'Smash it again, Sam': Verbs of cutting and breaking in Jalonke

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Abstract

This paper investigates the semantic and syntactic properties of cutting and breaking verbs in Jalonke. Semantic features relevant for these Jalonke verbs are control of the effector over the locus of impact, subcategorization for specific manners/instruments, and the theme being a whole vs. already detached from an entity. The latter distinction is unattested in other languages. Syntactically, the verbs fall into two classes: cut verbs with a transitive argument structure, and break verbs with causative and inchoative argument structure options. The existence of a class of exclusively transitive break verbs, despite the existence of the causative/inchoative alternation in Jalonke, is not expected in recent theories of argument structure.

Keywords: *cut and break; separation events; Jalonke; Central Mande; syntax-semantics interface; argument structure; verb semantics.*

1. Introduction

This paper investigates the linguistic encoding of cutting and breaking (C&B, hereafter) events in Jalonke from the perspective of both semantics and syntax. Jalonke is a variety of Yalunka, a Central Mande language spoken in a handful of villages in the north of Guinea. The language exhibits many typological traits characteristic of Mande languages: it has a very rigid SOVX word order, X standing for all adjuncts (Creissels 2000). Grammatical relations are marked exclusively through word order. Arguments of a verb cannot be ellipsed but must be minimally realized as pronouns, even if they are non-referential or recoverable from the context.

C&B events are expressed through verbal clauses in Jalonke, as illustrated in (1).[1] If the verbs heading the clauses do not select for a specific manner or instrument or if atypical instruments are used, the instrument

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of the corresponding event can be encoded in a postpositional phrase, as in (2).

(1) *A* *burɛx* *-ɛɛ* *sɛgɛ.*
3SG leaf -DEF cut
'He cut the leaves.' Dendelle 109

(2) *A* *dugi* *-nee* *i-* *bolon* *martoo* *-na* *'a.*
3SG cloth -DEF.PL IT- separate hammer -DEF with
'He cut (lit.: IT-separate) the cloth with a hammer.'
Cut&Break-AB-23

In this paper, I discuss the semantic features underlying C&B verbs in Jalonke and the relationships between their argument structure and meaning properties, addressing the following questions:

- Are C&B events encoded in the same way, or are there syntactic and semantic differences between the verbs denoting them in Jalonke?
- Are the semantic features relevant for the choice of verbs the same as attested for other languages or are there additional or different parameters governing their use?
- What are the argument structure properties of C&B verbs, and how do they relate to their meaning? How does their argument structure fit with crosslinguistically attested patterns?

The analysis presented here is based on responses of two consultants to the video stimulus entitled the "Cut and Break clips" (Bohnemeyer et al. 2001, a full description can be found in the introduction to this issue; see Majid et al.) and a detailed investigation of verbal argument structure through elicitation and corpus studies (Lüpke 2005).

2. The semantics of C&B verbs in Jalonke

In response to the C&B clips, 16 verb types were used. These verbs only represent a selection of the Jalonke verbs attested so far that describe C&B events (see Table 1). The argument structure of these verbs was established through their morphosyntactic properties and corroborated through a study on argument realization, both reported elsewhere (Lüpke 2005). In contrast to Ewe (Ameka and Essegbey, this issue), the findings favor a lexicalist rather than a constructionalist analysis of argument structure properties for Jalonke.

Jalonke C&B verbs are noteworthy for the large number of lexicalized derived forms among them. Thus, *i-dogoti* 'cut in half, cut in two pieces (lit.: IT-cut) (of cloth, rope or fruit)' and *i-bɔɔ* 'tear, slit, split, cut along

Table 1. *Jalonke verbs used in response to the C&B stimuli*

Verb	Argument structure	Gloss	Typical manner or instrument(s)
bolon	tr.	'untie, unfasten, pick (fruit), separate, split'	hands, fruitpicker, any suitable instrument for 'separate' and 'split'
din	tr.	'pound, punch'	hand, feet, any suitable instrument
gira	caus./inch.	'break, crush'	no specific instrument
i-bolon	tr.	lit.: 'IT-unfasten' 'unfasten again, unfasten several times, separate, split'	hands, fruit picker, any suitable instrument for 'separate' and 'split'
i-bɔɔ	tr.	lit.: 'IT-tear' 'tear, slit, split, cut along the long axis'	scissors, knife, axe, machete, hands
i-din	tr.	lit.: 'IT-pound' 'pound again, pound several times'	hand, feet, any suitable instrument
i-dogoti	tr.	lit.: 'IT-cut/break' 'cut/break in half, cut/break in two pieces'	knife, scissors, hand
i-gira	caus./inch.	lit.: 'IT-break' 'break again, snap'	no specific instrument
i-muŋuxun	tr.	lit.: 'IT-smash' 'smash'	no specific instrument
i-sɛgɛ	tr.	lit.: 'IT-cut' 'cut (if already cut off an entity), chop, cut in sections'	knife, axe, machete, scissors
i-tumba	tr.	lit.: 'IT-pierce' 'pierce again, pierce several times'	needle, stick, chisel
i-xaba	tr.	lit.: 'IT-cut' 'saw, cut into sections in several sawing strokes, chop'	saw, knife
kana	caus./inch	'destroy, break'	no specific instrument
sɛgɛ	tr.	'cut in one stroke'	knife, machete, sickle
tumba	tr.	'pierce, perforate'	needle, stick, chisel
xaba	tr.	'cut in several sawing strokes'	saw, knife, sickle

