

The standard Akan relative clause (RC) is illustrated in (2) using a subject relative (2a) and an object relative (2b). Akan employs a resumptive pronoun strategy that is subject to animacy restrictions, as noted by Boadi (2005) and Korsah (2016), among others.²

- Subject relative*
- (2) a. a-baayewa no a ɔ-be-kyea-a me nnora no kɔ
 SG-girl DEF REL 3.SG-VEN-greet-PAST me.1SG.SBJ yesterday CFM go
 ‘That girl who came to greet me yesterday has gone.’
- Object relative*
- b. ɔbarimaa, no a kraman dwa gu-u, ³ no so no nie
 boy DEF REL dog chase-PAST him TOP CFM be-there
 ‘There is the boy who the dog chased.’

While focused questions have received attention from an Information Structure perspective due to their effects on focus-induced semantic restructuring, to our knowledge, relative clauses in construction with *na* have not been discussed in this context. This study looks at real-life Akan discourse, recognizing that many phenomena of interest for the investigation of these two constructions cannot be fully understood by analyzing individual sentences in isolation. We utilize an Akan corpus that allows us to examine questions and relative clauses within the context of larger discourse units. Section 2 provides an overview of related research, and Section 3 presents our methodology. In Section 4 we present our study results and evaluate them linguistically, followed by a discussion of methodological and analytic choices made in Section 5. Finally, in Section 6, we discuss the theoretical implications of our findings.

2. Related Work

2.1 Focused- constituent-questions (FCQ). As illustrated in (1), in Akan, questions can be focused, which entails placing the question word or phrase at the left periphery of the sentence, immediately followed by the particle *na*. This phenomenon has been examined from various theoretical perspectives by authors such as Saah (1988); Boadi (1974, 1990, 2005); Marfo (2005); Marfo and Bodomo (2005); Ofori (2011); Duah (2015); among others. It is commonly assumed that FCQs are derived from non-focused questions, resulting in the positioning of the question- word or phrase in Akan's designated focus position at the left periphery of the sentence, typically identified as the specifier position of a focus clause headed by *na*.

Early publications by Boadi and Saah noted that focus questions are emphatic and that their interpretation depends on pragmatic factors. It was also noted that they appear to restrict the referential range of the constituents in question (Saah 1988). In this earlier work, it was assumed that the particle *na* is an exclusive focus marker. Saah described this as follows: "It narrows down the referential range of the element it attaches to and places it in an exclusive class by itself" (Saah 1988:25). According to Saah, this reading carries over to the interpretation of FCQs.

Since the early 2000s, the analysis of topics in African studies has increasingly incorporated Information Structure theories.⁴ Also influential has been the notion that the meaning of questions is

² Subject and object relatives have figured prominently in the discussion of Akan's resumptive pronoun strategy.

³ *dwa gu ... so* is an idiom. It means 'to wildly chase'. Less idiomatic is the verb *taa*, as in: *Eye ɔkraman no na ɔtaa abarimaa no*, meaning: 'It was the dog that chased the boy.' In the English-Twi parallel corpus (Azunre, et al. 2021) we find other expressions that can serve as translations for the English verb 'to chase' depending on context.

⁴ Lambrecht (1994) and Krifka (1993), next to others.

determined by the set of propositions that may serve as their answers, as suggested by Hamblin (1973) and Karttunen (1977), among others. Many scholars have built upon this work, leading to investigations of focused questions in Akan from this perspective (see especially Aboh et al. 2007; Aboh 2010; Titov 2019). In practice, this approach involves accessing the meaning of a question based on what native speakers, mostly the authors themselves, consider an acceptable answer to a context-free question.⁵ Issah in his work on Dagbani argues that FCQs introduce a contrastive focus (Issah 2015). Similar analyses have been proposed by Dakubu (2003) for Farefare and by Aboh (2008) for Gungbe. Aboh uses the notions of contextual focus and discourse linking⁶ to identify different focus positions. In a more recent article, Titov (2019) argues for Akan that FCQs require answers resulting from quantification over discourse-salient sets of alternatives, and that focused and non-focused questions are semantically distinct. However, Marfo (2005:133) and Marfo and Bodomo (2005) claim that in Akan, focused and non-focused questions have the same meaning, although speakers might prefer one over the other in certain contexts. These different perspectives have led to considerable disagreement regarding the meaning of the Akan focused question. Authors debate whether FCQs and their non-focused counterparts are two distinct question forms often indistinguishable in meaning, or if they constitute two different semantic types.

