

Why are 'as soon as' clauses marked for predicate-centered focus?

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1. Introduction

1.1 The puzzle

traditional assumption:

- subordinate clauses represent presupposed background information, thus are not assertions
- they don't have an internal information structure on their own, i.e. they only play a role in the overall information structure of the whole complex sentence (cf. Cristofaro 2003: 34, Matic' et al. 2014: 17).

But:

- this general assumption not valid for all kinds of subordinate clauses
- one counter-example: 'as soon as' clauses that display special formal encoding, including the use of predicate-centered focus marking,

(1) Wolof (Niger-Congo)

[Dafa àgg (rekk)], taw bi Ø door.
VFOC.3S arrive (only) rain DEF AOR begin
As soon as he arrived, the rain started. (Robert 2010: 480)

1.2 Traditional view of subordinate clause linkage

1.2.1 Formal properties of subordinate clauses

| Main clause | Subordinate clause |
|------------------------|---|
| can stand alone | cannot occur in isolation, i.e. is syntactically dependent |
| | is embedded, i.e. is constituent of main clause or modifies (part of) the main clause |
| finite verb morphology | less finite verb morphology |

| | |
|--|--|
| other main clause properties concerned | often indicated by subordinating particles |
| | no illocutionary elements allowed |
| | different coding of participants |
| | different word order |
| | restrictions for negation |

Table 1: Formal properties of subordinate clauses (based on Cristofaro 2003)

- (2) Hausa (Afro-Asiatic, Chadic): temporal clause: subordinating conjunction, less-finite verb morphology – PFV2 (= relative, out-of-focus form)
[Dà ya ga zākì], bàì gudù ba, ...
CNJ 3S.M.PFV2 see lion NEG:3S.M run NEG ...
When he saw the lion, he didn't run away, (but stood his ground.) (Newman 2000: 556)

1.2.2 Functions of subordinate clauses

| Main clause | Subordinate clause |
|--------------------------------|--|
| autonomous profile | lacks an autonomous profile, i.e. depends on main clause |
| locus of assertion | lack of illocutionary force – no assertion |
| clear defined IS configuration | external: is part of the IS profile of the whole sentence |
| | internal: no IS on its own or less possibilities for expressing own IS |
| foreground event | often presupposed, background |

Table 2: Functional properties of subordinate clauses (based on Cristofaro 2003)

- (3) I finally met the woman who moved in downstairs.
assertion: I met the woman
presupposition: someone moved in downstairs (Lambrech 1994: 51)

- + useful division of external IS and internal IS in Matic' et al. (2014: 9f.)
- **external IS** of dependent elements: complex sentence is one unit of information – dependent clause may have IS function within the complex clause
- **internal IS** of dependent elements: dependent element is IS unit of its own, with properties different from that of an independent predication

+ external information structure

1. dependent clauses are often presupposed, build the background for the main clause event (cf. the notion of topicality of subordinate clauses, Haiman 1978)

(4) After/when/before he came, Mary started to prepare the meal.

assertion: Mary started to prepare the meal.

presupposition: he came at some point in time

→ temporal clause delivers the frame “within which the main predication holds”

(Chafe 1976: 50)

2. dependent clauses can be focused

(5) Fon (Niger-Congo, New Kwa).

Kòkú lìn [[d̥] Àsibá gbà mótò ɔ́ wè]

PN think COMP PN destroy car DEF FOC

Koku thinks that it is that Asiba destroyed the car. (Lefebvre & Brousseau 2002: 135)

→ new information is reported in complement clause

+ adverbial clauses can be freely assigned topic or focus roles without specific restrictions within the complex clause (as their link to matrix clause is weaker) (cf. Matic et al 2014: 12f.)

+ internal information structure

- possibility of expressing an internal IS of dependent clauses is gradual but language-specific, depends on structural, lexical and discourse factors (Matic et al 2014: 13)

-in some languages there is an absolute ban of focus marking in subordinate clauses (cf. Aghem), others allow IS marking of its own

→ “Ad-subordinate clauses [= adverbial and relative clauses] are virtually always presupposed and **never asserted** in the same way as complement clauses can be [(...)].

