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INFORMATION STRUCTURE AND THE EXPRESSION OF GIVENNESS IN BUGLERE (CHIBCHAN)¹

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This paper provides an account of the expression of information structure in general, as well as of the information-structure category of givenness in particular, in Buglere, a Chibchan language of Costa Rica and Panama. Previous accounts of the existing morphosyntactic strategies to encode information-structure categories in Buglere are examined on the basis of a typical Buglere narrative, Additionally, the information-structure category of givenness is briefly inspected by means of two production experiments; the idea is to ascertain whether the tendencies found in natural speech remain in controlled, artificial environments. The analysis of the spontaneous narrative tends to confirm previous accounts of the information-structure patterns in Buglere, while the results of the experiments only partially confirm previous accounts. The emerging discrepancies are explained as being caused by the environment of the experiments, which speakers might have found slightly unnatural.

[KEYWORDS: Amerindian linguistics, Chibchan languages, grammatical relations, information structure, Buglere]

1. Introduction. Information structure refers to a component of sentence grammar "in which propositions as conceptual representations of states of affairs are paired with lexico-grammatical structures in accordance with the mental states of interlocutors who use and interpret these structures as units of information in given discourse contexts" (Lambrecht 1994:5). A corollary

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The following abbreviations are used in this paper: 1, 2, 3 = grammatical person; CFL = numeral classifier; CONT-FOC = contrastive focus; COMPL = completive; DAT = dative; DEM = demonstrative; EMPH = emphasis; EXCL = exclusive; FOC = focus; FUT = future; GEN = genitive; IMP = imperative; INCL = inclusive; INCOMPL = incompletive; INT = intensive; IRR = irrealis; MAL = malefactive; MED = middle voice; SS = same subject; NEG = negative; P.REC = recent past; P.REM = remote past; PL = plural; POS = possessive; PUNCT = punctual; RECIP = reciprocal; REFL = reflexive; REL = relativizer; SG = singular; TOP = topic.

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of that definition is that one member of the pairs (or indeed sets) of "allosentences" is unmarked; for Lambrecht, it is the one whose referents are ordered following the topic-comment (focus) articulation, that is, "structures which are used to convey information about some topic under discussion [and which] represent communicatively speaking the most common type" (Lambrecht 1994:132). Topic and focus are conceived as pragmatic relations, not as sentence components; topic is a relation of aboutness: "[A] referent is interpreted as the topic of a proposition if in a given situation the proposition is construed as being about this referent, i.e. as expressing information which is relevant to and which increases the addressee's knowledge of this referent" (Lambrecht 1994:131). Focus is "the semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition" (Lambrecht 1994:213), that is, it is the component of the proposition which adds information about a topic.² Since both topic and focus are pragmatic relations, heavily dependent on the presuppositions of the interlocutors, it follows that the topical or focal status of a referent is not necessarily dependent on its syntactic status (e.g., though subjects tend to be topics and vice versa, this is not always the case) but is dependent on the speakers' assessments.

As for topics, most authors (e.g., Reinhart 1982, Lambrecht 1994, and Erteschik-Shir 2007) agree on three characteristics of them: (*a*) topics express an aboutness relation; (*b*) topics are given referents; and (*c*) the truth value of the sentence is established with respect to them. A further concept of "accessible" information is used whenever we wish to refer to information which is assumed to be part of the common ground without yet being introduced in discourse, e.g. situationally available, culturally presupposed, or inferred information (see Chafe 1994, Gundel, Hedberg, Zacharski 1993, and Lambrecht 1994, among others). This paper focuses only on one of the three characteristics of topics, namely, (*b*). Central to the feature of givenness is the distinction between "new" and "given" information, which relates to the availability of a part of the utterance in the explicit COMMON GROUND (that is, assumptions the speaker makes about the contextual, situational, and cultural information that is part of the hearer's knowledge.)

Ongoing description of Buglere [bu.'gle.re], a Chibchan language of Costa Rica and Panama, shows that this language has an apparently multi-functional morpheme, *no*, with seemingly disparate functions and even a cha-

² Presupposition in turn is defined as assumptions about the hearer's knowledge, while assertion corresponds to assumptions about the hearer's improved/augmented knowledge through the utterance. In other words, the topic represents the constant referent about which information (assumed by the speaker to be unknown to the hearer) is added. This distinction comes close to the traditional Prague School-oriented dichotomies but differs from them in one significant respect: it is articulated independently of sentence constituents. Information structure is concerned with the mapping of that distinction onto a sentence, be it in unmarked or marked ways.



FIG. 1.—Focality-topicality continuum in Buglere (according to Quesada 2007a).

otic distribution. The previous account of this morpheme (Jara 1989) regarded it as the marker of agentive subjects in an active/nonactive alignment. Quesada (2006) argues against this analysis, proposing that Buglere exhibits nominative-accusative alignment, as no can also mark nonagentive subjects, as well as direct objects-though this occurs only seldomly, and that the role of no has to do with information-structure considerations. Hence, a full understanding of the role of no in Buglere can only be attained by making reference to information-structure categories such as topic, focus, givenness, and so on. On the basis of ten narratives from Margery and Rodriguez (1992), Quesada (2007a) provides an account of the distribution and functions of no, which reveals that the information-structure functions of no depend on (a) the syntactic function (including word order) of the no-marked NP, (b) the morphological nature of that NP, and (c) the NP's informationstructure status. Six morphosyntactic constructions were identified and arranged on a focality-topicality continuum, represented in figure 1, discussed below (1.2).

The aim of this paper is twofold. First, it intends to substantiate figure 1; all six configurations of figure 1 are analyzed on the basis of a typical Buglere narrative. Second, the topicality end of figure 1, concretely the encoding of givenness, is inspected briefly by means of two production experiments (see below); the idea is to ascertain whether the tendencies found in natural speech remain in controlled, artificial environments. To that end, experimental manipulations of two very characteristic constellations in discourse are presented. The first is the discourse condition in which an argument is given information and the rest of the sentence is new (which induces a topic-comment articulation). This is a typical discourse condition in narratives and is examined in Experiment I (3.1). The second is the discourse condition in which both the state of affairs (or predication) and the participants remain constant (i.e., given), but attention is given to one of two activated participants, making it the explicit topic of the predication; that condition, which exemplifies the process of topicalization, is examined in Experiment II (3.2). The paper does not delve into the issue of syntactic positions and distinctions of arguments, which remains for later investigations; its goal is rather to provide an analysis of NPs in terms of the various configurations that appear in figure 1.

