

## **Motion Events in Mbum**

### **The properties of an equipollently-framed language**

SALC 5 — Trondheim, August 19-21, 2015

Holger W. Markgraf

#### **1. Synopsis**

- Language under investigation: Mbum (Kebbi-Benue, Adamawa); approx. 50.000 speakers
- Location: Province d'Adamawa, Northern Cameroon; Ngaoundéré, Ngan-Ha, Mbang-Mboum, Tibati
- Classification: Niger-Congo, Atlantik-Congo, Volta-Congo, North, Adamawa-Ubangi, Adamawa, Mbum-Day, Mbum, South; according to [www.ethnologue.com](http://www.ethnologue.com) (Lewis, et al. 2015); Bennet (1983: 36 f.) proposes a Gur-Adamawa-Ubangi continuum, which was elaborated in Williamson / Blench (2000). Since then, the tripartite division of Adamawa, 'Waja-Jen', 'Leko-Nimbari' and 'Mbum-Day' has been renamed 'Northwestern Adamawa', 'Central Adamawa' and 'Adamawa' (cf. Kleinewillinghöfer 1996a and 1996b). Elders (2000, 2006) furthermore introduces the term 'Kebbi-Benue', replacing the misleading, ambivalent term 'Mbum' as a family labelling.
- Typological profile: isolating-analytic language-type, SV/AVO structure, four distinctive tones (H, L, HL, LH) plus several tone-polarity rules, (which are not yet identified).
- Neighbouring languages: Dii (Central Adamawa), Gbaya (Ubangi), Fulfulde (Atlantic)
- Prominent contact languages: Fulfulde, (Hausa, French)
- Since the immigration of the Fulbe people and the rise of their cultural and social dominion on the Adamawa plateau in the beginning of 19<sup>th</sup> century, the indigenous languages of northern Cameroon and Nigeria are mostly threatened with extinction.
- As a result of the contact with the Fulbe people, the Mbum adopted a range of lexemes and grammatical markers into their language, and vice versa (cf. Markgraf, to appear). There is a phonetic variation within the Mbum community between [ɟ] and [z], which might be motivated by the contact with the Fulbe community.
- As a typical isolating language, Mbum exhibits a high amount of multiple verb constructions (MVC), especially serial verb constructions (SVC), thus giving interesting insight in different types of complex event structure in that language.

## 2. The grammatical structure of Mbum

### 2.1 Some typological properties:

- Isolating-analytic language-type
- SV/AVO structure
- 4 distinctive tones (H, L, HL, LH) plus several tone-polarity rules
- Aspect language
- 5 simplex verbal constructions (single verb predication):
  - Factive: S—V—(O) [not consistent]
  - (Habitual): S—V-’nà —(O) [not consistent]
  - Imperfective progressive: S—kâ—V—(O) [not consistent]
  - Imperfective prospective: S—kà—V-’nà—(O) [not consistent]
  - (Stativ): S—V-REDUP—(O) [not consistent]
- Complex verbal constructions (multiple/serial verb predication)
  - Voluntative
  - Motion serialization
  - Direction serialization
  - Caused motion path
  - Switch-function
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### 2.2 Simplex verbal constructions

#### a. FAKTATIVE:

„... the most obvious fact about the verb, which in the case of active verbs is that the action was observed or took place, but for stative verbs is that the situation obtains at present“ (Welmers (1973: 346f.).

S—V—(O)

- (1) *ké*            *jí*  
3SG.SBJ        come  
‘He comes’.

- (2) *ndàì=rí*      *zí*      *kà*      *hòì*  
cow=PL        come    PREP    Gras  
‘The cattle come from the bush’.

