0. General information

0.1 Goal of presentation

+ the present paper is a first study of polar questions in Ama; it aims (i) at the description of these questions, and (ii) it will show how the general focus operator and the truth value focus operator interact in their formation
+ questions are an important part of human verbal interaction
- they serve the desire to balance the apparent mismatch between speaker and addressee wrt. the information both have
- help to establish and develop the common ground underlying the conversation
+ I refer here exclusively to polar questions (or yes/no-questions), in contrast to constituent (wh-) questions and alternative questions
- constituent questions and alternative questions ask for special information to close an open proposition, alternative questions already offering two alternatives for which the proposition holds (Krifka 2011: 1744)
- yes/no-questions (polar) principally request the truth value of a proposition, i.e. they ask for confirmation or rejection of an assumed fact
+ the interest of investigating polar questions was borne
1. by the fact that polar questions are an important part of human interaction - in most languages, two thirds of the questions in a conversation are yes/no-questions (Mitterer & Stivers 2007: 44)
2. by the observation that these can have different formal characteristics in some languages, including Ama (and Kanuri, cf. Cyffer 2013), cf. (1a) vs. (1b) - this was explained by the speaker by different referential values of the object

(1a)  indefinite object vs. (1b)  definite object
    kàká ádʒārā  tāřā?  kàká ádʒārā  kā  tāřā?
    Kaka bicycle  buy.PFV  Kaka bicycle  PC.FOC  buy.PFV
    Did Kaka buy a bicycle?  Did Kaka buy the bicycle?

– as will be shown the formal difference can be traced back primarily to differences in the scope of focus, an interpretation that is related to the referential quality of the object

*The present research was conducted within project B7 “Predicate-centered focus types” of the SFB 632 “Information structure” (Potsdam/Berlin), funded by the German Research Foundation (DFG). I am very grateful to my Ama informants in Cairo and Khartoum for allowing me insights into their language. My special thanks go to our student assistant Siri Gjersoe and to Stefanie Jannedy (ZAS) for their help with the intonational analysis using PRAAT.
The presentation is structured as follows:
0. Introduction, including general information on Ama
1. Structure of (neutral) polar questions in Ama
2. Polar questions and focus domain
3. Conclusion

0.2 The language

+ genetic affiliation: Ama: Nilo-Saharan, Eastern Sudanic, Nyimang (together with Affiti)
+ geographic distribution: spoken in Sudan, Kordofan province, in the Mandal hills west of Dilling
- number of speakers: language seems to be viable, given with 70,000 in 1982, many speakers settle outside the core area,
+ typological properties:
  o agglutinating
  o tone language (with 3 level tones)
  o 7-vowel system, with \( u \) and \( i \) as variants of \( u \) and \( i \) with unclear status, centralized \( e \) in some environments (Stevenson 1957)
  o head-modifier order in the noun phrase
  o dependent marking
  o no number marking on the noun, but on the verb, no grammatical gender
  o case marking by means of suffixes which follow the last modifier in a noun phrase
  o aspectual differentiation of verbs

+ characteristics of clause structure of main declaratives (1):
- verb-final word order (SOV, nearly always given in elicitation)
- in second position (whatever comes before): declarative particle \( a \) or \( ba \) (the second one with more emphatic value)
- there might be some other verbal particles, indicating TAM or information-structure

(2) out-of-the blue:

\[
\begin{array}{llll}
\text{Ábdù} & \text{ānúŋ} & \text{àrbíyā} & \text{nyíg} \\
\text{PN} & \text{DECL} & \text{3S.POSS} & \text{fix.PVF} \\
\text{[SBJ]} & \text{[OBJ]} & \text{[V]} & \text{[FOC]} \\
\end{array}
\]

Abdu repaired his car.

+ but: the seemingly strict finality condition for the verb can be canceled by discourse considerations, mainly insofar that all known information might follow the verb \( \rightarrow \)

Ama is discourse-configurational
1. Structure of (neutral) polar questions

1.1 The puzzle

- in Ama, the formal characteristics of these questions are not easy to determine, cf. (4)

(3) kā ̄ t̄ēg kàm̄l d̄ō kér-i gir̄-3?
PC.FOC give.PFV PN ?DS wife-DAT money-ACC

[VP ] [SBJ ] [I.OBJ ] [OBJ ]
Did Kamal GIVE the money to his wife?

