Situation anaphoricity in Hausa and Akan: A uniform account

The presentation focuses on two formal strategies of coding situation anaphoricity in two un-related tenseless languages, namely Hausa (Chadic) and Akan (Kwa). The two formal markers are shown to involve the same underlying situation semantics (including salient context situations, Austinian topic situations, and situation extension), thereby accounting for their parallel distribution in the two languages. Hausa and Akan differ, though, in that Akan uses grammatical tone to disambiguate between situation-related and tense-related anaphoricity.

GENERAL BACKGROUND: Situations play a prominent role in the semantic analysis of adverbial modifiers (Davidson 1967) and A-quantification (von Fintel 1995). Erteshik-Shir (1997) assigns topic situations a crucial role in the analysis of thetic sentences. Kratzer (2011) generalizes the concept of topic situations (sTOP) by making free situation pronouns an integral part of any clause; cf. also Schwarz (2009). European languages show only scarce evidence for the existence of sTOP-pronouns, with the exception of German *da* (Salfner & Salfner 2011) and Dutch *er*. By contrast, many non-Indoeuropean languages show a DEF/INDEF-distinction in the verbal domain, where DEF-marking on the verb makrs situation familiarity (Baker & Travis 1997, Matic & Nikolaeva 2014); cf. Renans (2019) on definite event determiners in Ga (Kwa).

HAUSA - DATA: Hausa and Akan exhibit a different way of making anaphoric reference to contextually salient situations by means of part-whole relations. This explicit reference to situations may be correlated to the fact that both languages are grammatically tenseless (Osam 2008, Mucha 2013). In Hausa, *REL(ative)*-marking of the preverbal person-aspect complex (marked in bold) is used in sentence types that relate sTOP to a contextually given situation: with wh-ex situ (1a), focus fronting (1b), and relative clauses (1c). This marked form contrasts with the default absolute form that is used in out-of-the blue assertions and yes/no-questions, (2):

(1)a. Mee₁ Kànde **ta** dafàa t₁? b. kiifii₁ Kànde ta dafàa t₁.
   what Kande 3sg.F-PFV.REL cook   fish Kande 3sg.F-PFV.REL cook
   'What did Kande cook?'   'It's fish that Kande cooked.'

   c. kiifii-n dà Kànde **ta** dafàa
   fish-LINK REL Kande 3sg.F-PFV.REL cook
   'a/the fish that Kande cooked'

(2) Kànde t**aa** dafà kiifii. 'Kande cooked fish.'
   Kande 3sg.F-PFV.ABS cook fish

The standard generative analysis of REL-marking treated it as a formal reflex of A'-fronting (Tuller 1986), thereby incorrectly predicting a 1:1-correlation between A'-fronting and REL-marking. This analysis is falsified by the occurrence of REL-marking without A'-fronting, e.g., in past-oriented narrative sequences (3a) and with thetic exclamatives (3b). Conversely, there are also instances of A'-fronting without REL-marking, e.g., with aspect focus (4).

(3)a. su-**ka** shigoo, …, sai su-**ka** zaunaa b. CONTEXT: What happened?
   3PL-PFV.REL enter   then 3PL-PFV.REL sit   B'àràayii nèe su-**kà** yi mîn saatàa!
   'They entered, …, and then sat down.'   robbers PRT 3PL-PFV.REL do me theft
                                                   'ROBBERS have stolen from me!'

(4) A: Musa has repaired his bike.
     B: A'à, **har yànzuu₁** yanàa gyaarà-ntá t₁.
        no, until now 3SG.M-IPFV.ABS repairing-it
        'No, he's STILL repairing it!'

HAUSA- ANALYSIS: The data in (1) to (4) receive a unified account on a semantic analysis of REL-marking as expressing situation anaphoricity, as in (5). REL adds a presupposition that there be a contextually salient situation that is a subpart or equal to sTOP of the REL-clause:

(5) ⟦REL⟧= λp.λsTOP: ∃s ≤ sTOP. p(sTOP)

In (1ab), the salient situation (a Kande-cooked-situation) is a subpart of a Kande-cooked-fish situation. For (1c), we employ the subsituation operator for relative clauses from Hohaus (2015 2015: 60ff). In (3ab), s is identical to sTOP and provided by the linguistic (3a) and non-linguistic context (3b), respectively (NB: that propositions in Hausa are only exemplified in the presence of *nee/cee*; cf. Hartmann & Zimmerman (2007)). In (2) and (4), the absence of a contextually salient situation in CG, triggers ABS-marking. The semantic analysis receives further support from cases in which the choice of REL triggers a difference in interpretation, cf. (HI) in APP.