The remainder of this section introduces the focality-topicality continuum (fig. 1) as point of reference for the following sections. On the basis of a spontaneous narrative, in **2**, the relevant constructions in the expression of

information-structure statuses in Buglere are discussed; special attention is given to the marker no. Section 3 centers on the encoding of givenness, based on two production experiments. One of these experiments (3.1) comes from QUIS, a tool for linguistic fieldwork which contains a set of stimulibased experimental procedures for the creation of a semi-spontaneously produced data set for the study of information structure; QUIS was developed within the project D2 Typology of Information Structure, which is part of the SFB Information Structure at the University of Potsdam/Humboldt University of Berlin.³ The other experiment (3.2) is the *Fish Film*, originally designed to test the encoding of FOCAL ATTENTION, "a limited-capacity resource which selects some component information from the general environment for further specialized processing" (Tomlin 1997:172). The first experiment is concerned with how a recently activated participant-a topic-is coded, whereas the second is concerned with the grammar of topicalization, that is, how one of two activated participants in a given state of affairs is encoded. Some conclusions of the study are given in 4.

1.1. The focality-topicality continuum in Buglere. The point of reference of the paper is the six morphosyntactic constructions that make up the focality-topicality continuum, shown in figure 1. According to figure 1, lexical *no*-marked NPs, point (**a**) in figure 1, are used to encode participants which are new, placed in focus, or being grounded in discourse, as in (1*a*):

(1a) LEXICAL NP + no Bodrega no dege-ble siung ke: frog FOC say-P.REM deer to 'THE FROG said to the deer'. (Margery and Rodriguez 1992:30)

Recently activated participants are encoded as lexical NPs without the presence of no, as in (1b), which corresponds to point (**b**) in figure 1. A recently activated participant can either end up being an established topic or its presence and/or persistence in the discourse can turn out to be ephemeral.

(1b) LEXICAL NP Siung dege-ble deer say-p.REM
'THE DEER/the deer said . . .' (Margery and Rodriguez 1992:32)

As one moves to the right of the focality-topicality continuum, pronouns enter the scene. Pronouns have the peculiarity that their referents are either speech-act participants or recently activated entities, and their status as ei-

³ For a full documentation of the experiments, including stimuli, instructions, and a description of the experimental procedure plus a full documentation of the materials, see Skopeteas et al. (2006).

ther topics or foci depends on the morphology—presence vs. absence of no—and on their role in the discourse context.⁴ If pronouns in Buglere are no-marked, point (c) in figure 1, that means they are fulfilling either argument-focus or sentential focus, as in (1c). If, on the other hand, they are not no-marked, (d) in figure 1, they express sentence topics, as shown in (1d).

(1c) PRONOUN + no

Cha	no	mung	jiendega	na,	dege-ble	no
1sg	FOC	REFL	run	again	say-p.rem	TOP

'I am not running again, [he] said' (Margery and Rodriguez 1992:32)

(1d) PRONOUN

Cha	jo-bi	oangama	ngeru	
1sg	go-COMPL	far	first	

'I'm going far ahead' (Margery and Rodriguez 1992:32)

Next on figure 1 is zero anaphora, a strategy used to encode participants that speakers consider well grounded.⁵ Here too there is a difference depending on the presence of *no*; zero anaphora + *no* (**e**) encodes marked topics (that is, the topic status is being highlighted by the marker), as in (1*e*), while zero anaphora without *no* (**f**) is reserved for clearly established topics, as in (1*f*).⁶

⁴ In other words, speech-act participants are always given (not new), but discursively they are dependent on the information structure of the sentence/discourse. For instance, the deictic center can be new in certain discourse contexts, although as a speech-act participant it is given, as in *She said that someone was against the resolution, namely me. I rejected it.* Indeed, in Boruca, a relative of Buglere, there are two sets of subject markers, which are dependent on the information-structure status of the subject; for example, first-person singular can be expressed as either new (*at ki*) or not new (*ang*) in discourse.

⁵ The third-person singular pronoun in Buglere is *che maña*, which can be expressed anaphorically by \emptyset . It is difficult to tell between zero anaphora and third-person singular. The former is more conspicuous with other speech-act participants, as in (*i*), where both first (as subject) and third (as postpositional object) person are expressed by \emptyset :

(i) Ogle cha no bled-able, Ø ngang donand-able Ø ke with 1sg foc talk-p.rem, Ø land ask-p.rem Ø to

'I spoke with him [lit., with him I spoke] and [I] asked [him] about land'.

⁶ The question may arise about why zero anaphora needs any kind of marker. The answer is that zero realization is not tantamount to zero existence (absence of sign material does carry linguistic meaning); hence, zero NP realization + *no* is just another morphosyntactic configuration as, say, pronoun + *no*. Assuming that presence of *no* alone is actually a sequence of $\emptyset + no$, one has to conclude, as mentioned in the running text, that the topic status of the referent encoded as \emptyset is being highlighted. While that analysis is not necessarily flawed, the presence of *no* alone can, alternatively, be regarded as a case of a topic continuity marker, as in (7) below (2.2), where there is a sequence of clauses with alternation of $\emptyset + no$, \emptyset , and $\emptyset + no$ again. Under that analysis, the function of *no* would no longer be that of marker, but of a pronoun. In either case, its function toward the right end of figure 1 is indisputably related to highly topical referents.

(1e) $\emptyset + no$

D	<i>по</i>	<i>káre</i>	<i>jogé-ble</i>	<i>iá</i>	<i>já-ble</i>	<i>talĩke</i>	<i>по</i>
D	ТОР	also	go-p.REM	chicha	drink-р.пем	whole	ЕМРН
[Ø] 1	also v 992:82	vent to 2)	drink all of	the chich	na' (Margery a	nd Rodri	guez

(1f) Ø

<i>Mong</i>	whawk	<i>joge-l</i>	<i>ble na</i>	,	Ø	<i>mũng</i>	<i>joge-b</i>	le	<i>brid</i>	<i>ega</i>
sparro		go-P.I	REM a	gai	nØ	REFL	go-p.r	ЕМ	turn	around
<i>du</i>	<i>dike,</i>	<i>gira</i>	iwa	Ø	<i>mĩng</i>	<i>joll-ab</i>	ole	<i>bue</i>	Ø	<i>ãlĩng,</i>
boat	t stuck	but		Ø	REFL	arrive-	·P.REM	do	Ø	for
Ø	<i>chige-bl</i>	e Dem	mĩng NEC	1	mũng PEEI	<i>iẽng</i> return				

'The sparrowhawk went once more; it $[\emptyset]$ flew around the boat, but $[\emptyset]$ could not reach it $[\emptyset]$ and $[\emptyset]$ flew back' (Margery and Rodriguez 1992:104).