1. Structure of (neutral) polar questions

1.1 The puzzle

- in Ama, the formal characteristics of these questions are not easy to determine, cf. (4)

(4) discussion about video clip

kāà ̄ n̄̄sì
PC.FOC pant.IPFV
He is panting.

índo ̄ xòx̄ör há jìé? negative polar question
3S.?DS snoring(ID) NEG do.IPFV
And he is not snoring?

ŋá ̄ xòx̄ör ...
? snoring(ID) ...
So, snore ..

kó á jì át̄án ánd̄ô há̄ n̄ó̄ pant.IPFV-INF PRT AUX do.IPFV now here there_is
He is snoring here now.

xòx̄ör á jì? polar question
snoring(ID) AUX do.IPFV
Is he snoring?

xòx̄ör kó á jì, én. confirmation
snoring(ID) PRT AUX do.IPFV, ehem
Yes, he is snoring, eem.

ín n̄̄sì-d̄ā kó há nè gí. negative polar question
3S pant.IPFV-INF PRT NEG be.IPFV ?
Isn’t it a panting?
+ at first glance, there is no apparent difference between the two affirmative sentences (except the focus-sensitive particle in the confirmation)

→ What are the general properties of polar questions in Ama?

+ crosslinguistically attested are the following properties of yes/no-questions: (Dryer 2008)

- question particles
- interrogative verb morphology
- interrogative word order
- absence of declarative morphemes
- interrogative intonation

1.2 Word order and verb morphology

(5a) declarative clause
kér bá këndì kàà tàl.
woman DECL beans PC.FOC eat.PFV
{What did the woman do with the beans?} The woman ate the beans.

(5b) yes/no question
Áminà këndì kàà tàl.
PN beans PC.FOC eat.PFV
Did Amina eat the beans?

→ word order and verb morphology are identical in both clause types
- lack of the declarative sentence-particle in the question

1.3 Lack of declarative particle as diagnostic element

+ declarative particles never occur in dependent clauses and questions, but also not every main clause has such a particle, cf. beginning of a picture description

(6) wá àsà nè-dì á,
people three be.IPV-P?
è tìr tùãg wèl bìbì ... àràràn wò-dì.
CNJ together sit.IPV house different... RED.near have.IPV-P
There are three people, living together in different houses near each other.

è nyàlà dù dã, è wèl àzàhàri-ù wùdãŋ nè.
CNJ one ?DS TOP CNJ house blue-GEN person be.IPV
and one is the blue house person.
Ines Fiedler
Humboldt-Universität zu Berlin

(And one is the red house person.)
(And one is the green house person.)

ɛ́ dī ëëë, īŋ ē ðīlāl ēá
CNJ then eh, 3S CNJ go.PFV.P TOP
țūn-āū tá fní-āū bàdēig ē ĕ̄ tī săr,
night-LOC ? sleep-LOC start.PFV.P CNJ lay_down.PFV.P
...and when they went to sleep at night, ...

(The story continues without any declarative particle in clause-second position)

+ In general, the use of a/ba in clause-second position in texts is very restricted
- In three narratives (191 clauses), ba occurs exactly four times (once in direct speech
  (7), once at the beginning of the story, twice in focus constructions):

  (7) {And Bigmouth caught the rabbit, and the rabbit said,}
yī bā ťōm-ā ťūū tī ē yī āŋ hā tī
2S DECL wood-GEN ?piece catch.PFV CNJ 2S 1S.ACC NEG catch.PFV
“You caught a piece of a wood, and you did not catch me.”

- In three free discussions (now analyzed 170 clauses), ba occurs more often (8 times),
e.g. in fronted topic constructions, for confirmation and as answer to questions, (8):

  (8) {Are you born Ama, my friend?}
   à bā àmà-ð-āū kū sū̄-ē
1S DECL Ama-?DS-LOC PRT be_born.IPFV-PASS
I am born as Ama.