#### b. (HABITUAL):

S—V-VN—(V~REDUP)—(O)  
S—V-’nà—(V~REDUP)—(O)

- (3) *mbàm sé-nà gà(∼'gà)*  
 cloud(rain) go-VN hurry(∼REDUP)  
 'The clouds go fast'.

c. IMPERFECTIVE PROGRESSIVE

S—PROG—V—(O)  
 S—kâ—V—(O)

- (4) *ndàì=rí kâ sé (bì) hòì*  
 cow=PL PROG go (in) bush  
 'The cattle are going into the bush'.

d. IMPERFECTIVE PROSPECTIVE

S—PROSP—V-VN—(O)  
 S—kâ—V-'nà—(O)

- (5) *gùn kâ sé-nà l'école.*  
 child PROSP go-VN school  
 'The child is going to school (He is about to go)'.

e. (STATIV):

S—(V-VN)—V~REDUP—(O)

- (6) *má-ndàì ndé~ndè mà-hólà*  
 AUG-cow surmount~REDUP AUG-goat  
 'A mother-cow is bigger than a mother-goat'.

- (7) *njáma rá~rà*  
 giraffe bend~REDUP  
 'The giraffe is bent (down)'.

## 2.3 Complex verbal constructions

Complex verbal constructions are distinguished from simplex verbal constructions by the appearance of one or more additional verbs in one clause, which constitute a serial verb construction<sup>1</sup>. The notion of complexity, however, is not as simple, as presented here.

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<sup>1</sup> The defining properties of verb serializing languages won't be discussed here. For a recent examination of this topic, cf. Haspelmath (2015).

Complexity can pertain on all levels in the representation of language, and is not restricted to the complexity of verbal predication, issued here.

f. VOLUNTATIVE CONSTRUCTION

Simple: S—VOL—V  
 Reduplicated: S—VOL~REDUP—V-nà—O  
 Nominalised: S—VOL-nà—V-nà—O  
 Negated: S—VOL—V-nà—O—NEG

S—V<sub>VOL</sub>—V

- (8) *ké jí sàk*<sup>7</sup>  
 3SG want tear  
 ‘He wants to tear (down) [the tin plate]’. [P&W:MH:22]

S—V<sub>VOL</sub>~REDUP—V-VN—O

- (9) *zúgù jí kà jí ngér-à-gún*  
 owl come with come above-CON-child  
 ‘The owl comes over the child,  
     *gún jí~jì hé-nà ásàù*  
     child want~REDUP climb-VN rock  
 the child wants to climb a rock’. [Frog2b:MA:37]

S—V<sub>VOL</sub>-VN—V-VN—O

- (10) *ké = ài kà ndòì-à-ké-à-gwágwá*  
 3SG=OST with bird-CON-3SG-CON-duck  
 ‘Look here, he with his duckbird,  
     *gún nyìkì (jà) zì-nà í-nà kà fè-hólà*  
     child small (3SG:PROSP) want-VN play-VN with thing-trap  
 the little child likes to play with pets’. [P&W:MH:20]

**S—V<sub>VOL</sub>—V-VN—O—NEG**

- (11) *mì zì kúr-à jáŋ-à nzùk-kór mà já*  
 1SG want crawl-VN resemble-VN cripple know NEG

‘I don’t want to crawl like a cripple’. [BV:HS:66]

**S—V<sub>VOL</sub>—V<sub>COMPL</sub>—[V<sub>DEIX</sub>—V<sub>MANNER</sub>—V<sub>VERT</sub>—O]**

- (12) *gún-ndúù=rí dō jí fáj sè jò hé p’ù*  
 child-bird=PL DEM want COMPL(say) go fly climb tree

‘Those little birds want to fly on the tree’. [P&W:MH:91]

### 3. Motion events

#### 3.1 The typology of lexicalisation patterns

In Talmy’s well-known typology (Talmy 1985, 1991, 2000) regarding lexicalization patterns in event types, languages are classified in so-called verb-framed languages (“V-languages”) and satellite-framed languages (“S-languages”). The S-language type lexicalises the core schema of motion, i.e., the path, in a satellite, a grammatical constituent, other than a nominal argument, that has a sister relation to the verb (‘go in/out/up’, etc.) while the V-language type lexicalises it in the verb (cf. Noonan 2003: 214; Ameka & Essegbey 2013: 21).