In essence, figure 1 represents a continuum of increasing topicality, with three basic morphological structures (lexical NPs, pronominal NPs, and zero), which can, in addition, bear the marker no; the difference between forms with and forms without no is one of degree, the former being less topical than the latter. Figure 1 exhibits an iconic relationship between information-structure status and form such that (a) correlates with new, focal referents, while (f) correlates with given referents. It is widely accepted (i.e., Chafe 1987 and Lambrecht 1994) that focus and topic statuses correlate with morphological structure of NPs, such that lexical NPs tend to encode new participants, while pronominal NPs tend to encode participants that are well grounded in the discourse. The facultative marker no has a highlighting (specifier) function; it enhances the status of the referent depending on how it is encoded: if (full) lexical NP, it becomes a focus marker; if pronominal or zero anaphora, it becomes a topic marker.

2. Information structure in Buglere. Buglere is a dialect of Bocotá, a Chibchan language originally spoken in the western Panamanian provinces of Veraguas and Chiriquí; hence, it is also known as Bocotá de Chiriquí.⁷

⁷Buglere speakers refer to themselves as *Buglé* and to their language as *Buglere*. They have also adopted the name *Sabanero* for both themselves and their language. The name *Guaymí Sabanero* ('Guaymí from the lowlands') originates from an erroneous view by some scholars who considered Buglere a lowlands dialect of Ngäbére (Guaymí); hence, the name "guaymíes sabaneros" (see Margery and Rodriguez 1992). Aware of their origin, however, the Buglés eliminated the term *Guaymí* but kept that of *Sabanero*. The Buglé people, approximately 2,000 swidden agriculturalists, share with the Ngäbe (Guaymí) people a reservation known as Comarca Ngäbe-Buglé. As a result of recent joint migration, Buglere is also spoken by some 400 Buglés living on the Guaymí Reservation in Coto Brus, province of Puntarenas, in the South Pacific region of Costa Rica. Buglere is a typical Chibchan language of the Isthmian branch (see Quesada 2007*b*). It exhibits SOV basic order, postpositions, postnominal adjectives, and numeral classifiers (comprising a total of 13 classes); possessive phrases follow the pattern possessor–possessum. Verbal categories are expressed by suffixes, with the following categories being grammaticalized: middle voice, [\pm recent] past, present (unmarked), and future tense (expressed by the clitic *be*); mood includes a [\pm realis] opposition; aspectual categories such as progressive, ingressive, and terminative are expressed periphrastically. Participants are not cross-referenced on the verb; their role is made explicit by word order and by the marker *no*.

2.1. Word order. In Buglere, unmarked two-participant transitive clauses follow the SOV order (2), which is used discourse-initially, for grounding participants and for reinforcing their identity in some discourse passages; participants usually appear as full noun phrases in this order. In running discourse, however, the alternative OVS order is fairly common (3); in the OVS order, the postverbal subject is normally followed by the information-structure marker no (see 2.2 below on no).⁸ Following figure 1, the informationstructure status of the postverbal subject depends on its morphology (whether lexical, pronominal, or zero). Thus, in (3a) the postverbal subject is a nomarked lexical NP and a clear instance of argument focus-that is, constructions "in which the focus identifies the missing argument in a presupposed open proposition" (Lambrecht 1994:222). In (3b), on the other hand, the postverbal subject is zero anaphora and its referent is evidently the topic. When the agent is well grounded, the subject tends to be suppressed, yielding an OV structure, as in (4). In cases like (4), it is practically impossible to tell whether the suppressed constituent was pre- or postverbal; only under

⁸ It could be argued that the OVS order constitutes an instance of inversion, similar to that found in Teribe (see Quesada 2000 and Quesada and Skopeteas 2010); however, two arguments speak against that view. First, there is no verbal morphology indicating that a change in the relation between participants and the predicate has taken place. Second, the presence of *no*—the likely obviative marker in a hypothetical inverse construction—is not exclusive to the OVS order. It can appear in the SOV order, as in:

 (i) Sege no cha gud-re ko dige mouse FOC 1SG bite-P.REC hand in
 'THE MOUSE bit my hand' [lit., 'the mouse bit me in the hand'] presence of *no* is it possible to tell, as in (7) below where it is postverbal in the first clause, preverbal in the third clause.

- (2) Gudde siung ngabeg-able tiger goat kill-P.REM'The tiger killed the goat'
- (3a) Che maña miam-ble inua no 3sg see-P.REM father FOC

'HIS FATHER saw him'

- (3b) salmong ning doe chige-ble Ø no salmon NEG bring go-P.REM Ø TOP
 '[Ø, previously mentioned] did not bring the salmon'
- (4) *Glikuara juelen-ble-ga* plank remove-p.REM-remove '[They] removed the plank'

Subjects of intransitive clauses can also be placed postverbally. Their information-structure function depends likewise on the morphology of the NP; focused participants are coded as *no*-marked lexical NPs (5*a*), while topics are coded as zero anaphora with presence of *no* (5*b*). In both transitive and intransitive clauses, the information-structure status of pronouns and lexical NPs without presence of *no* depends on the specific context in the narrative.

(5 <i>a</i>)	Kuadra	ine Ivi	ngualinga	-ble	<i>chibia</i>	no FOC
	'Sudden	nly, 1	HIS MOTHE	R screa	med'	FUC
(5b)	Kirua	ioll-	able	muno	ibuade	ioge-ble

5b)	Kirua	joll	-able		mung	ibuade,	joge-ble	Ø	no
	son	rem	ain-P.R	EM	REFL	ashamed	go-p.rem	Ø	TOP
	<i>jona</i> towi	<i>ng</i> 1	<i>sege</i> in	sa sal	<i>lmong</i> lmon	<i>gige</i> buy			

'The son felt ashamed, $[\emptyset]$ went to town to buy the salmon'

2.2. The information-structure marker *no***.** As mentioned repeatedly above, *no* has a series of functions ranging from the expression of mere emphasis $(6)^9$ to topic (7) and even focus (8), depending on the morphology of the NP it marks.

 9 The function here called "emphasis" refers to those cases in which the scope of *no* is not an NP, as in (6) or in the last example in (7). Clearly, this function has nothing to do with figure 1.