Therefore, the internal IS of these clauses is much less likely to be expressed than in the case of complement clauses, ...” (Matic et al. 2014: 17)

→ complement clauses seem to convey (stronger) assertions (cf. Guldemann 1996: 159-87, van Valin & LaPolla 1997: 485f, and others)

+ but also some adverbial clauses can show an internal information structure

(6) Avatime (Niger-Congo, Kwa) – left-dislocation (mostly in complement clauses, but also in adverbial clauses, even though rarely)

blɔ petee kíà-tsa tɔ [kí-bò-ɛ]

1P all 1P.SBJ.POT-meet PURP C4S-money-DEF

bíà-lɛ = ke kí ð-mà kákaa

C1P.SBJ.POT-share = C4S give C2S-town every

We will all meet so that we share the money to every town. (lit.: We will all meet so that, as for the money, we will share it to every town.) (van Putten 2014: 167)

- for a number of other languages (e.g. English, Thompson & Mulac 1991, German, Freywald 2013), an information reversal can be claimed for some complement clauses: “... in which the main assertive point of the sentence shifts from the main to the subordinate clause.” (Matic et al 2014: 15)

2. ‘As soon as’-clauses in African languages

2.1 Fon (Niger-Congo, New Kwa)

+ prototypical temporal clause consists of a temporal head noun followed by a relative clause (d̥éè ... ɔ́)

- relative clause is introduced by relative morpheme and ends with backgrounding particle ɔ́

(7) [hwènú d̥éè Kòkú wá ɔ́] à d̥ò xwégbé ǎ.

time REL PN come TP 2S be.at house NEG

When Koku came, you were not at home. (adapted from Lefebvre & Brousseau 2002: 171)

+ ‘as soon as’ clause:

- juxtaposition of both clauses, linked by coordinating conjunction

- verb focus preposing strategy

- adverb with meaning ‘quickly, immediately’

(8) [wá (wè) Kòkú wá (tíóló)] bò Bàyí yì

come FOC PN come (as.soon.as) CNJ PN leave

As soon as Koku arrived, Bayi left. (Lefebvre & Brousseau 2002: 503)

+ predicate-centered focus: verb focus preposing strategy

(9) wá wè Kòkú wá
come FOC PN come

It is arrived that Koku has. (not e.g. leave) (Lefebvre & Brousseau 2002: 503)

2.2 Ama (Nilo-Saharan, Eastern Sudanic)

+ 'when' clause

- introduced by conjunction é

- finished with dá, which otherwise functions as topic marker

(10) [é wùdáŋ nɔ́ sír wúlè dá,]
CNJ person DEM out move.PFV TP
é ín nē sá jón.
CNJ 3S FOC watch take.PFV

When the person went out, then he took the watch. (Fiedler, f.n.)

+ 'as soon as' clause

- focus-sensitive particle, meaning 'only'

- verbal particle ka that indicates predicate-centered focus

(11) [à nyà wɔŋ gír]-ò ká tí]
1S just 1S.POSS money-ACC PC.FOC catch.PFV
é ká yɔŋ kíḍò kàjèl-ò tāŋ-ān.
and FUT 2S.DAT thing sweet-ACC buy.PFV-for

As soon as I get my wages, I buy you some sweets. (Fiedler, f.n.)

+ predicate-centered focus: verbal particle ka in main affirmative clause

(12) bwêr, ká tíŋ.
no, PC.FOC call.PFV

{The woman hit Kamal.} No, she CALled (him). (Fiedler, f.n.)

2.3 Wolof (Niger-Congo, Atlantic)

+ mainly paratactic clause-chaining to express subordinate relations (Robert 2010)

- use of different verb paradigms important for interpretation

+ perfect: indicates that a process (initially known to be ongoing) has now reached its end-point (active verbs)

+ aorist: obligatory in some subordinate sentences (REL, ADV), but not in causal, completive and comparative

+ verb focusing conjugation with 'as soon as' reading: expresses SoA focus, truth value and intensive value (really)

(13) when clause: use of perfect form

[ágg na,] taw bi door na
arrive PERF rain DEF begin PERF

He arrived, then it started to rain.