Schaefer (1986) proposed that Emai, a serializing language of Nigeria is a V-language. According to Talmy (2009), languages of the serializing type, as Chinese, Emai and Mbum, should be classed as a “S-language”, since the manner verb is usually considered the main verb and path is encoded in the satellite<sup>2</sup> However, Slobin and Hoiting (1994) proposed “to treat such languages as ‘complex verb-framed languages’: verb framed because path is expressed by an independent verb, and complex because the serial-verb construction functions as a sort of compound main verb in a clause, with no division between finite and non-finite forms as in ‘standard’ verb-framed languages, which require constructions such as ‘exit flying’” (Slobin 2004: 227). Later, Slobin introduces the term equipollently-framed languages for the third, intermediate language type.

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<sup>2</sup> Apart from that, path verbs often do not function as full verbs, provide a small set of verbs and tend to grammaticalize into path satellites (Slobin 2003: 227f.).

“Equipollently-framed languages, [to] include serial-verb languages and other types of languages in which both manner and path are expressed by “equipollent” elements—that is, elements that are equal in formal linguistic terms, and appear to be equal in force or significance” (Slobin 2004: 227).

Ameka and Essegbey (2013 [2001]) confirm the findings of Slobin and Hoiting (1994) and summarize the properties of serializing languages as the following (cf. table 1):

Language type	Core Schema	Co-event (Manner)	Relevance of path type distinction	Grounds per verb	Grounds per clause	Components of cliff scene	Scene setting
V-language	verb	subordinate	yes	max. 2	max. 2	less than 3	static
S-language	satellite	verb	no	multiple	multiple	3 or more	dynymic
Serialising language	verb	verb	no	generally 1	multiple	3 or more	static

*Table 1: Comparing the three language types (Ameka & Essegbey 2013: 36)*

Properties of serializing languages concerning their lexicalization patterns in motion events:

- The core schema (path) is lexicalised in one or more verbs
- The co-event (manner) is also lexicalised in a verb.  
(None of the verbs is dependent on, or subordinated to the other.
- There is no relevance to distinguish between the two path types ‘path-focus’ (non-interrupted path) and ‘boundary-focus’ (crossing of a spatial boundary, e.g. enter/exit)<sup>3</sup>.
- The tendency to express one ground per verb<sup>4</sup>.
- Several grounds can be expressed per clause<sup>5</sup>.
- 3 or more components of the Frog 2 story cliff scenes can be divided<sup>6</sup>.
- Have a static scene setting<sup>7</sup>

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<sup>3</sup> “This distinction is important for V-languages because, unlike S-languages, only Path-focus verbs can occur with adjuncts expressing both source and goal within a clause in a V-language“ (Ameka & Essegbey 2013 31).

<sup>4</sup> “We use ‘generally 1’ ground per verb to indicate that it is not impossible for some SVCs to have more than one argument” (Ameka & Essegbey 2013 36)..

<sup>5</sup> “This is because [...] the languages have the possibility of stringing a number of verbs together in a single clause. [This] means that these languages inevitably divide scenes into more components than V-languages“ (Ameka & Essegbey 2013 31).

<sup>6</sup> This property concerns a difference in discourse behaviour, based on elicitations done by Dan Slobin and others (Slobin et. Al 1994; St...) As an elicitation tool they used the wordless frogstory picture book “Frog where are you” by Mercer Mayer (1969). In the scene referred to as the cliff scene, the boy and his dog are thrown from a cliff by a deer, that has picked the boy up on his antlers, when he was searching for his pet frog. They both fall from the cliff into the water beneath. Slobin divides the events in the scene into four components (1. Change of location: deer moves, runs at cliff; 2. Negative change of location: deer stops at cliff; 3. Change of location: deer throws boy, makes boy/dog fall; 4. Change of location: boy/dog falls into water (Slobin 1997: 448).

### 3.2 Motion construction

Van Staden and Reesink (2008) differentiate between two motion event constructions, namely *motion serialization* and *direction serialization*, both employing the general deictical path verbs ‘come’ and ‘go’. In *motion serialization* the agent moves into a specific direction to perform or to participate at an event, which is expressed within a second verb ( $V_{\text{PATH}} - V_2$ ). Generally this involves a change of location (cf. Markgraf 2011: 196).