- (6) Ngãng jóye soguá no cha dige Now arrive happy EMPH 1sG with
 'Now I am happy' [lit., 'Now I am HAPPY with myself'] (Margery and Rodriguez 1992: 81)¹⁰
- "Cha be (7)degede giti ba ke," dege-ble Ø no. later 2sg 1sg FUT say to say-P.REM Ø TOP Giti Ø joge-ble kada-ble desege ye then Ø go-P.REM certain place animal call-P.REM sribire mũng Ø gule. Ø káre jogé-ble no work 3sg with Ø REFL TOP also go-P.REM talĩke iá já-ble no chichi drink-P.REM whole EMPH
 - 'I will let you know, said [the guatusa]. And then $[\emptyset]$ asked the animals to work together with her $[=\emptyset]$ and then $[\emptyset]$ drank ALL the chicha' (Margery and Rodriguez 1992: 82).
- (8) "Cha joge-dale uange ngaña llane; cha no mung 1sg go-IRR far high there 1sg FOC REFL dagadaba-dale dobogu: cha jogo-dale badega cha throw-IRR downward 1sg go-IRR run 1s_G gada-de jogo-dale chi sege," dege-ble gobi no. CFL.LONG-one go-IRR river in say-P.REM turtle FOC

"I can climb up there; [and] I can throw myself down; I can run in the water," said THE TURTLE'.

In (7), the topic of the episode is the *guatusa* (a long-headed, plantigrade mammal, with short and round ears, typical of Central America), which is expressed via zero anaphora, with and without *no*: in the first clause, it is *no*-marked; in the following clause, it is not; finally, in the last clause, it is again *no*-marked. If we assume the figure 1 hypothesis proposed in this paper, we can predict that zero anaphora is used to encode participants that speakers consider well grounded, and that the presence of *no* with zero anaphora serves to highlight the topic status of the referent. Thus, the intermittent, facultative marking of zero anaphora in (7) has to be regarded as the result of

¹⁰ The glosses and segmentations (but not orthography) in the examples from secondary sources have been adapted to my own for the sake of uniformity. $\langle II \rangle$ represents the voiced al-veopalatal affricate [cb], while $\langle j \rangle$ represents the voiceless glottal fricative [h]. Stress marks and tilde on vowels in Margery and Rodriguez (1992) simply represent phonetic stress and nasality. They are not used here.

the speaker's assessment concerning the status of the referent. In (8), the subject of the sentential object is a lexically *no*-marked, postverbal NP; presence of *no* has to do with the need to identify the speaker in a dialogue. Both (7) and (8) show once again that the functions of *no* depend on at least (*a*) the specific context in the narrative, (*b*) the position where it appears in the clause, and (*c*) the nature of the NP it marks (lexical vs. pronominal).

Another function of no is that of contrastive focus, as in (9). Notice that out of the three possible thieves—the dog, the speaker, and the speaker's sister—one is singled out by the presence of no. As can be seen in the free translation, this function of no comes very close to that of cleft constructions in languages like English and Spanish. Note the use of zero anaphora for the topic *chre* 'the meat'.

(9) cha dabaia degede ke miane chre ja-dre-ade, 1sg sister say that meat steal-P.REC-steal NEG ja-dre-ade to no steal-P.REC-steal dog CONT-FOC

'My sister says that [she] did not steal the meat; THE DOG did [It was the dog that stole it]'

In sum, the marker *no* is a facultative element whose function is to reinforce the information-structure status of the referents it marks; referents' information status in turn depends on word order, morphological structure, and discourse context.

2.3. A Buglere spontaneous narrative. The interaction of the two main strategies used in Buglere to express information-structure statuses is illustrated in (10), a typical Buglere narrative, which was presented by Mr. Celestino Santos, of the Guaymí Reservation, in March 2008.

(10)	<i>Gobi</i> Turtle	<i>i</i> and	<i>soguar</i> iguana	ng l	<i>kuerea</i> chief					
(10 <i>a</i>)) <i>Sogua</i> iguana	ng kla 1 be	e-ble -P.REM	<i>ugo</i> sano	<i>ba gi</i> d or	<i>di</i> 1	<i>jimungu</i> . side	<i>Sogua</i> Iguana	ng 1	<i>kuerea</i> chief
	kle- be-F	ble P.REM	<i>ugoba</i> sand	<i>gi</i> or	i <i>di</i> n					
(10b)) <i>jimung</i> side	<i>3</i> u	<i>kle-ble</i> be-p.r	e EM	<i>jobe</i> . bathe.	Ki su	uadrane, ddenly	<i>gobi</i> turtle	<i>chig</i> com	ge-ble ne-p.rem
	sobe wall	ega c k v	<i>hi g</i> vater o	g <i>idi</i> , on	<i>chige</i> come	<i>e-ble</i> e-p.r	2 EM			

- (10*c*) *keda*. Na dege-ble "ba kle llema bue." no ke out other FOC say-P.REM to 2SG be what do "cha dege-dre kle no. basale say-P.REC TOP 1sg be tour
- (10d) ugoba gidi jobe kare," dege-ble kuerea soguang sand on bathe too say-P.REM iguana chief "Gobi, a, ba chugu-bi no. jaine FOC turtle uh 2sg come-COMPL here
- be be (10*e*) *che* munguñe, che munguñe bagaga 1PL.INCL FUT 1PL.INCL FUT four race race nenge." "Cha joge-dale today 1sg go-IRR
- (10f) uange ngaña llane; cha dagadaba-dale no mung far high there 1sg FOC REFL throw-IRR dobogu; cha jogo-dale badega cha downward 1sg go-IRR run 1sg
- gobi (10g) gada-de jogo-dale chi sege," dege-ble CFL.LONG-one go-IRR river in say-P.REM turtle dege-dre no. Soguang kuerea chief iguana say-P.REC FOC
- (10*h*) "*je* kare kare cha kare cha joge-dale ngaña kare, DEM too too 1sg too 1sg go-IRR high too cha sogen-dale dobogu. Cha 1sg throw-IRR downward 1sg
- (10*i*) joge-dale badega kare. Cha joge-dale chi kare. sege go-IRR too 1sg go-IRR river run in too "kare Dege-ble che be say-P.REM too 1PL.INCL FUT
- llaba (10*j*) munguñe, baga che munguñe," dege-ble, four within 1pl.incl race race say-P.REM *"kare* che munguñe agua," 1pl.incl too race EMPH
- (10k) dege-ble Gidi bagaga kare; gobi jolla-ble, no. say-P.REM ТОР then four too turtle come-P.REM soguang kuerea jolla-ble; iguana chief come-P.REM