AKAN: Akan resembles Hausa in that different types of situation-anaphoric clauses feature the same connecting marker *na*: *Na* shows up with focus fronting, situational chaining to implicit topic times/situations, and clausal chaining in the form of serial verb constructions, cf. (6a-c) (Duah 2019). (AI) in the appendix shows that *ná* is not a dedicated past marker as it can also make reference to future reference times/situations (Duah & Savić 2020). *Na* also shows up with A-quantification (6d), thereby explicitly marking situation extension (von Fintel 1995):

(6) a. [Yaw] [**nà** ɔ̀-dɔ́ Ama]. b. **Ná** Yaw rè-sùá àdéɛ́.
   Yaw CONN 3SG.SBJ-love-HAB Ama CONN Yaw PROG-study thing
   'It is Yaw that loves Ama.' '(When…) Yaw was studying.'

   c. Manu nyà-à sìkà [**nà** ɔ̀sí-ì dáń].
   Manu get-PST money CONN build-PST house
   'Manu got money and (with that money) he built a house.'

   d. Sɛ̀ Texasni á-ǹ-kɔ́ àdwúmà à, nà ɔ̀-nóm̀ bíá.
   COMP Texan PFV-NEG.go work. COND CONN 3SG.SBJ-drink beer
   'When a Texan is off work, he drinks beer.' (= A Texan always drinks beer)

Extending the analysis of Hausa REL in (5) to Akan *na* allows for a unified analysis of (6a-d) with *na* denoting an anaphoric situation linker in the left periphery. The non-present tense interpretation in (6b) and (AI) arises because sTOP is normally temporally extended and hence cannot take momentary present utterance situations/times as values (Smith & Erbaugh 2004).

While treating REL-marking and *na* as semantically on a par accounts for the cross-linguistic parallels, there is also one difference glossed over in (6a-d): Whereas anaphoric reference to situations (with *wh*-ex situ/focus fronting, narrative situation chaining, A-quantification) is uniformly marked with L-tone *nà*, reference to topic times (Klein 1994) is marked by H-tone *ná*. The choice between *nà* and *ná* (plus Asp) also induces differences in interpretation, (7ab):

(7) a. [èmó bɔ́tɔ́ dwírí gùù wɔ̀ China nó] **nà** Maria híńtíĩ wɔ̀ Germany.
   rice bag fall lie.PFV at China CD Maria trip.**PFV** at Germany
   'When the rice bag fell in China, Maria **tripped** in Germany.' (s≤sTOP)

   b. [èmó bɔ́tɔ́ dwírí gùù wɔ̀ China nó] **ná** Maria **à**-híńtí wɔ̀ Germany.
   rice bag fall lie.PFV at China CD Maria **PERF**-trip at Germany
   'When the rice bag fell in China, Maria **had already tripped** in Germany.'

The semantic difference follows from tonal disambiguation between situation and temporal anaphoricity, cf. Dolphyne (1988) on grammatical tone in Akan: *Nà* presupposes the presence of a salient situation s ≤ sTOP, same as Hausa REL in (5), whereas H-tone *ná* presupposes the presence of a salient time interval t ≠ t_U, cf. (8), which is less informative than (5).

(8) $⟦ná⟧ = λp.λt_U : ∃t ≠ t_U .λs. p(t)(s)$

The disjoint temporal interpretation in (7b) follows if t_U in (8) is replaced by the local context time (Enc 1987), which is provided by the *when*-clause in (7b).

CROSS-LINGUISTIC OUTLOOK: We expect to find more explicit markers of situation anaphoricity, and especially in grammatically tenseless languages, which lack the formal means of expressing discourse coherence through anaphoric reference to time intervals.

Appendix: Additional data

(HI) a. [Sândà mukà daawoo] (sai) **mukà** gayà musù làabarìi (Hausa)
    when 1PL-PFV.REL return then 1PL-PFV.REL tell them news
    'When we returned, we told them the news.'

   b. **Mun** gayà musù làabarìi [sândà mukà daawoo]
    1PL-PFV.ABS tell them news when 1PL-PFV.ABS return
    'We told them the news when we returned.' (Newman 2000:556)

(AI) ɛ́ńkɔ́sí ɔ̀kyéná ná Carmen á-síésìè nè lɔ́rè. (Akan)
    by tomorrow CONN Carmen PERF-clean 3SG.POSS car
    'By tomorrow Carmen will have cleaned her car.'

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