—[S— $V_{\text{PATH}}$ — $V_{\text{MANNER}}$ — $V_{\text{PATH}}$ —O]

- (13) *ámberè ndè kó kù wà sé jò rì mbì*  
 frog when see 3PL PERF go jump enter water  
 ‘When the frog has seen them, he jumps into the water’. [Frog1b:MA:36]

In (13) there are three independent, uninflected verb stems in a row, a general, ‘relational’ path verb *sé* ‘go’, indicating motion away from the reference point, following the manner verb *jò* ‘jump, fly’, and a ‘boundary-focus’ path verb *rì* ‘enter’.

This conforms the properties 1-3. Regarding the fourth property, *sé* ‘go’ is intransitive, *jò* ‘jump’ and *rì* ‘enter’ share only one ground, the water. The general path verb *sé* ‘go’ can be omitted, as shown in (14). Following the necessity of still having the path of motion encoded in the clause, the left manner verb *jò* ‘jump, fly’ takes over the function of path, leaving the boundary-focus verb *rì* ‘enter’ for the only conceivable manner encoded in this motion event, namely of ‘getting wet’. But this is only a tendency, since boundary-focus verbs, by carrying an intrinsic Telicity, have always an interpretation of change-of-state, or change-of-location, or arriving at a state or location.

S— $V_{\text{MANNER/PATH}}$ — $V_{\text{BOUNDARY-FOCUS.PATH/MANNER}}$ —O

- (14) *ámberè jó rì bí mbì*  
 frog jump enter PREP water  
 ‘The frog jumps into the water’. [Frog1b:MA:20]

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<sup>7</sup> Ameka & Essegbey (2013: 35) assume that serializing languages lean more towards a static representation of scenes, as V-languages do.

Compared to sentence in (12), the manner of travel for the *figure*, has changed, in (15). The manner verb ‘fly’ isn’t used here, for the boy cannot fly. However, manner is still lexicalized in the verb *hè* ‘ascend’, which means also ‘climb’.

**S—V<sub>PATH</sub>—V<sub>MANNER.VERTICAL.PATH</sub>—O**

- (15) *gûn bó sé hè pù*  
child EMPH go ascend tree

‘The child thus climbs (on) a tree’. [Frog2a:HS:25]

A lot of different V-V combinations are possible: V<sub>PATH</sub>—V<sub>MANNER.VERTICAL.PATH</sub> as in (15), V<sub>MANNER</sub>—V<sub>VERTICAL.PATH</sub> as in (16), V<sub>MANNER.PATH</sub>—V<sub>ROUTE</sub> as in (17), or as V<sub>RETURN</sub>—V<sub>PATH</sub> in (18). This confirms the fifth property, the possibility of expressing several grounds per clause, which can best be understood in terms of “granularity”. In serializing languages it is possible to encounter two or more path verbs in a clause, that is, “speakers [...] are more likely to break up the event into a larger number of components, based on ‘narrative habits’ of compacting several Path components into a single clause” (Slobin 1997: 448).

**S—V<sub>MANNER</sub>—V<sub>VERTICAL.PATH</sub>—(O)**

- (16) *ké=àw ká páŋ hè*  
3SG=OST:DIST PROG sneak ascend

‘Look there, how he sneaks up (the hill)’. [P&W:MH:257]

**(S)—V<sub>MANNER.PATH</sub>—V<sub>ROUTE</sub>—X**

- (17) *zò tá ngér àsáú=rí*  
fly pass on rock=PL

‘We fly past the rocks’. [P&W:MH:14]

**S—V<sub>RETURN</sub>—V<sub>PATH</sub>—(O)**

- (18) *gûn-wĩkè kà jál-à jí lùmù*  
child-female PROSP return-VN come market

‘The girl is returning from the market’. [BV:MH:08]

Before examining, the components of the frog story 2 cliff scene, which is the 6<sup>th</sup> property of lexicalization patterns in motion events of serializing languages, there is still need to discuss Van Staden & Reesink’s *direction serialization*, where the path verb follows the rest of the construction.