the long axis (lit.: IT-open)' are not used in cases where the action denoted by the base verb is repeated, but have acquired specialized meanings, as evident from their glosses. This contrasts with derived forms that still can have a general iterative meaning, as is the case of *i-sɛgɛ* 'chop, cut into sections (lit.: IT-cut)' and *i-xaba* 'cut, saw into sections (lit.: IT-cut)'. For the distributive and causative, similar irregularities are attested, as for instance *ma-xaba* 'peel (with knife) (lit.: DISTR-saw)', *ra-xaba*

'prune, trim (lit.: CAUS-saw)', or *ma-bɔɔ* 'peel (with hands) (lit.: DISTR-open)' and *ra-bɔɔ* 'cut open, tear open, operate (lit.: CAUS-open)'.

The following features are relevant for the choice of different verbs for the description of different C&B events:

– no control vs. control of the effector[2] over the locus of separation;
– the theme being whole or having been previously detached from another entity;
– the verb specifying a specific manner or instrument;
– the state change happening in a stereotypical or in an unexpected way.

2.1. *No control of the effector over the location of impact*

Jalonke uses a number of verbs for clips in which the effector has no control over the exact location of impact. Depending on the type of impact, two groups of verbs compete with each other. The verbs *i-gira* 'break again' and *i-dogoti* 'cut/break into two pieces' are used for the separation of oblong thin objects in places not under the control of the effector. *I-din* 'pound again' and its simplex form *din* 'pound' predominantly describe the diffuse and locally imprecise impact of a hammer on different objects. Other verbs entail control over the location of impact; this group includes *sɛgɛ* 'cut' and *tumba* 'pierce'.

2.2. *Theme a whole vs. previously detached from an entity*

A noteworthy and systematic distinction within the domain of C&B in Jalonke is whether the theme is construed as having been previously detached from an entity. Ropes and cloth, for instance, can never trigger a simplex verb describing their separation, because these objects have already been detached from a roll of rope or an entire woven piece of cloth. For these objects, a verb derived with the iterative prefix (for those verbs where its meaning is not lexicalized) is mandatory. Other objects, such as twigs, branches, leaves and all fruit and vegetables allow two choices. If they are still whole or attached to, for example, the tree they are parts of, a simplex verb is used to describe the event of cutting or breaking. If the objects have already been detached from the whole of which they are part, a regular (*i-xaba* 'chop') or lexicalized iterative (*i-dogoti* 'cut in two pieces') must be used. The sensitivity of C&B verbs to the distinction whole vs. previously detached part of a whole has to my knowledge not been attested in other languages.

2.3. *Specification of verbs for instruments*

Many Jalonke verbs, henceforth called cut verbs as shorthand, are differentiated through the manner or instrument[3] lexically specified. These

verbs contrast with break verbs, which don't select for a specific instrument. Cut verbs necessarily involve specific instruments: *sɛgɛ* 'cut (in one stroke), fell' implies a knife, an axe, or a machete, *bii* 'cut (in swinging, shaving movements)' implies a sickle if applied to a grain-field, and a razor if applied to hair. *Xaba* 'cut, saw' involves a saw or a knife with saw teeth and further designates that the disintegration involves several strokes. Verbs that lexically specify instruments are unlikely to occur with an instrument encoded in an adpositional phrase in spontaneous responses to the video stimuli, unless the instrument is atypical (see 2.4 below). The first spontaneous descriptions generally do not contain mentions of instruments. Thus, *sɛgɛ* 'cut' never occurs with an instrument in a PP if the corresponding event is carried out with a chopping knife, and *i-bɔɔ* 'tear again' does not specify the instrument either when the verb action is carried out with hands, as expected.

In contrast, a different set of Jalonke verbs, from now on referred to as break verbs, do not lexically specify a particular instrument to bring about the state change denoted by the verb. The lack of specification of instruments for these verbs is evidenced through a) the compatibility of these verbs with a number of different instruments encoded in adpositional phrases and b) more spontaneous mentions of these instruments than with verbs lexically specifying them. *Kana* 'destroy, break', for instance, can be carried out with hands, feet, tools, or any object likely to yield some destruction, and these instruments are often expressed.