- (10*l*) *jolla-ble* Gli gli dige, ngaña. bamanane je come-P.REM tree on high tree half-bent DEM gobi joge-ble gidi mung iluge then turtle go-P.REM climb REFL
- (10m) ngaña gidi kare. Jolla-ble ngaña, uine ngaña. then up too come-P.REM up silent up "Ba kle degede sogen-du dobogu 2sg be say throw-MED downward
- (10n) mian-dale cha ke," soguang dege-dre Kare ngeru. see-IRR 1SG iguana say-P.REC first to too sogem-ble dobogu. Bade gobi turtle throw-P.REM downward fall
- (10*o*) *jolla-ble* kê gidi daba sigem-ble-de. gua break-P.REM-break come-P.REM flat down stone on chebege-ble Gobi mung kuara tege

turtle stay-P.REM REFL skin fix

- (10*p*) *gidi*; nging, soguang sogem-ble dobogu. with meanwhile iguana throw-P.REM downward Joge-ble gadada jolla-ble chi sege. go-P.REM splash go-P.REM river on
- (10q) Soguang ganaianda-ble. Gobi chebege-ble mung kuara iguana win-P.REM turtle stay-P.REM REFL skin gidi; kle-ble kuara tege mung fix with be-p.rem skin REFL
- jirudabaka. (10r) tege gidi Mung kuara tega-ble gidi with slowly fix REFL skin sew-P.REM on julita, joge-ble badega, gadada jolla-ble all go-P.REM run splash go-P.REM
- (10s) chi sege soguang gidi. water on iguana with

The Turtle and the Chief Iguana

An iguana was at the riverside; the chief iguana was bathing at the riverside. Suddenly, a turtle emerged out of the water and asked the iguana, "What are you doing?" The chief iguana replied, "I am also bathing on the sand," and then said, "Turtle, now that you just came here, let's have a race; let's have a race in four days." The turtle said, "I can climb up to the top of that tree and jump down; I can go up and jump down." "Oh, I can do that too; I can climb up and jump down into the water," retorted the iguana; and added, "well, then we'll have a race; in four days, we'll have a race." The day came. The turtle came and so did the chief iguana, which immediately climbed to the top of a bowed tree. The turtle also climbed up the tree and sat down on the top of the tree. The iguana said to the turtle, "Well, you've been bragging [all along]; now show me that you can indeed jump down." The turtle threw itself down but crushed into a flat stone and broke into pieces; it then started to sew itself back together. Then the iguana jumped down into the water. The iguana won. The turtle kept sewing itself together; when it was done, it went back into the water together with the iguana.

2.4. Encoding of given participants in a spontaneous narrative. Close inspection of (10) reveals four clearly identifiable episodes:

Episode 1. Presentation: (10a)–(10b)

Episode 2. Dialogue and challenge: (10c)-(10k)

Episode 3. Contest: (10k)–(10q), with three subsections:

- 3.1. Reintroduction of participants: (10k)
- 3.2. Preparation: (10*l*)–(10*m*)
- 3.3. Climax: (10*n*)–(10*p*)

Episode 4. Dénouement: (10q)–(10s).

The development of the story and encoding of the two participants is as follows:

Episode 1. Presentation:

- (*a*) The iguana is introduced as *Soguang* and repeated in the following clause.
- (b) Third mention of the iguana (*soguang*), coded as \emptyset anaphora. The turtle is introduced as *Gobi* and coded as \emptyset upon second mention.

Episode 2. Dialogue and challenge:

- (c) In its third mention the turtle is coded as pronoun + no. It is brought to the foreground as the initiator of the dialogue. After the quotation, it is coded as postverbal \emptyset anaphora.¹¹
- (d) The iguana replies; it is coded as postverbal *soguang kuerea* + *no*. This is a focus structure similar to the turtle's first mention on line

¹¹ The pattern X said "...", said X for indirect speech is not uncommon in the Isthmian languages. It has been well attested in Teribe (see Quesada 2000).

(10c). Both are used to identify the participants in a dialogue at the onset of the story. Toward the end of line (10d), the iguana takes the lead in the exchange and challenges the turtle.

- (e) The turtle retorts. Quoted as direct speech, the turtle replies as a speech-act participant (first-person singular pronoun).
- (f) In the second clause, the turtle continues its reply and highlights itself, as cha + no, in order to establish a contrast between it and the iguana. At the end of the line, it is coded as pronoun only; it is not coded as \emptyset anaphora nor as pronoun + no. This is a case of overt topic continuity; the referent is kept constant but is not totally grounded.
- (g) The direct speech quoted on lines (10e) and (10f) is, syntactically, the direct object of the verb *degeble*, and its postverbal subject, the turtle, is coded as lexical NP + *no*. Again, this focus structure is used to identify the participants taking turns. At the end of the line, the iguana takes its turn; it is coded as lexical NP without *no*. A possible explanation for the absence of *no* in a similar context (turn-taking in a dialogue) can be the length of the turtle's turn (four clauses in OVS structure), in addition to the facultative nature of the particle.
- (*h*) The iguana is quoted in direct speech; in the two instances, it is coded as first-person pronoun. Again, the use of the pronoun represents a case of overt topic continuity.
- (*i*) After the quotation, in the middle of the line, the iguana continues its turn and is coded as \emptyset anaphora; that is, the speaker considers it well grounded at this point.
- (*j*) As in the previous line, \emptyset anaphora is used between citations of the given referent, the iguana.
- (k) At the end of the iguana's last turn, it is coded as \emptyset anaphora + no. This line closes Episode 2.

Episode 3. Contest:

- (*k*) The day of the contest comes and the two protagonists are reintroduced as lexical NPs.
- (*l*) The reintroduction of the iguana extends over two clauses, one on line (10k) and the other on line (10l). In the second mention of the iguana, it is coded as Ø anaphora; a similar pattern was observed in lines (10a) and (10b). In line (10l) there is the preparation of the climax, and the turtle is coded as lexical NP.
- (*m*) The turtle is coded as \emptyset anaphora; it is then well grounded. The iguana starts to speak.
- (*n*) The author of the citation, the iguana, is identified as a lexical NP. Reference is made again to the turtle, which is also coded as a lexi-

cal NP; toward the end of the line, it is coded as \emptyset anaphora. The climax begins, revolving around the turtle.

- (*o*) The climax takes place; its protagonist is coded as \emptyset anaphora. The last part of the climax begins; the protagonist is retaken as a lexical NP.
- (*p*) Attention is given to the other participant, the iguana, which is coded as a lexical NP, first, and then as \emptyset anaphora, thus closing the episode.