- It occurred much more often in guided elicitation when discussing the content of
  some video clips

  (9) A: widēŋ kār bā né̄ …
child female DECL COP.CNJ …
That is a girl, {she is scratching her eye with the hand, isn’t it?}
B: No, it is not, look carefully how she is scratching.
A: à bā kā kī-tēlē
1S DECL PC.FOC ?-see.PFV
I saw it.
C: She is scratching her eye, or?
A: She got up and is scratching her eye.
thus, the diagnostic value of this feature is not very high

1.4 Final question marker

+ in the overwhelming part of polar questions in my data set (around 250), only a handful show a final vowel whose function is not quite clear – it is never an open vowel (as attested in some constituent and alternative questions)

(10) {Abdu loves his car. Yesterday I saw that he washed and polished it.}

řnô hä nyig ē?
3S.?DS NEG fix.PFV ?Q
And he did not fix it?

1.5 Question intonation

+ comparison of pitch contour of declarative and yes/no-questions for examples (4) and (5), see the appendix, revealed no apparent difference in intonation, as far as fundamental frequency is concerned

(i) there is no rising or high-tone question intonation observable as often postulated as crosslinguistically valid (cf. among others, Mitterer & Stievers 2007: 43)

(ii) the comparison of the pitch contour for example (5) might lead to the conclusion that there is a low boundary tone indicating the question – hint for “lax” question prosody? (cf. Rialland 2006 and Clements & Rialland 2008 for a number of African languages, incl. two Eastern Sudanic languages): falling intonation / final low tone, final lengthening, breathy termination or an [open] vowel (esp. a, often combined with low tone)

(iii) comparison of example (4) with final high or mid tone does not show any reflex of a final low tone in the questions

→ no evidence for ‘lax’ question prosody so far

→ no evidence for difference in intonation so far
1.6 Summary

+ from the features mentioned by Dryer (2008), only one can be truly found in Ama:

<table>
<thead>
<tr>
<th>Features of yes/no-questions</th>
<th>Features of yes/no-questions in Ama</th>
</tr>
</thead>
<tbody>
<tr>
<td>absence of declarative morphemes</td>
<td>yes – not a strong diagnostics</td>
</tr>
<tr>
<td>(final) question particles</td>
<td>? – very seldom found</td>
</tr>
<tr>
<td>interrogative intonation</td>
<td>no – needs further investigation</td>
</tr>
<tr>
<td>interrogative verb morphology</td>
<td>no</td>
</tr>
<tr>
<td>interrogative word order</td>
<td>no</td>
</tr>
</tbody>
</table>

→ polar questions in Ama do not really show any special marking – this was also shown by Levinson for Yéli Dnye, a Papuan language (Levinson 2010: 2742; Mitterer & Stivers 2007: 45), but is quite unusual crosslinguistically

→ polar questions in Ama look much like statements (as is the case for other languages, even though they have encoding means at their disposal) – how does their interpretation as questions come from?

“Statements which function as questions in this way are common in our corpora of natural conversation in a range of different languages. Linguists often insist that such statement-questions are obligatorily marked with rising intonation, but we found that these statement questions occurred very often with falling intonation (e.g. in English, Dutch, and Yéli Dnye). They acquire their interrogative meaning by purely pragmatic means. If it is independently clear from the context that the interrogative epistemic gradient applies ..., then a proposition need not be grammatically marked as a question in order to function as one.” (Mitterer & Stivers 2007: 44f., emphasis mine)

- Levinson (2010) assumed that speaker and addressee have an epistemic mismatch in their information status which is presumed by both, so this mismatch can act as the clue to polar questionhood (2010: 2742) – this might as well be the case in Ama

2. Polar questions and focus domain

+ difference between biased and unbiased (neutral) polar questions:
- **unbiased (= neutral)** polar questions are questions whose answers are in general not especially marked – they ask for confirmation or non-confirmation of the truth of a proposition and can normally simply be answered with “yes” or “no” (this kind of polar question is mostly found in conversation)
biased questions, on the other hand, already show some expectation concerning the answer – in this case, not every answer is successful in the given context, but there is a preferred answer

+ in the center of the second part of the paper are biased polar questions asking whether it is true that a specific constituent fulfills an open proposition: thus, we have two focal operators here:

