present study only generic pronouns modified by a definite article or demonstrative occurred. Thus, the generic nouns in (12) and (13) were counted, but not the one in (14). Examples (13) and (14) come from data outside the text studied here.

- (12) uxi'-e' x-mell be'n-ka'
C-take-3r POSS-money HUMAN-PL.DEF
He took the people's money.
- (13) ba-ni ll-e'ne-ba' gao-ba' nada'
ANIMAL-this H-want-3a P.eat-3a ls
this animal wants to eat me

- (14) na'll u-de be'n bencha'o be'le
 then C-pass PERSON C.fix meat
 then passed by the man who fixed the meat

2.4. Neutrally ordered DEF NPs

The unmarked word order for YZ is VSO. No coreferential pronoun copy occurs on the verb when the Subject is realized as a NP in post verbal

position. In (15) the Subject is the clitic pronoun -e'; in (16) the Subject is riel-ka' and there is no Subject clitic; in (17) the Subject is the generic pronoun be'n-en and there is no Subject clitic.

- (15) ll-e-e' bxoz-en
 H-say-3r priest-DEM
 He says to the priest
- (16) kate bllin riel-ka'
 when C-arrive mule.driver-DEF.PL
 When the mule drivers arrived...
- (17) ka baka' be'n-en la'p-en
 when C.remove HUMAN-DEF hat-DEF
 When the person removed the hat...

2.5. Fronted Definite Noun Phrase

Subject and/or Object Noun Phrases can be fronted. In narrative discourse such fronting serves to highlight the referent of the fronted NP in relation to other participants or the development of the plot. Example (18) comes from outside the text.

- (18) The lion...
 wanted to kill the mouse
 but the MOUSE (fronted) begged for mercy
- (19) They took the coffee pot, poured water in it, prepared it, set it on the ground and thought it would boil; but in fact it was the kind that needs fire. PETER (fronted) had tricked them.

2.6. Indefinite Noun Phrases

New participants in a discourse are introduced by means of an indefinite Noun Phrase. Often this includes a preposed number or other quantifying adjective. An indefinite plural marker can occur following the noun, as in (22).

- (20) ka bllin to bxoz
then C.arrive one priest
Then a priest arrived
- (21) yidǵ-ak-ba' no carton
S.make.holes-PL-ANIMAL some box
they (animnals) were making holes in some boxes
- (22) na' bllin riel-ak
and C.arrive mule.driver-INDEF.PL
And some mule drivers arrived.

Since indefinite Noun Phrases code new participants it is assumed that they therefore correlate with the lowest degree of participant accessibility.

3. COMPARISON OF PRIMARY AND SECONDARY PARTICIPANTS

Of the human participants in the story, a distinction is made between a primary participant, Peter, and seven secondary participants. Peter is considered the primary participant because:

1. the title and the closing statement indicate that the story is about Peter the Bad One.
2. Peter is the only participant occurring in every episode of the story.

Table 2 shows the measurements for the primary and secondary participants separately.

Table 2. Measurement of Coding Devices
for Primary vs, Secondary Participant

	Ref. Dist.	Interference
pronouns		
Primary (117) (89%)	1.4	.56
Secondary (62) (60%)	1.2	.47
free pronouns		
Primary (4)	2.5	1.
Secondary (1)	1.0	1.
generic pronoun construction		
Primary (0)	--	--
Secondary (21)	2.4	.95

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neutrally ordered		
DEF NPs		
Primary (10)	2.9	.91
Secondary (21)	3.5	.95
fronted DEF NP		
Primary (1)	9.0	1.

These results indicate that in this story reference to the primary participant can be contrasted with reference to other participants in the following ways:

1. The primary participant is coded as a more accessible topic. He is referred to by pronouns, a relatively unmarked device, in relatively more ambiguous contexts than are secondary participants.
2. A generic pronoun is often used to refer to a secondary participant but not to the primary participant.

3.1. Primary participant coding

A comparison of the results for the primary participant and the secondary participants shows a slightly higher average Referential Distance for pronouns coding Peter than for the others. It may be noted also that in the case of Peter clitic pronouns comprise a higher percentage of the total references to him. The significance of these figures is reinforced by a consideration of some relatively ambiguous contexts in which the primary participant is coded by a clitic pronoun.

No marked construction occurs at the beginning of new episodes to reintroduce the primary participant. A pronoun is used at each new episode.

- (22) dayolbe ude -na
 again C-pass -DEM
 Then again afterward
- (23) ballin -e' llo'a yeo -n dayolbe
 C-REP-arrive -3r mouth river -DEM again
 he arrived at the edge of the river again

The Primary participant is coded by a pronoun immediately after the introduction of another participant.