→ succession of events, "link is purely temporal" (Robert 2010: 482)

(14) when: subordinating conjunction, use of aorist, VFOC in main clause

[Bu ñów-aan] xale yépp da-ñu-y bég.
when come-DIST.PST child all VFOC-3P-IPFV be_satisfied

Quand il venait, tous les enfants étaient contents.

(When he came, all children were happy.) (Robert 1996: 159)

(15) as soon as: Verb focusing form in dependent clause + aorist

[Dafa àgg (rekk)], taw bi ∅ door.
VFOC:3S arrive only rain DEF AOR begin

As soon as he arrived, the rain started.

→ "describes a situation in which the first event triggers the second one" (Robert 2010: 480), i.e. the first event is the causal source for the second one (2010: 487)

+ predicate-centered focus expressed by verb focusing conjugation

(16) Wax-u-ma la sax rekk lekk, da-ma ko wann
tell-NEG-1S 2S.OBJ even only eat VFOC-1S 3S.OBJ swallow

I did not just eat it, I DEVoured it.

[lit. I do not just say only "eat", in fact I "devoured" it] (Robert 2010: 253)

2.4 Kanuri (Nilo-Saharan, Western Saharan)

+ 'when' clause

- consists of relative clause whose head is a noun meaning 'time', ends in determiner (here: dè, triggering a definite interpretation of factual past events)

- finished by postposition -(la)n indicating place/means

- whole construction understood as complex NP, i.e. nominalized clause

- only verb form allowed is perfect or imperfect

(17) [sâ kàsúwù-rò lè-zó-nà-dè-n] górò káiwò.
 time market-ALL go-3S-PERF-DET-LOC kola buy:3S:NEC
 When she went to the market, she bought KOLA. (Hutchison 1981: 270)¹

+ 'as soon as' clause (Hutchison 1981: 294 – 300)
 - same structure as for other adverbial clauses, without final determiner
 - associative postposition -a used
 - use of verb emphasis completive which is otherwise not allowed in adverbial clauses
 - use of nominal focus marker -ma
 → still dependent, nominalized clause, but with more assertive force than other temporal clauses
 - normally, the structure of VEC + ASS gets the meaning “When X happens, than Y will happen) or a generic interpretation
 - when associative subordinate VEC clause is immediately followed by the emphatic – ma, then the interpretation is best rendered as ‘as soon as’, ‘right when’

(18) [sè-wànd-í-à-má] bànnàj-ín
 3S-get-VEC-ASS-FOC ruin:3S-IPFV
 As soon as he gets it, he will ruin it. (Hutchison 1981: 297)

(19) [sú-rí-à-má] sò-tài.
 3S-see:VEC-ASS-FOC 3S-grab:?
 As soon as he sees it, he will grab it. (Hutchison 1981: 297)

+ VEC mainly gets an event-centered thetic interpretation, not real marker for predicate-centered focus, but strong assertive value

(20) Háwàr mâi-bè fàn-g-í.
 news king-GEN hear-1S-VEC
 I just heard the news of the king. (Hutchison 2000: 583)

¹ Hutchinson gives no glosses for his examples – the glosses given here might not be fully correct, as verb morphology is often not easy to decompose.

2.4 Hausa (Afro-Asiatic, Chadic)

+ when clause:
 - subordinate conjunction dà which links a subordinate clause to a matrix clause (Jaggar 2010: 70f.)
 - special verb form with reduced verbal properties (out-of-focus form = PFV2)
 (21) [dà ya tsayàa] sai sukà yi ta bugù-n-sà.
 CNJ 3S.M.PFV2 stop then 3P.PFV2 do CONT hit.VN-GEN-3S.M.POSS
 When he stopped they kept on beating him. (Newman 2000: 558)