Episode 4. Dénouement:

- (q) The result of the contest is announced, and the protagonists are coded as lexical NPs. But a lengthy reference to the loser is made, where it is coded as \emptyset anaphora till the end of the story.
- (r) \emptyset anaphora (three times) for the loser, which is the topic of the episode.
- (s) Not applicable.

The distribution of the six constructions in figure 1 in terms of functions in (10) is summarized in table 1.

Three important points emerge from table 1. First, the number of constructions without no is doubtlessly higher than that for forms with no. This fact reinforces the view that *no* is a facultative marker which highlights the information structure status of referents as the case may be. Second, the functions assigned to each configuration are not as clear-cut as figure 1 suggests. Instead, some of the functions can be expressed by two different configurations (e.g., identification in turn-taking can be expressed by lexical NP with and/or without no, or change of referent can be expressed by lexical NP and/or pronoun + no), while one configuration can have more than one function (e.g., a lexical NP can code a first mention as well as a change of referent, or pronoun + no can express a change of referent as well as contrastive focus). Third, despite this, in general terms, the relation between structure and function tends to go along the lines outlined in figure 1. Let us now turn to more controlled environments, where spontaneity is reduced, as in the QUIS experiment and even more as in the Fish Film, where speakers were asked to report the situation exactly as it unfolded.

3. The expression of givenness in Buglere in controlled environments. The purpose of the experiments is to determine the impact of givenness and topicalization on the choice of the morphosyntactic strategies analyzed in **2** above. Before I go into detail about the experiments, three clarifications are in order. First, these experiments and their results are rather preliminary because both the population and the number of tokens are small. Second, it is clear that controlled elicitation methods may display deviations from the

		Number of	
Structure	Line	Instances	Function
Lexical NP + no	(10 <i>d</i>)	1	Identification in dialogue (turn-taking)
	(10g)	1	Identification in dialogue (turn-taking)
Lexical NP	(10 <i>a</i>)	2	First mention (presentational sentence)
	(10 <i>b</i>)	1	First mention (presentational sentence)
	(10g)	1	Identification in dialogue (turn-taking)
	(10 <i>k</i>)	2	First mention in new episode
	(10 <i>l</i>)	1	Change of referent
	(10 <i>n</i>)	2	Change of referent
	(100)	1	Reactivation (after series of \emptyset anaphora)
	(10p)	1	Change of referent
	(10 <i>q</i>)	2	Change of referent
Pronoun + no	(10 <i>c</i>)	1	Change of referent
	(10f)	1	Contrastive focus
Pronoun	(10 <i>c</i>)	2	Sentence topic (direct speech)
	(10 <i>d</i>)	1	Sentence topic (direct speech)
	(10 <i>e</i>)	3	Sentence topic (direct speech)
	(10f)	3	Sentence topic (direct speech)
	(10 <i>h</i>)	4	Sentence topic (direct speech)
	(10 <i>i</i>)	2	Sentence topic (direct speech)
	(10 <i>j</i>)	2	Sentence topic (direct speech)
	(10 <i>m</i>)	1	Sentence topic (direct speech)
$\emptyset + no$	(10 <i>c</i>)	1	Recently activated topic (antecedent is lexical NP one clause before)
	(10 <i>k</i>)	1	Well-grounded topic (antecedent is lexical NP more than two clauses before)
Ø	(10 <i>b</i>)	2	Topic (third reference to soguã, second to gobi)
	(10 <i>i</i>)	1	Well-grounded topic (antecedent is lexical NP more than two clauses before)
	(10 <i>j</i>)	1	Well-grounded topic (antecedent is lexical NP more than two clauses before)
	(10 <i>l</i>)	1	Topic (antecedent is lexical NP one clause before)
	(10 <i>m</i>)	1	Topic (antecedent is lexical NP one clause before)
	(10 <i>n</i>)	1	Topic (antecedent is lexical NP one clause before)
	(100)	1	Topic (antecedent is lexical NP two clauses before)
	(10p)	1	Topic (antecedent is lexical NP one clause before)
	(10 <i>q</i>)	1	Topic (antecedent is lexical NP one clause before)
	(10 <i>r</i>)	3	Well-grounded topic (antecedent is lexical NP more
			than two clauses before)

 TABLE 1

 Distribution of Constructions in (10)

naturalistic discourse. The most important source of such deviations is that language consultants may not always perceive the "intended" discourse conditions, i.e., the conditions that the experimental setup aims to establish. Third, since the number of language consultants is very limited and the restrictions of the small population in an endangered language do not allow us to test hypotheses in a large speakers' sample, this article just reports the descriptive results of this (small-scale) study. In the following, I report the number of tokens obtained in each experimental condition and interpret the descriptive values (i.e., the proportions) without using inferential statistical procedures. This in turn implies that we cannot estimate to what extent the reported differences result by chance.

3.1. Experiment I: Givenness of participants. The experiment chosen to test the encoding of topics is called Visibility in QUIS; it aims at the elicitation of short narratives by means of picture descriptions. The consultant is shown two pictures and is instructed to describe the presented scenes as if they were parts of a unique story (see exemplification in 10 above).¹² The first scene is used to establish the intended context: it presents an entity, either animate or inanimate. After describing the first picture, the consultant is shown the second one, which contains the critical situation: it presents an event in which the already introduced entity is involved, either as an agent or as a patient. The critical situations contain events that are likely to be lexicalized through transitive verbs across languages (e.g., 'hit', 'kick', 'push', 'carry', 'hold', etc.). The main factor implemented in the experimental design was the discourse status of the referents, given vs. new, and their semantic case role as either agent or patient: {Level₁: agent \rightarrow given and patient \rightarrow new; Level₂: agent \rightarrow new and patient \rightarrow given}, yielding two experimental conditions which are presented and illustrated in (11):

¹² The corresponding directions for this experiment in the *Field Manual* read as follows: The instructor says:

You will be shown two pictures that belong together, that is, they belong to the same story. **Imagine that the first scene takes place first and the second scene some time later, e.g., after five minutes.** What is interesting for us are the figures and actions at the foreground of the picture, you do not need to describe details about the pictures or the individual figures. Please give just a short description of each scene.

The instructor shows the first picture to the language consultant.

The instructor shows the second picture to the language consultant. (See the photograph in Appendix A.)