### 3.3 Direction construction

In *direction serialization*, the second verb (path verb) specifies the path or the change of location of an event encoded in the first verb. If both verbs are intransitive, the subject is in motion, if the first verb is transitive, and the two verbs are separated by an object, the object is in motion, which usually becomes the subject of the second verb (switch-function serialization) (cf. Markgraf 2011: 196).

Sentences (19) and (20) exemplify this kind of construction, where the path verb ( $V_2$ ) specifies the deictical reference from or to the point of reference.

**S— $V_{\text{MANNER}}$ — $V_{\text{PATH}}$ —X**

- (19) *sóì ló sè kà zàl-à-àbóràk*<sup>7</sup>  
 snake creep go PREP place-CON-lizard  
 The snake sneaks (up) to the lizard. [BV:HS:96]

- (20) *gûn-wũkè kà jál-à jí lùmù*  
 child-female PROSP return-VN come market  
 ‘The girl is returning from the market’. [BV:MH:08]

#### g. CAUSED MOTION PATH: ROUTE

**S— $V_{\text{TAKE}}$ —O— $V_{\text{DIR}}$**

- (21) *mì kà báŋ-à gùn-à-mí=rì sé*  
 1SG PROSP take-VN child-CON-1SG=PL go  
 ‘I take my kids along’. [BV:MH:17]

**( $V_{\text{PATH.ROUTE:INT}}$ )— $V_{\text{TRANSFER}}$ —O— $V_{\text{PATH}}$ —IMP**

- (22) *tà báŋ fã sè jè*<sup>8</sup>  
 pass take bag go IMP

“Pass (over here), take the bag, (and) go!” [P&W:MH:26; The grandpa, lifting a bag for the boy.]

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<sup>8</sup> jè (orig.: ,buy’, ,sell’; TRANSFER; IMPERATIVE; PREPOSITION)

h. CAUSED MOTION PATH: ROUTE (SWITCH-FUNCTION)

**S—V<sub>ROUTE:TR</sub>—O<sub>S</sub>—V<sub>VERTIKAL.PATH</sub>—V<sub>PATH</sub>—X—AUX**

- (23) *kè kók kù hè sè ngér p<sup>h</sup>ù wá, jáŋ kù jí*  
 3SG pull 3PL ascend go PREP tree PERF like 3PL want  
 ‘He has pulled them up the tree, as they wanted it’.

i. CAUSED MOTION PATH: GOAL

**S—V<sub>TRANSFER:AND</sub>—V<sub>PATH</sub>—V<sub>TRANSFER:VEN</sub>—O<sub>GOAL</sub>**

- (24) *gái dō nýr bànán ké níŋ jáŋá ké lál-à mú*  
 guy DEM peel banana 3sg make compare 3SG eat-VN DECL  
 ‘That guy peels a banana, he pretends to eat,

*ké báŋ sé bí ngér table, ké sé kè jó,*  
 3SG take go put.in PREP table 3SG go 3SG stand

*ké kâ kó*  
 3SG PROG see

and puts (it) on the table. He deposits himself [go-stand ‘GER:sich hinstellen’]  
 and is watching’. [ES(145ET):MA:74]

j. PATH INCHOATIVE

**S—V<sub>PATH</sub>—S—V<sub>POSITION</sub>**

- (25) *kè sé kè jó*  
 3SG go 3SG stand

‘Er stellt sich (hin)’. [ES(145ET):MA:74]

- (26) *gói sái lé-nà dígà ngér zí túbà*  
 dog moment fall-vn from up come down

‘That moment, the dog falls down’. [Frgo2a:HS:12]

(27) [Frog2:MH:16-18]

*kè sè hɛː ŋɛ́r ásàù*  
3SG go climb on rock

‘He climbs on a rock,

*ké ká dǐ fɛ̀ “ámberè ámbéré”*  
3SG PROG call thing “Frog, Frog!”  
and calls it: “Frog, Frog!”