+ 'as soon as' clause
 - subordinate conjunction dà
 - in-focus verb form (PFV1)
 (22) [dà yaa tsayàa] sai sù² yi ta bugùn-s-à.
 CNJ 3S.M.PFV1 stop then 3P.SUBJ do CONT hit.VN-GEN-3S.M.POSS
 As soon as he stops they keep on beating him. (Newman 2000: 558)
 → close temporal succession of two events, whereby the dependent clause refers to non-past events Newman (2000: 558)

+ expression of PCF: two strategies
 - SoA focus: cleft-like construction with preposed nominalized verb, followed by the out-of-focus verb form (not shown here)
 - main clause with in-focus verb form, that mainly expresses a plain assertion
 (23) PCF: in-focus form
 á'à, táa kírà shì.
 no, 3S.F.PFV2 call 3S.M
 {The woman hit Kamal.} No, she CALLED him. (Fiedler, f.n.)

2.6 Shona (Niger-Congo, Bantu)

+ 'when/if' clause: use of conditional verb form (dependent)
 (24) va-ka-svika# ku-no-bva kwa-tanga ku-naya
 2-COND-arrive IP-PRS-turn.out IP:DEP:ant-start INF-rain
 When/if they arrive, it starts raining. (adapted from Güldemann 2002: 266, Shumirai Nyota, p.c.)

² The conjunction sai often triggers the use of the subjunctive verb form and indicates then the meaning of 'must'.

+ 'whenever' clause:

- use of lexeme *ti* 'be so'

- the verb following *ti* is in dependent form

(25) ku-no-ti va-ka-svika # ku-no-bva
IP-PRS-PV 2-COND-arrive IP-PRS-turn.out
kwa-tanga ku-naya
IP:DEP:ant-start INF-rain

Whenever they come, it starts raining. (Güldemann 2002: 266)

(26) *ti* is "emphasizing that one proposition is strict, exclusive, exceptionless condition/situational frame for the fulfillment of the other"

ka-rume kai-ti ka-ka-tema ko-pfugama.
12DIM-man 12:HAB-PV 12-COND-strike 12:INIT-drop.on.knee.

Whenever the little man struck he would drop on one knee ... (Güldemann 2008: 491)

+ lexeme *ti* is used as emphasizing and foregrounding device for state of affairs

- *ti* selects an event in a narrative and stresses its final achievement, unexpectedness, general significance for the storyline (Güldemann 2008: 490)

(27) shumba i-ka-ti zvino ya-va ku-da ku-va-dya.
9.lion 9-SEQ-PV now 9:PERF-become INF-want INF-3P.OBJ-eat

Now, the lion was about to eat them. (Dale 1972: 133, cited in Güldemann 2008: 490)

2.7 #Kx'ao//'ae (Kx'a, Ju)

+ 'when' clause

- subordinating particle at the beginning

- no further subordinating morphology

(28) [Ká toà hã kò gjàè-à laòh]
SUB be.that 3S PST arrive-VE home.5
hã gjàè gù hã bá 'm̀si
3S arrive take 3S father.1 food.5

When he arrived home, he took his father's food. (Lee Pratchett, f.n., p.c.)

+ 'as soon as' clause

- subordinating particle at the beginning

- whole clause focused with *kòm*, a nominal focus marker

(29) [ká à ||àè kxò-à toà kòm] mí gjàè ká à zì
SUB 2S touch pot.5-REL be.that FOC 1S arrive CONN 2S shit
As soon as you touch that pot, I come and beat the shit out of you. [lit. I come and you shit] (Lee Pratchett, f.n., p.c.)

(same construction can also get 'whenever' reading)

+ focus constructions

- *kòm* is foremost a term focus marker

(30) !hoàn kòm dshàú nḡà'm
man.1 FOC woman.1 hit

{Who did the woman hit?} The woman hit the man. (Lee Pratchett, f.n., p.c.)

- the possibility that *kòm* has a role in some PCF occurrences cannot completely ruled out, e.g. in truth value

(31) mí tè kòm n||aq'arà hì
1S ? FOC read it.4

{You didn't read the book!} I DID read it. (Lee Pratchett, f.n., p.c.)