1. the general focus operator (marked by the focus marker nɛ)
2. the truth value focus operator (marked by the predicate-centered focus marker ka)

- the positive answer to such a question can be simply “yes”, but a negative answer necessarily requires a following correction
- form of the answer is biased by structure of the question

2.1 Neutral polar questions

- ask for the truth value of the whole proposition with two possible answers:

confirmation or contradiction, i.e. only the truth value operator is in focus

(11a) kákā kúdò kā tårá?
PN goat-ACC PC.FOC buy.PFV
DID Kaka buy a goat?
(11b) yɛ́ī, kákā bā kúdò kā tårá.
yes, PN DECL goat-ACC PC.FOC buy.PFV
Yes, Kaka REALLY bought a goat.
(11c) bwér, kā há tårá.
no, PC.FOC NEG buy.PFV
No, she didn’t.

→ additionally to the lack of the declarative particle, the question is marked by the particle ka before the verb

Functions of ka:
+ polyfunctional element belonging to the verb phrase
+ Stevenson (1938: 110ff.) describes it as

emphasizing particle in perfect, habitual, past, and other tenses
particle marking future tense – in this case it is separated from the verb
particle expressing a purpose or wish
+ related to its function as emphasizing particle, it serves the expression of predicate-centered focus (in statements, often together with the declarative particle ba)

(12a) SoA focus
{Abdu loves his car. Yesterday I saw that he took care of it. What exactly did he do with the car? / Did he wash or fix it?}
kā bá nyíg.
PC.FOC DECL fix.PFV
He FIXED it.

(12b) Truth value focus: positive polarity - affirmation
{Abdu loves his car. Yesterday I saw that he washed and polished it. And he did not fix it?}
kā bá nyíg.
PC.FOC DECL fix.PFV
He DID.

→ combination of the verbal particle ka and the affirmative particles a or ba can be seen as the preferred encoding strategy for predicate-centered focus in Ama – ka can be seen as marker of predicate-centered focus (among other things)
→ when asking for the truth value of a proposition, particle ka has to be present in the question (in most cases, see the exception in example (4)), ba is not allowed

2.2 Non-neutral polar questions
+ two focus operators interact in these questions:
   (i) the general focus operator (marked by the focus marker nɛ)
   (ii) the truth value operator (marked by the predicate-centered focus marker kā)
→ What structure do we get when both focus operators come together? Is it possible to have both markings together? Which operator determines the structure of the question?

2.2.1 Focus on subject
+ asks whether the subject, given as one alternative, is the right one to make the proposition true
(13a) Kákā nɛ é kūd-ɔ́ tárá?
PN FOC CNJ goat-ACC buy.PFV
Did KAKA buy a goat?
(lit.: Was it Kaka who bought a goat?)
open proposition: X bought a goat
constituent question: Who bought the goat?
assumption: X = Kaka
polar question: Is this assumption true?

(13b) yéli, ín bá né ţářá.
  yes, 3S DECL FOC buy.PFV
  Yes, SHE bought (it).
(13c) bwér, kā bá há ţářá, ē Āminá né ţářá.
  no, PC.FOC DECL NEG buy.PFV, CNJ PN FOC buy.PFV
  No, she didn’t, but Amina bought (it).

→ structure of the question differs from the one in neutral polar questions, but resembles strongly the subject focus construction
  + question is marked by
  - subject cleft, i.e. the subject is in sentence-initial position, followed by the generic focus marker nɛ́ which developed out of the verb ‘to be’
  - in the clefted part of the question, no declarative particle is allowed, in contrast to declarative focus utterances
  - the clefted part might be followed by a background clause (often introduced by conjunction ḗ) which does not show the predicate-centered focus particle ka

### 2.2.2 Focus on object

+ asks whether the object, given as one alternative, is the right one to make the proposition true

(14a) kákā kūd̪-ɔ̀ tářá?
  PN goat-ACC buy.PFV
  Did Kaka buy a GOAT?
  (lit.: Was it a goat that Kaka bought?)

open proposition: Kaka bought X
constituent question: What did Kaka buy?
assumption: X = a goat
polar question: Is this assumption true?
Yes, she bought a GOAT.

No, she bought a COW.