2.4. *State change happening in an unexpected or atypical way*

Examples of C&B events that are unusual for Jalonke speakers include cutting a rope with a chisel or cutting a cloth or a carrot with hands. In these cases, the verb used for the corresponding canonical event features in the response, but the unusual instrument is indicated as well. Non-canonical cutting events also comprise clips such as cutting cloth, ropes, or hair with scissors. Scissors are a very rare instrument in the Jalonke environment–traditionally, razor blades or knifes are used for these actions. The only instrument featured in the clips for cutting hair are scissors. This culturally unfamiliar scene forces Jalonke speakers to find a new label, instead of choosing the verb for the canonical event. For cutting hair, the verb *i-bolon* 'separate again' is used rather than the collocation *xun-na bii* 'head-DEF cut' normally describing clips of shaving hair with razor blades or knives, as typical in Jalonke culture. The verb *bii* 'cut, cultivate' is only used for shaving hair (with razor blades) and cutting crops (with sickles or knives) and therefore does not feature in response to the C&B clips.

3. The syntax of C&B verbs in Jalonke

Guerssel et al. (1985) postulate a contrast between break verbs on the one hand, and cut verbs on the other hand, and Haspelmath (1993), Levin (1993), and Levin and Rappaport Hovav (1995) extend this claim to all verbs of state change (see Bohnemeyer this issue for a detailed discussion). Their prediction is that break verbs, or all verbs that encode only the result of a state change, not its specific manner, have an argument structure different from that of cut verbs. More generally, verbs not encoding the manner of a state change are expected to differ from verbs that lexically encode the manner and/or instrument through which that change is instigated. Break verbs are expected to be either intransitive or to participate in the causative/inchoative alternation (*I broke the glass* vs. *The glass broke*) if the language in question has this alternation. Cut verbs on the other hand are not expected to appear without their external cause argument unless passivized, since their causing subevent contains specific information about a manner or an instrument metonymically entailing an effector. If these verbs participate in an alternation, it is expected to be the conative alternation (*I cut the ham* vs. *I cut at the ham*) if the language in question makes use of this alternation.

The semantic contrast between C&B verbs in Jalonke is to a large extent reflected in their argument structures. If the verbs are cut verbs that specify manner or instrument of the state change, they are transitive verbs. If the verbs are break verbs and hence leave the manner or instrument of the corresponding state change unspecified, they participate in the causative/inchoative alternation in the majority of cases. It is noteworthy, however, that a small number of Jalonke break verbs do not alternate between causative transitive and inchoative intransitive uses. These non-alternating break verbs are problematic for crosslinguistic predictions regarding the relationship between event structure and argument structure and will be discussed in detail below.

3.1. *Cut verbs or manner + result verbs*

Jalonke cut verbs lexicalize specific manners and/or instruments of the state change they denote. As a corollary, these verbs entail effectors handling those instruments or acting in a specific manner. That the corresponding events are construed as entailing an effector has consequences for their syntactic properties: these verbs have a transitive argument structure, reflecting that they denote externally caused events that contain a specific causing subevent. These verbs therefore cannot suppress the causing subevent and in consequence do not detransitivize, but only passivize. This syntactic behavior is exemplified with the active transitive clause in

(3) and its passive intransitive counterparts in (4) and (5). The passive reading of the intransitive clause becomes evident from its incompatibility with an interpretation of the state change as having occurred spontaneously (4), and its compatibility with a clause implying an external cause for the state change (5).[4]

(3) *A lut -ɛɛ i- bolon siizoo -nee ra.*
3SG rope -DEF IT- separate scissor -DEF.PL with
'He cut the rope with the scissors.' Cut&Break-Alpha 024

(4) *Lut -ɛɛ i- bolon. (*A kan tagi i.)*
rope -DEF IT- separate (*3SG owner middle at)
'The rope was cut (*By itself.)'

(5) *Lut -ɛɛ i- bolon. (!Nda a i- bolon.)*
rope -DEF IT- separate (Somebody 3SG IT separate)
'The rope was cut. (!Somebody cut it.)'

There is no conative alternation in Jalonke that could serve to further differentiate these verbs from break verbs.

3.2. *Break verbs or pure result verbs*

If verbs do not entail specific manners and/or instruments, this property has consequences for their syntactic behavior. These verbs focus on the state change sub-event and leave the exact nature of the cause of this change unspecified. This is illustrated by the following two examples in (6), the throwing of a ball, as stated explicitly in the following clauses, results in breaking a window. In (7), however, the manner of the state change is left unspecified. When asking consultants about possible means of bringing about the state change encoded by *wuru* 'break, crack' in (7), they offer all kinds of scenarios—by dropping the lamp, by stepping on it, by throwing it, etc.