2.8 Summary: Properties of 'as soon as' clauses in the sample

+ in all languages shown here, 'as soon as' clauses show properties different from those of 'when' clauses

(NB: in most languages, 'as soon as' clauses can also be expressed by other constructions)

- 'when' clauses show all properties of typical adverbial clauses

- 'as soon as' clauses show a deviation from this subordinate clause pattern

| Features | Fon | Ama | Wolof | Kanuri | Hausa | Shona | ‡Kx'ao 'ae |
|---------------------------------|----------------------|---------------------------|------------------------|-----------------------------------|---------------------------|-----------------------|---------------------------|
| Sem. interdependency | + | + | + | + | + | + | + |
| Synt. integration | - | - | - | + | +/- | ?+ | + |
| Subordinating morphology/syntax | - | - | - | nominalized clause with assoc. PP | + CNJ - out-of-focus form | dependent verb form | subordinating conjunction |
| PC Focus marking | verb focus preposing | verbal particle <i>ka</i> | verb focus conjugation | verb emphasis completive | in-focus verb form | emphasizing <i>ti</i> | ? |
| Other indicators | immediate | just | only | term focus marker | -- | -- | term focus marker |
| External IS | BG | BG | BG | BG | BG | BG | BG |
| Internal IS | PCF | PCF | PCF | event-centered thematic | PCF | PCF | ? |

Table 3: Properties of 'as soon as' clauses in the sample

- not necessarily formal subordination, but semantic subordination,
- + from a pragmatic point of view, the 'as soon as' clause represents background information for the main event (external IS)
- at the same time, this background information is asserted by using formal main clause properties; the assertive value is even increased by marking the dependent event with predicate-centered encoding devices
- mismatch in two ways:
 1. more general: between syntax/morphology and semantics of the constructions
 2. more specifically: between internal and external information structure

3. 'As soon as' and predicate-centered focus

3.1 'As soon as' as special type of temporal subordination

+ temporal adverbial clauses give the temporal frame for the event expressed in the main clause – indicate temporal relation between the two clauses: simultaneity, or sequentiality, e.g. anteriority or posteriority wrt. to main clause event

+ 'when' clauses often indicate anteriority (but are underspecified), but do not indicate when exactly the event in the main clause will happen

(32) Als Maria nach Hause gekommen war, hat sie ihre Freundin angerufen.

When/after Mary arrived home, she called her friend.

→ loose temporal relation between both clauses

- the main clause event may happen at any moment after the event in the dependent clause is accomplished;

- thus the dependent event is a necessary precondition for the main clause event

+ 'as soon as' clauses

- anteriority of the event in the subordinate clause

- the main clause event follows **immediately** after the subordinate event

- achievement of the event in the 'as soon as' clause is presupposed (also the case for 'whenever')

(33) Sobald Maria nach Hause kam, rief sie ihre Freundin an.

As soon as Mary arrived home, she called her friend.

(34) Sobald ich nach Hause komme, werde ich dich anrufen.

As soon as I arrive home, I'll call you.

→ tight temporal relation between the events in both clauses

- the main clause event begins in exactly that moment when the 'as soon as' clause event is accomplished;

- thus the dependent event is a necessary precondition for the main clause event

→ the main difference between 'as soon as' clauses and 'when' clauses lies in the fact that there is a tight relationship between both events – more concrete, this relationship implies 'immediateness', that is a very high level of temporal relation

- + encoding of this tight relationship
- by special subordinating particles, like in English and German
- some African languages use predicate-centered focus marking – but which effect has this marking exactly?

3.2 Effect of predicate-centered focus marking in ‘as soon as’ clauses

- + predicate-centered focus = focus on any sentential element that is related to the predicate (centered around the predicate), i.e. it involves the semantic content of the verb (SoA focus), the TAM operators, or the truth value operator (Güldemann 2009)
- function of the predicate: is the bearer of the illocutionary force of the clause and host of assertiveness (what again is related to finiteness)
- relation between focus and assertiveness: when focusing, I assert that X (X = NP, VP, clause)

+ claim: predicate-centered focus entails focus on the assertion

1. predicate-centered focus normally requires a plain assertion, therefore in most cases the ‘as soon as’ clause does not show dependent, non-finite verb forms – formal explanation
2. by focusing (part of) the predicate, the assertive value of it is again increased