(11) Conditions for Experiment I Condition 1: agent/given and patient/new [sc-1]: 'a boy_i is standing on the floor'

[sc-2]: 'the boy_i is kicking a man'

Condition 2: agent/new and patient/given [sc-1]: 'a man_i is sitting on the floor' [sc-2]: 'a boy is kicking the man_i'

The above conditions were implemented in eight items containing different events, thus rendering a design of 2 (conditions) \times 8 (items) = 16 elements. Pictures have been developed using the 3–D rendering software package Poser 5.0. Four native speakers living on the Guaymí Reservation participated in this kind of elicitation task. Each speaker performed all eight descriptions in one session, which renders a data set of 4 (speakers) \times 1 (session) \times 8 (descriptions) = 32 picture descriptions in total (16 per condition).

3.1.1. Expectations. As presented above, the experiment intends to test the possible impact of discourse status of the referents on the choice of word order and morphological coding (*no*-marked, lexical or pronominal NP, lexical NP, pronominal NP, and zero anaphora). The prediction is that whenever the agent outranks the patient in givenness, there are two possibilities: SOV order with a non-*no*-marked lexical or pronominal NP agent or OVS order with either an optionally *no*-marked pronominal subject or an unmarked lexical subject. This is the case in Condition 1. Conversely, when the patient outranks the agent in the givenness hierarchy (given > new), either OVS word order or SOV order with O being coded as either a pronoun or zero anaphora will be used. This is the case in Condition 2. The predictions for this experiment are summarized in (12).

(12) Predictions

Condition 1: agent/given and patient/new \rightarrow SOV where S = pronominal or lexical NP and O = lexical NP ~ OVS, where S = pronominal (*no*) or lexical NP

Condition 2: agent/new and patient/given \rightarrow SOV~ OVS, where S = lexical NP (*no*), O pronominal NP ~ \emptyset

The speakers gave spontaneous descriptions of the presented stimuli. As a result, not only did they select among alternative ways of encoding the same propositional content, but they also could select different propositional contents to describe the same perceptional input. Testing the above hypotheses concerning the choice of morphosyntactic patterns requires a restriction of the data set to those descriptions that fulfill the following requirements: (*a*) only the referent which is intended to be given is already introduced in

	AGT Giv	ven/PAT New	AGT New	/ PAT Given
Valid tokens: 16				
$S_{[lex]}noO_{[lex]}V$	2	12.5%	1	6.25%
$S_{[lex]}O_{[lex]}V$	7	43.75%	10	62.5%
S _[pro] noO _[lex] V	0	0%	0	0%
$S_{[pro]}O_{[lex]}V$	5	31.25%	3	18.75%
$S_{[lex]}O_{[pro]}V$	2	12.5%	1	6.25%
S _[pro] O _[pro] V	0	0%	1	6.25%
OVS	0	0%	0	0%

 TABLE 2

 Encoding of Given Participants in Semi-spontaneous Speech

the discourse and (b) the target event is lexicalized by a transitive verb. All responses fulfilled both conditions.

3.1.2. Results. The results of Experiment I are summarized in table 2. Table 2 reveals an evident tendency to code new agents as lexical NPs in SOV order (75%), in agreement with the expectations. However, when it comes to given agents, the predictions are only partially fulfilled, because 68.75% of given agents were coded as lexical NPs, while only 31.25% as pronominal NPs (with optional no-marking) in SOV order, and no given agent appeared postverbally. As for patients, these were coded as lexical NPs when new (87.5%), thereby fulfilling the expectations, but as lexical (87.5%)and pronominal NPs (12.5%) when given, and in the SOV order. Again, these results contrast with the tendencies found in narratives. Above all, it is intriguing that the OVS configuration, where S can be either a lexical or pronominal and optionally no-marked NP, was not produced. The results of Experiment I also contrast with a tendency to one-argument structures attested in Buglere narratives. It is highly probable that the speakers did not believe that the participants intended to be portrayed as given in the experiment were fully grounded (as they often are in narratives), so as to make use of the constructions that normally occur in spontaneous narratives (e.g., pronouns, zero anaphora, OVS word order). That being the case, it may be concluded that OVS order and pronominalization require the agent to be (deemed by the speaker as) FULLY GROUNDED in discourse; otherwise, lexical realization and SOV order are employed.

3.2. Experiment II: Givenness of a state of affairs and choice of topic (topicalization). The *Fish Film* was originally designed to test the interaction between focal attention and syntactic subject in sentence production (see Tomlin 1995). It consists of 32 trials in which two identical fish, differing in color, approaching from opposite sides, meet in the middle of the screen. When they meet, one swallows the other within a time span of 50ms.

	Abstract	%
Total number of tokens: 64		
NP _[lex] no	12	18.75%
NP _[lex]	15	23.43%
NP _[pro] no	34	53.21%
NP _[pro]	3	4.68%

 TABLE 3

 TOPICALIZATION OF AGENTS IN SEMI-SPONTANEOUS SPEECH

The colors of each pair of fish are randomized and the direction of the eating fish is counterbalanced. In each trial, one of the fish is primed by means of an arrow pointing to it. Speakers are asked to describe the event as it unfolds. The idea is that they direct attention to the primed fish.¹³ This process can be equated with what is commonly known as topicalization insofar as both participants (and, in the case of the *Fish Film*, even the event) are given, but one is singled out to be made the point of departure in the predication. Usually a referent is topicalized "by being placed in the sentence initial position normally occupied by the topic" (Lambrecht 1994:147), but topicalization can also be effected by morphological or prosodic means.¹⁴

3.2.1. Expectations. The predictions for this experiment are summarized in (13).

(13) Predictions¹⁵

Topicalized (primed) fish as agent

 \rightarrow S(no)OV, where S = pronominal NP ~ \emptyset , O = lexical NP

Topicalized (primed) fish as patient

 \rightarrow OVS(no) ~ SOV, where S = lexical NP ~ pronominal, O = lexical NP

3.2.2. Results. The results in table 3 are in line with the predictions. The realization of a given participant, either lexical or pronominal, and marked by *no* (71.96%), appears only natural given that topicalization is not plain givenness but "marked givenness." In other words, two fundamental information-structure functions fall together here: topicality as given, back-

¹³ The Fish Film is available at http://logos.uoregon.edu/tomlin/research_fishfilm.html>.

¹⁴ According to Lambrecht (1994:147), "the fact that in topicalization a non-subject becomes a topic does not entail that the subject must lose its topic status in the process. Therefore, such a sentence may have two topic expressions." In the *Fish Film*, both fish are given; the primed one undergoes topicalization. For a detailed discussion about topicalization, see Erteschik-Shir (2007:23–27).