*fɛ̀-sǐ sè tǐ-nà sòb kè kà tǐw*  
dear go exit-VN carry 3SG with horn  
A dear comes out and carries him on (with) his antlers,

*bán sè wúː bí mbì kà gòì wà-pát*  
take go throw in water with dog alle  
and throws them all into the water, with the dog.

*kú tò mbì*  
3pl fall water  
‘They fall (in) the water’.

(28) [Frog2c:HS:36-44]

*gún hɛː sé ŋɛ́r ásàù*  
child climb go PREP rock

‘The child climbs on a rock,

*ká dǐ mbá tǐw-à-fɛ̀-sǐ*  
PROG call hold horn-CON-deer  
he calls and holds the antlers of a deer.

*gún hɛ̀ ŋɛ́r ásàù mbá tǐw-à-fɛ̀-sǐ ká dǐ ámbéré*  
child climb PREP rock hold horn-CON-deer PROG call frog  
The child climbs a rock, holds the antlers of a deer and calls the frog.

*zígù jènú ñgér pù góí bò tǐbà ásàù*  
 owl COP PREP tree dog EMPH PREP rock

The owl is on a tree, and the dog (crouches) under the rock.

*fè-sǐ mbùr ké ñgér ñgér sǒ*  
 deer raise 3SG PREP PREP head

The deer picks him up on (his) head.

*zígù jènú ñgér pù*  
 owl COP PREP tree

The owl is on the tree.

*fè-sǐ ká dúk kà ké*  
 deer PROG run with 3SG

The deer is running with him,

*kè jènú bì(n) kàlàñ fīw=rí ñgér sǒ ñgér sǒ-à-fè-sǐ*  
 3SG COP PREP other.side horn=PL PREP head PREP head-CON-deer

He is between (in the other side of) the antlers on the head, on the head of the deer.

*góí zè fǎl ká dūk*  
 dog PREP.COP in.front prog run

The dog is ahead and runs.

*kú kǎ sé nzák-vàráñ sáí kè*  
 3pl arrive go border-canyon moment 3sg

The come to the edge of a canyon, when

*sáí kè vǐ kè sè bí mbì kà góí bàb*  
 moment 3sg throw 3sg go in Water with dog too

when he throws him into the water, together with his dog'.

## Keys to the elicited materials:

[P&W:MH:22]	Peter and the wolf, Moussa Hayatou, (22)
[Frog2b:MA:37]	Frog story 2b, Frog, where are you?, Mohammadu Awal, (37)
[Frog1b:MA:36]	Frog story 1b, A boy a dog and a frog, Mohammadu Awal, (36)
[Frog2a:HS:25]	Frog story 2b, Frog, where are you?, Housseini Saliou, (25)
[Frog2:MH:16-18]	Frog story 2, Frog, where are you?, Moussa Hayatou, (16-18)
[Frog2c:HS:36-44]	Frog story 2c, Frog, where are you?, Housseini Saliou (36-44)
[BV:HS:66]	Bewegungsverben (motion verbs), Housseini Saliou, (66)
[ES(145ET):MA:74]	Event segmentation clip 145ET, Mohammadou Awal (74)

## Abbreviations:

AUG	augmentative	OST	ostensive predicator
COMPL	complete	PL	plural
CON	connector	PERF	perfective
DECL	declarative	PREP	preposition
DEM	demonstrative	PROG	progressive
DIST	distal	PROSP	prospective
EMPH	emphatic	REDUP	reduplication
IMP	imperative	VOL	volitive
NEG	negation marker	VN	verbal noun
SG	singular		
SBJ	subject		

## References:

- Ameka, F. K., & Essegbey, J. (2013). Serialising languages: Satellite-framed, verb-framed or neither. *Ghana Journal of Linguistics* 2 (1): 19-38.
- Bennett, Patrick. R. 1983. Adamawa-Eastern: Problems and Prospects. In: Dihoff, I. R. et al. (Hrsg.). S. 23-47.
- Croft, W., Baral, J., Hollman, W., Sotirova, V., & Taoka, C. (2002, January). Revising Talmy's typological classification of complex events. Conference of the Linguistic Society of America, San Francisco.
- Elders, Stefan. 2000. *Grammaire Mundang*. Leiden.
- . 2006. Issues in comparative Kebi-Sanaga (Adamawa). *Africana Linguistica* 12.
- Haspelmath, Martin. 2015. *The serial verb construction: Comparative concept and cross-linguistic generalizations*. draft.