+ ‘as soon as’ with PCF marking could be paraphrased as:

| | | |
|---------|-------------------------------------|-----------------------|
| | As soon as | main event |
| ext. IS | [Background] | [Foreground] |
| int. IS | [Focused assertion] | [Plain assertion] |
| | I assert that EVENT is accomplished | (I assert that) EVENT |

Hypothesis:

- as the assertion of the first event is strengthened by predicate-centered focus marking, an interpretation as simple succession of events, i.e. low on the scale, is unlikely
- focusing on the assertion that the event is accomplished increases its importance for the whole sentence and triggers the conventional implicature that there must be a close temporal relationship which has as condition that the first event is accomplished
- thus, the temporal relationship is not directly encoded, but focusing on the first event entails “focus on the domain of temporal relation” (Güldemann 2002, Güldemann 2008: 489ff.)

- as claimed, the temporal relation has a high degree on a scale - this ‘immediateness’ could thus be seen as some kind of **intensification** which is claimed to be a semantic subtype of predicate-centered focus

3.3 Summary and outlook

- + the interaction of ‘as soon as’ clauses with PCF marking contradicts the traditionally assumed non-assertiveness feature of subordinate clauses in general, as focus on the predicate is correlated with illocutionary force of the clause
- + this PCF marking can be functionally explained – by marking the dependent event with predicate-centered focusing devices

 1. the semantic and pragmatic weight of the dependent clause predicate is increased
 2. at the same time, the main clause event is still asserted, i.e. there is no information reversal, but the dependent event is marked as higher in assertiveness
 3. as the dependent event provides the background for the main clause event and is at the same time focused, there must be a reason for that - the only possible interpretation is that it signals via the accomplishment of the dependent that there is a special temporal relation between both events which is high on a scale of temporal relations

- + as most languages have more than just one ‘as soon as’ construction at their disposal, future research must show whether these constructions (without predicate-centered focus marking) fit into this scenario
- it must also be investigated whether there is a relation between the type of verb and its capacity to occur in predicate-centered focus marked adverbial clauses
- the position of the dependent clause to the main clause might also have an effect on the availability of this reading

Abbreviations

Glosses:

Arabic numerals indicate a noun class or, when immediately followed by a gloss for gender and/or number, a person category.

| | | | |
|------|-----------------|------|--------------------------|
| ACC | Accusative | M | Masculine |
| ANT | Anterior | NEG | Negative |
| AOR | Aorist | NEC | Noun emphasis completive |
| ASS | Associative | OBJ | (Direct) object |
| C | (Noun) Class | P | Plural |
| CNJ | Conjunction | PST | Past |
| COMP | Complementizer | PC | Predicate-centered |
| CONT | Continuative | PERF | Perfect |
| COND | Conditional | PFV | Perfective |
| DAT | Dative | PN | Proper name |
| DEF | Definite | POSS | Possessive |
| DEM | Demonstrative | POT | Potential |
| DEP | Dependent | PRS | Present |
| DET | Determiner | PURP | Purpose |
| DIM | Diminutive | PV | Performance verb |
| DIST | Distant | REL | Relative |
| F | Feminine | S | Singular |
| FUT | Future | SBJ | Subject |
| FOC | (Generic) focus | SEQ | Sequential |
| GEN | Genitive | SUBJ | Subjunctive |
| HAB | Habitual | TP | Terminal particle |
| INF | Infinitive | VFOC | Verb focus form |
| INIT | Initiative | VE | Valency external |
| IP | Impersonal | VEC | Verb emphasis completive |
| IPFV | Imperfective | VN | Verbal noun |
| LOC | Locative | | |