(6) *E fɛnɛter -na wuru. E balon -na wol',*
3PL window -DEF break 3PL ball -DEF throw
ɛ ɛ gɔnɔ a kobi -n' ii.
3PL 3SG hit 3SG be bad -DEF at
'They broke the window. They threw a ball, they hit it badly.'

(7) *N nafa boore -na a lamp -ɔɔ xɛl -ɛɛ*
1SG SUBJ.NEG other -DEF POSS flashlight -DEF egg -DEF
wuru de!
break DISC
'I shouldn't break the other's light bulb (lit.: the lamp's egg)!'
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Most of the Jalonke result verbs fit crosslinguistic expectations regarding their syntactic behavior: these verbs participate in the causative/inchoative alternation and allow transitive as well as intransitive uses, as illustrated by the following two examples. In (8), the clause can be interpreted as containing the passive of the (causative) transitive verb, and in (9) as headed by the (inchoative) intransitive verb, as evidenced by the different semantic entailments in brackets:

(8) *Tam -ɛɛ gira. (Nda a gira.)*
stick -DEF break (Somebody 3SG break)
'The stick broke. (Somebody broke it.)'

(9) *Tam -ɛɛ gira. (A kan tagi i.)*
stick -DEF break (3SG owner middle at)
'The stick broke. (By itself.)'

Some of these verbs, for example the break verbs *muŋuxun* 'crush, smash' and *wuru* 'crack', are only attested with a transitive argument structure, however. The existence of a class of transitive, non-alternating verbs of pure state change in Jalonke, a language that otherwise makes use of the causative/inchoative alternation, is contrary to predictions made by Haspelmath (1993); Guerssel et al. (1985); Levin (1993); and Levin and Rappaport Hovav (1995). It is a matter of future research to determine whether the transitive-only break verbs of Jalonke have some meaning components that distinguish them from causative/inchoative or intransitive verbs of pure state change, whether they must be accepted as idiosyncratic cases, or whether their existence is a mere by-product of Jalonke favoring the lexicalization of events in transitive verb roots, and so belonging to Nichols type of "fundamentally transitive" languages (Nichols 1993, Nichols et al. 1999).

4. Conclusion

Jalonke C&B verbs do not constitute a form class on their own but belong to subsets of manner-with-result verbs and result change of state verbs. Nevertheless, the semantic features found to govern the extension of these verbs, as shown by their application to the C&B videoclips, are to a large degree similar to those of other languages (see Majid et al., this issue). Thus, Jalonke speakers make different lexical choices for events where effectors have control over the locus of the state change and where they do not. Jalonke verbs can further be distinguished according to whether they specify the instrument and/or manner of the corresponding

event or not. A feature that seems to be unique to Jalonke is the classification of the theme as being a whole vs. having been separated from a whole.

As to the syntactic properties of C&B verbs, some of the crosslinguistic predictions concerning the relation between lexical meaning and argument structure properties are borne out by the Jalonke verbs in this semantic domain. Manner-with-result verbs, including all cut verbs passivize, but do not detransitivize by means of the inchoative alternation. In contrast, result verbs, among them most break verbs, are either lexically intransitive or can appear without an external cause argument. Unlike in passivization this external cause argument is not semantically present, hence most of the verbs participate in the causative/inchoative alternation. The non-alternating transitive break verbs of Jalonke are an exception to this general pattern. Semantically, they appear equivalent to other intransitive or causative/inchoative alternating verbs of pure state change or result. Yet, syntactically these verbs pattern with state change verbs that contain a causing subevent that entails manner and/or instrument.

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1. The Jalonke examples are represented in terms of surface forms as they were uttered. The following abbreviations are used: 1—1st person; 2—2nd person; 3—3rd person; caus./inch—causative/inchoative alternating; DEF—definite determiner; DISC—discourse marker; IT—iterative derivation; itr—intransitive; NEG—negation marker; O—object; PL—plural; POSS—marker of alienable possession; S—subject; SG—singular; SUBJ—subjunctive; tr—transitive; V—verb; X—adjunct. In addition, the following conventions are used: '-' for affixes; '.' for categories encoded by a portmanteau morpheme. Where a source is given, the Jalonke examples are from texts or based on stimuli; where not, they are elicited examples.
2. I follow Van Valin and Wilkins (1996) in distinguishing between the thematic roles of agent—the wilful and controlling instigator of an event—and effector—the mere instigator of an event.
3. I do not systematically distinguish between manner and instrument of a C&B event, because in many cases it is impossible to disentangle the two notions. A chopping knife, for instance, requires a certain manner of handling it, whereas a saw canonically implies that the separation takes place in several stroking movements of the saw.

4. See Lüpke (2007) for a detailed description of the zero-coded passive of Jalonke, which is radically different from the intransitive use of cut verbs reported by Essegbey (this issue) for Sranan verbs.

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