- (24) then a priest arrived
the priest said to him...
- (25) Again afterward
he arrived again at the edge of the river.
Another man arrived.
He (Peter) sat right down...
- (26) Again other mule drivers arrived
and they said to him:

3.2. Secondary participant coding

There were 45 cases in which both the primary participant and a secondary participant are referred to within a single clause. In 21 of these clauses both participants are coded by pronouns. In 22 clauses only the primary participant is coded by a pronoun. In 2 clauses only the secondary participant is coded by a pronoun.

The following figures compare the coding of the grammatical subject where the Subject of the preceding clause is a different participant:

(27) Primary participant		Secondary participants	
clitic pronoun	13	clitic pronoun	4
free pronoun	3	generic pronoun	9
NP	8	NP	8

Referential distance for NPs coding the primary participant is actually lower. This could be due to the relatively higher density of references to Peter. There are 132 references to Peter as compared to 104 for all the other participants combined. Peter is referred to frequently in every episode whereas greater gaps between references to secondary participants occur. In one case one of the antagonists was reintroduced after an interval of one episode.

Generic pronouns are frequently used to code secondary participants. In (28) the references to each secondary participant are listed with the number of occurrences in parentheses; generic pronouns are indicated by capital letters.

(28) to bxoz (1) a priest	be'n yoble (1) another person	riel-ake (1) some mule drivers
bxoz-en (5) the priest	BE'N-en (3) that PERSON	riel-ka' (5) the mule drivers
BE'N-en (1) that PERSON	pronoun (4) (57%)	BE'N-ka' (6) those PEOPLE
pronoun (2) (25%)		prob-ka' (1) those poor guys
		pronoun (18) (60%)
riel yoble (1) other mule drivers	be'n yoble (1) other people (mule drivers)	
riel-ka' (2) those mule drivers	riel-ka' (4) those mule drivers	
BE'N-ka' (1) those PEOPLE	BE'N-ka' (9) those PEOPLE	
pronoun (17) (85%)	prob-ka' (1) those poor guys	
	pronoun (21) (67%)	
be'n bse'l korchis (1) the authorities	to carpintero (1)r a carpinter	
pronoun (2) (100%)	carpintero-n (2) that carpinter	
	BE'N-en (1) that PERSON	
	pronoun (2) (60%)	

Example (29) is from the end of the story; in it the secondary participants are consistently referred to by generic pronouns.

(29) lleb BE'N -ka'
 S.fear PERSON -PL
 ...they are afraid

kone ka' ǰallix -e' prob -ka'
 with that.way C.MA-cause.to.fall -3r poor -PL
 So in that way he caused the poor guys to fall

bayoll ǰabix BE'N -ka'
 C-REP-finish C.MA.fall PERSON -PL
 After the men fell

na'll babi' le'e -+n
 then C-REP-return -3r -3i
 then he returned

ǰaxi' -e' ke BE'N -ka'
 C.MA-take -3r of PERSON -PL
 he went and took the men's things

da -n nsa' BE'N -ka' uxi' -e' ke -e'
 INAN -DEM S-carry PERSON -PL C-take -3r of -3r
 what the men were carrying he took for himself

ba uxiy -e' BE'N -ka'
 now C-trick -3r PERSON -PL
 Now he had trick the men.

It might be argued that generic pronouns are equally as unmarked as regular pronouns since they correspond to essentially the same semantic categories. Furthermore it could be argued that their consideration in a comparison of primary and secondary participant coding is not valid because there are no occurrences of generic pronouns referring to Peter on which to base the comparison. However it is for this very reason that the generic pronouns are more marked. They refer predictably only to the other participants whereas regular pronouns can refer to either participant. A survey of other similar texts yielded equally high measurements for generic pronouns.

4. CONCLUSION

In this paper I have shown that the participant coding devices available in YZ correlate with the functional domain of participant accessibility. In addition, I pointed out that the most important participant of the story received relatively less marked coding. Peter, the primary participant, was coded by clitic pronouns (effectively the minimum coding construction) in a much larger percentage of cases and in more ambiguous contexts than the other participants. It can be assumed,

then, that because of the prominence given to the primary participant in the title of the story and through out the development of each episode the identity of this participant is well fixed in the mind of the audience and thus easily accessible. This undercoding is a dynamic device which emphasizes the importance of the main participant. A comparison with other languages might show that undercoding of the main participant is a universal tendency. It is also conceivable that in another language overcoding could serve to highlight the importance of a primary participant.

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