References

- Chafe, Wallace. 1976. Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In Charles N. Li (ed.). *Subject and topic*, 27-55. New York: Academic Press.
- Cristofaro, Sonia. 2003. *Subordination*. Oxford: Oxford University Press.
- Culicover, Peter W. & Ray Jackendoff. 1997. Semantic subordination despite syntactic coordination. *Linguistic Inquiry* 28.195-217.
- Freywald, Ulrike. 2013. Uneingeleiteter V1- und V2-Satz. In Jörg Meibauer, Markus Steinbach & Hans Altmann (eds.). *Satztypen des Deutschen*, 317-337. Berlin, New York: de Gruyter.
- Güldemann, Tom. 1996. *Verbalmorphologie und Nebenprädikationen im Bantu*. Bochum: Universitätsverlag Dr. N. Brockmeyer.
- Güldemann, Tom. 2002. „When ‚say‘ is not say. The functional versatility of the Bantu quotative marker *ti* with special reference to Shona”. In Tom Güldemann & Manfred v. Roncador (eds.). *Reported Discourse. A meeting Ground for different linguistic domains*, 253-88. Amsterdam: John Benjamins.
- Güldemann, Tom. 2008. *Quotative Indexes in African Languages: A Synchronic and Diachronic Survey*. Berlin, New York: Mouton de Gruyter.

- Güldemann, Tom. 2009. Predicate-centered focus types: A sample-based typological study in African languages. Application for project B7 in the CRC 632 ‘Information structure’, phase 2: 2009-2011.
- Haiman, John. 1978. Conditionals are topics. *Language* 54.564-89.
- Hutchison, John P. 1981. *A Reference Grammar of the Kanuri Language*. African Studies Program, University of Wisconsin: Madison.
- Jaggard, Philip J. 2010. Relational DA as a preposition, coordinator, and subordinator in Hausa: Polysemy or homophony? In Georg Ziegelmeyer & Norbert Cyffer (eds.). *Aspects of co- and subordination. Case studies from African, Slavonic and Turkic languages*, 61-78. Köln: Koeppel.
- Lambrecht, Knud. 1994. *Information structure and sentence form. Topic, focus, and the mental representations of discourse referents*. Cambridge: Cambridge University Press.
- Lefebvre, Claire & Anne-Marie Brousseau. 2002. *A grammar of Fongbe*. Berlin, New York: Mouton de Gruyter.
- Matić, Dejan, Rik van Gijn & Robert D. Van Valin Jr. 2014. Information structure and reference tracking in complex sentences: An overview. In Rik van Gijn, Jeremy Hammond, Dejan Matic, Saskia van Putten & Ana Vilacy Galucio (eds.). *Information Structure and Reference Tracking in Complex Sentences*, 1-42. [Typological Studies in Language, 105]. Amsterdam: John Benjamins.
- Newman, Paul. 2000. *The Hausa language: An encyclopedic reference grammar*. New Haven: Yale University Press.
- Reis, Marga. 1997. Zum syntaktischen Status unselbständiger Verbzweit-Sätze. In *Sprache im Fokus*, ed. by C. Dürscheid, K.H. Ramers & M. Schwarz, 121-44. Tübingen: Max Niemeyer Verlag.
- Robert, Stéphane. 2010. Clause chaining and conjugations in Wolof: A typology of parataxis and its semantics. In Brill, Isabelle (ed.). *Clause linking and clause hierarchy. Syntax and pragmatics*, 469-498. Amsterdam: John Benjamins.
- Robert, Stéphane. 1996. Aspect zéro et dépendance situationnelle: l'exemple du wolof. In Claude Muller (ed.), *Dépendance et intégration syntaxique: Subordination, coordination, connexion*, 153-61. Tübingen: Niemeyer.
- Thompson, Sandra A. & Anthony Mulac. 1991. The discourse conditions for the use of the complementizer that in conversational English. *Journal of Pragmatics* 15, 237-51.
- Thompson, Sandra A., Robert E. Longacre & Shin Ja J. Hwang: 2007². Adverbial clauses. In Timothy Shopen (ed.). *Language typology and syntactic description*. vol. II: Complex constructions, 237-300. Cambridge: Cambridge University Press.
- van Putten, Saskia. 2014. Information structure in Avatime. PhD thesis, Radboud University Nijmegen.
- van Valin, Robert D. Jr. & Randy J. LaPolla. 1997. *Syntax: Structure, meaning and function*. Cambridge: Cambridge University Press.