- Kleinewillinghöfer, Ulrich. 1996a. Relationship between Adamawa and Gur languages: The case of Waja and Tula. *Cahier Voltaïques / Gur Papers I*: 25-35.
- . 1996b. Die nordwestlichen Adamawa-Sprachen — eine Übersicht. *Frankfurter Afrikanistische Blätter* 8: 80-103.
- Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig (eds.). 2015. *Ethnologue: Languages of the World, Eighteenth edition*. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com>.
- Markgraf, Holger W. 2010. Von seriellen Verben und Auxiliaren. Die Grammatikalisierung von Bewegungsverben in Admawasprachen. In, Kramer, R. and H. Tröbs (eds.), *Afrikanische Sprachen im Fokus. Linguistische Beiträge zum 19. Afrikanistentag, Mainz, 8.-10. April 2010*. Köln: Rüdiger Köppe Verlag. pp. 189-208.
- . *to appear*. Variation and Linguistic Change in Mbum. Grammaticalization and the socio-cultural influences in a multilingual society. In, Kramer, R. and K. Beyer (eds.) *Social network analysis and urban languages. Theories methods, case studies*. Frankfurt: Frankfurter Afrikanistische Arbeitspapiere.
- Noonan, Michael. 2003. Motion events in Chantyal. In E. Shay & U. Seibert (eds.), *Motion, Direction and Location in Languages – In Honor of Zygmunt Frajzyngier*, 211-234. Amsterdam: John Benjamins.
- Schaefer, Ronald. 1986. Lexicalising directional and nondirectional motion in Emai. *Studies in African Linguistics* 17 (2): 177-198
- Slobin, Dan I. 1991. Learning to think for speaking: Native language, cognition and rhetorical style. *Pragmatics* 1: 7-26.
- . 1997. Mind code and text. In Joan Bybee, John Haiman, and Sandra A. Thompson (ed.), *Essays on Language Function and Language Type (Dedicated to T. Givón)*, pp. 437-467. Amsterdam: Benjamins.
- . 2004. The many ways to search for a frog: Linguistic typology and the expression of motion events. In S. Strömquist & L. Verhoeven (Eds.) *Relating events in narrative: Vol. 2. Typological and contextual perspectives* (pp. 219-257). Mahwah, NJ: Lawrence Erlbaum Associates.

- Talmy, Leonard. 1985. Lexicalization patterns: semantic structure in lexical form. In, T. Shopen (ed.), *Language Typology and Syntactic Description, Vol. 3: Grammatical Categories and the Lexicon*, 36-149. Cambridge: Cambridge University Press.
- . 1991. Path to realization: a typology of event conflation. *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistic Society*, 480-520.
- . 2000. *Toward a Cognitive Semantics* (Vol. 2). Cambridge: Cambridge University Press.
- . 2009. Main verb properties and equipollent framing. In, Guo, J. et al (ed.), *Crosslinguistic Approaches to the Psychology of Language. Research in the tradition of Dan Isaac Slobin*. pp. 389-402. New York: Taylor & Francis.
- Van Staden, Miriam and Ger Reesink. 2008. A functional approach to verb serialization. In, Senft, Gunter (ed.), *Serial Verb constructions in Austronesian and Papuan Languages*. Canberra. S. 17-54.
- Welmers, William E. 1973. *African Language Structures*. Berkeley / Los Angeles: University of California Press.
- Williamson, Kay and Roger Blench. 2000. Niger-Congo. In, Heine, B. and D. Nurse, (eds.). *African languages: An introduction*. Cambridge: Cambridge University Press. pp. 11-42.
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