+ again a different structure, which resembles a declarative statement
- object is in canonical position, i.e. the focus position
- no special particle allowed – neither the declarative particle ba, nor the predicate-centered focus particle ka
- following my informant, simple answer with ‘no’ would have been possible (contrary to expectation)

### 2.2.3 Focus on verb

+ asks whether the verb, given as one alternative, is the right one to make the proposition true

(15a) kákā kʊ́d̪-ɔ̀ nɔ́ kā tārā?
PNNPN goat-ACC DEM PC.FOC buy.PFV
Did Kaka BUY the goat?

open proposition: Kaka did something with a goat
question: What did Kaka do to the goat?
assumption: verb = buy
polar question: Is this assumption true?

(15b) yɛ́, kā (b)ā tārā.
yes, PC.FOC (DECL) buy.PFV
Yes, she bought (it).

(15c) bwér, bɔ́rgǝ̀l-ɛ́ì bā nyɔ́n.
no, thief-CASE DECL take.PFV
No, she STOLE (it).

(15cc) bwér, kā (b)á há tārā.
no, PC.FOC DECL NEG buy.PFV
No, he didn’t buy it.
+ in yes/no-questions with scope on the verb, the structure is the same as in questions where the scope is on the whole proposition, i.e. basic word order, no declarative particle, but predicate-centered focus particle ka
- there are other variants possible, which use word order change (16a) or a cleft structure (16b), parallel to term focus constructions

(16a)  word order change: verb phrase in sentence-initial position, all known elements follow the verb
kāa  tēg  kāmāl  dū  kēr-i  gīzelf?  
PC.FOC.DECL give.PFV  PN  ?DS  wife-DAT  money-ACC

(16b)  cleft structure – claimed to express surprise
tān-dā  nē  ē  kāmāl  kēr-i  gīzelf  tēg?  
give-INF  FOC  CNJ  PN  wife-DAT  money-ACC  give.PFV

Did Kamal GIVE the money to his wife?

2.2.4 Summary
+ the biased polar questions treated here represent an amalgamation of constituent questions (generic focus) and neutral polar questions (truth value focus)
- the structure of these question parallels the respective focus constructions, but the truth value marking particle is missing \( \Rightarrow \) thus, the generic focus operator is overriding the truth value operator

3.  Conclusion
+ formal encoding of polar questions
- Ama polar questions do not show any clear special encoding – seemingly, their interpretation as question is achieved by the context (a mystery for me when analyzing the texts)
- the only clear difference between polar questions and their answers is the absence vs. presence of the declarative particle a or ba, but as this is true for most clause types in Ama, even for declaratives, its value is not really high ranked
\( \Rightarrow \) polar questions can be characterized as question-statements
+ information-structural interpretation
- a first look at texts has revealed that the overwhelming part of polar questions asks for the truth of a proposition
- in non-neutral polar questions, two focal operators interact: (i) the generic focus operator and (ii) the truth value focus operator
- whereas the truth value operator determines the semantic kind of focus, the generic focus operator determines the scope on which the truth value operator works
\[ \rightarrow \] reading of these non-neutral polar questions:
(i) Is it true that X fulfills the proposition (in case of a term) or
(ii) Is it true that X does Verb?
- the formal difference between neutral and non-neutral polar questions can be explained by the fact that two different focus operators interact in case of the latter, whereby the generic focus operator is overriding the truth value operator, thus making sure that the scopal domain can’t be misunderstood
Abbreviations

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

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACC</td>
<td>Accusative</td>
</tr>
<tr>
<td>BG</td>
<td>Background clause</td>
</tr>
<tr>
<td>CNJ</td>
<td>Conjunction</td>
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<td>DAT</td>
<td>Dative</td>
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<td>Declarative</td>
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<td>DEM</td>
<td>Demonstrative</td>
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<td>DS</td>
<td>Different subject</td>
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<td>Focus (marker)</td>
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<tr>
<td>GEN</td>
<td>Genitive</td>
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<td>IPFV</td>
<td>Imperfective</td>
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<td>Negative</td>
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<td>(Direct) object</td>
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<td>Plural</td>
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<td>PASS</td>
<td>Passive</td>
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<td>PC.FOC</td>
<td>Predicate-centered focus</td>
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References