¹⁵ The predictions for this condition look superficially similar to those in (12). On closer inspection, however, they turn out to be different: while in (12) a given agent is expected to be coded as a lexical NP, in (13)—where both participants are given—the primed participant is expected to be coded as *no*-marked NP. That is, the conditions are different and so are the predictions.

	Abstract	%
Total number of tokens: 64		
OSV	49	76.56%
SOV	15	23.44%

TABLE 4 Syntactic Realization of Topicalized Patients in Semi-spontaneous Speech

TABLE 5	
TOPICALIZATION OF PATIENTS IN SEMI-SPONTANEOUS S	PEECH
(REGARDLESS OF WORD ORDER)	

	Abstract	%
Total number of tokens: 64		
NP _[lex] no	8	12.5%
NP _[lex]	24	37.5%
NP _[pro] no	11	17.18%
NP _[pro]	21	32.87%

TABLE 6	
TOPICALIZATION OF PATIENTS IN SEMI-SPONTANEOUS S	PEECH
(INCLUDING WORD ORDER)	

		Abstract	%
OSV	Total number of tokens: 49		
	NP _[lex] no	8	16.32%
	NP _[lex]	24	48.97%
	NP _[pro] no	9	18.36%
	NP[pro]	8	16.32%
SOV	Total number of tokens: 15		
	NP _[lex] no	0	0%
	NP _[lex]	0	0%
	NP _[pro] no	2	13.33%
	NP[pro]	13	86.66%

ground information, which explains the use of the pronominal forms; and topicalization as highlighting an already existing topic, which is expressed by *no*. This in turn explains the low percentage of non-*no*-marked pronominal NPs.

Tables 4–6 show the various configurations obtained when patients were topicalized. The first striking aspect is the use of the OSV word-order pattern, never attested in hitherto published Buglere narratives (see Margery

1989 and Margery and Rodriguez 1992) nor in my own fieldwork. Moreover, OSV is not a common pattern in the Isthmian languages, where object and verb form a cohesive, indivisible unit. In Buglere, by far the most common word order in noncontrolled environments is OVS; OSV is practically nonexistent. Therefore, the overwhelming number of OSV instances, which syntactically fulfill the profile of left-dislocation, has to be attributed to the limited response time the speakers had to code the scenes.

Table 4 shows that 76% of topicalized patients were realized in the OSV word order. Table 5 shows the morphological realization of topicalized patients, while table 6 shows the morphological realization of topicalized patients in combination with word order. Important to mention is the fact that in all 15 instances of the SOV order the patient is coded as a pronoun, and only in two is it followed by no, whereas in the OSV order it tends to be coded as a lexical NP (65.29%). One can thus predict that if a patient is going to be topicalized, it will be placed in sentence-initial position mainly as a lexical NP, or else coded as a pronoun in SOV order. The difference between the topicalization of agents and that of patients is mainly one of wordorder patterns. The participant being made topic is moved to sentence-initial position. If it is the agent, the order is SOV; if it is the patient, the order is OSV/OVS. The second difference is morphological. Topicalized agents tend to be coded mainly as either lexical NPs or no-marked lexical and pronominal NPs-but not just pronominal NPs-in sentence-initial position, whereas topicalized patients tend to be coded as either lexical or pronominal NPs. Additionally, while 70% of topicalized agents were no-coded, only 30% of topicalized patients were. The reason for this distribution may be related to the fact that Buglere is currently experiencing a change in participant-encoding patterns. The role of *no* was until recently that of a marked nominative (see Quesada [forthcoming]). Facultative marking led to its reanalysis as a marker of information-structure status, thereby making it possible for the erstwhile marker of subjects to extend to objects. Since the change is still in progress, no-marking of objects is not as categorical yet as marking of subjects.

4. Conclusions. Two types of conclusions, general and specific, can be drawn from this study. The former pertain to the theory of information structure, while the latter concern the expression of information structure in Buglere. Regarding the theory of information structure, the results of the study tend to confirm the theory's basic tenets, such as the iconicity in the expression of topics, or the role of word order and syntactic positions. The distinction between givenness and topicalization, for instance, can be cast in terms of markedness. Givenness can be said to be unmarked with respect to topicalization in that the former simply expresses a normal status of a topic,

whereas the latter represents the highlighting of that status, thereby requiring sign material (which in Buglere can be a change in word order and/or the use of *no*, which in turn was higher in Experiment I than in Experiment II). As for sentence-initial position, the results of the second experiment categorically confirm its status as "cognitively speaking . . . an eminently salient position" (Lambrecht 1994:201).¹⁶ This was shown most dramatically by the use of OSV order in Experiment II. Lastly, a nontrivial generalization concerning the difference between spontaneous and semi-spontaneous speech is in order. The distribution of the various morphosyntactic strategies in (10) reveals the speaker's own assessment of the information-structure statuses of the participants, whereas in both experiments those statuses were preassigned and the speakers had to verbalize them. This explains the difference between the results of the experiments and the distribution of the various structural configurations in (10).

As for the expression of information structure in Buglere, the empirical data show clear correlations between the choice of word order in discourse and the application of universal pragmatic principles such as "given > new." The latter determine the available options for the linearization and morphological trappings of the conveyed information in this language. Above all, the results of the experiments reveal the relevance of sentence-initial position in the grammar of information structure in Buglere.¹⁷ Tomlin's original application of the Fish Film to various languages yielded different results. In English, the topicalized participant was coded as a syntactic subject. In Burmese and Indonesian, it was coded as a syntactic subject marked by a postposition, whereas in Mandarin, it was simply placed as the initial argument in the clause. Slavic languages such as Polish, Russian, and Bulgarian showed "no clear pattern"—nor did Akan (Tomlin 1995:540–41). Thus, in typological perspective, Buglere belongs to those languages that place topicalized (or focally attended in Tomlin's terms) participants-that is, marked topics-in the leftmost syntactic slot, whereas given (unmarked) topics appear in the unmarked SOV order. Although these results are preliminary and more experiments are definitely needed, I hope that a better understanding of the grammar of information structure of one more Chibchan language has been attained.

¹⁶ The claim is not that sentence-initial position is reserved for topics only but rather that this position's feature can be exploited to highlight either topics or foci. In the case at hand, then, Buglere makes use of this position to highlight a given participant.

¹⁷ A detailed analysis of the role of sentence-initial position and positions for sentence-initial constituents and syntactic structure in general in Buglere is undoubtedly desirable; however, as stated at the beginning of this paper, that analysis exceeds the goals of this paper and remains for future research.

APPENDIX A



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