In this study, our objective is to draw attention to the fact that FCQs can perform functions beyond mere inquiry, and that, in such cases, the FCQ itself triggers an illocutionary shift. Our analysis suggests that this phenomenon is best described as illocutionary metonymy (Panther and Thornburg 2017). The term describes how speakers convey their intended meaning through language that relies on conceptual associations or contextual understandings.

2.2 Relative clauses (RC). According to Saah (2010), an Akan relative clause must be headed by the relativizer *a* or *aa*⁷, and end with a clause-final determiner. Boadi (2005) and Saah (1994, 2010) provide detailed discussions of the referential characteristics of the clause-final determiner, which is typically *no*, but *yi* is also possible. Semantically, the determiner marking the relative head and the clausal determiner must be compatible. Clausal determiners are thought to be definite, specific, and locative in nature. *No* can be classified as ‘Distal +’, while *yi* is ‘Distal –’ (Boadi 2005:128).

Saah (2010) argues that the “basic” Akan relative clause is invariably restrictive, with non-restrictive relative clauses only becoming possible through extraposition. Conversely, Boadi (2005) distinguishes between restrictive and non-restrictive relative clauses as the two distinct types found in Akan. He specifically mentions that non-restrictive relative clauses may occur without a clause-final marker (CFM). The nature of the CFM remains a topic of controversy. Dolphyne (1988) considers it as a subordination marker, and Boadi (2005) classifies it as a subordinate clause particle, emphasizing its clausal functions rather than its role as a determiner.⁸ Fretheim and Amfo (2005) share a similar perspective. Studying subordination, Schachter (1973) discusses, for several languages including

⁵ By ‘Context-free questions’ we mean ‘System sentences’ in the sense of Lyons (1977). As such they play a vital role in linguistic language modeling. For this study we mainly use situated sentences, which are taken from dialogues, and narratives.

⁶ The term ‘D-linking’ was introduced by Pesetsky (1987). A discourse-linked (or d-linked) question such as ‘which man’ (as opposed to ‘what man’) implies a context set of familiar entities. In the case of ‘which man’ the set of men is the familiar context set. Therefore, a question for ‘which man’ is a d-linked question. While ‘what man’ is not.

⁷ In linguistic literature, relative clause markers are often represented as “*áa*” or “*áa*” to reflect their assumed intonational properties. In our study, we utilize orthographic representations taken from a text corpus, where tone is not explicitly indicated.

⁸ Dolphyne notes that *no*, as a subordinate marker, carries a high tone, which makes it homophonous to the definite article.

Akan, tonal substitutions for embedded and relative clauses. Similarly, Bearth (2002); Fiedler and Schwarz (2005:122), and Korsah and Murphy (2019) have described tonal effects for subordination involving Akan RCs.⁹

Arkoh and Matthewson (2013), following Saah (2010), classify the CFM as a clausal determiner and propose that it encodes familiarity, Bombi et al. (2019) argue against the unified analysis of clausal determiners as event determiners. They argue that the *no* has different semantic functions reflecting different syntactic configurations. McCracken (2013) presents the results of an empirical study investigating the use of the CFM, reporting that the marker was present in only half of the cases she studied. She suggests that the occurrence of the CFM in Akan depends on several factors, including the position of the relative clause, the referential and givenness features of the relativized head, and its grammatical function. Despite extensive study, there is still considerable disagreement concerning the obligatoriness of the CFM's appearance and its function in Akan.

3. Methodology¹⁰

In this section we will outline our methodologies. We start by describing the data preparation process, followed by the creation of a dataset suitable for the present study, and the development of two questionnaires. Our method is inductive as it moves from pattern-detection in corpus material to data extraction and its curation, resulting in a dataset of representative text samples. The dataset, in turn, informed two small surveys conducted to gather preferences from native speakers regarding the use of focused questions and relative clauses. These surveys helped us enhance the quality of the material on which this study is built. While our approach is inductive, it is not naïve, as it is informed by insights from previous research in African studies.

3.1 Data preparation. We analyzed an Interlinear Glossed Corpus for Akan (Beermann and Mihaylov, 2009), which includes coherent texts, transcribed dialogues, and linguistic collections comprising isolated sentences that reflect specific construction types. This collection is a valuable resource created through class sourcing, where native speaker graduate students in linguistic data management courses contributed to its development. It encompasses 8,587 phrases, corresponding to 99,535-word tokens (see Table 1). This corpus can be used for the framework-independent development and testing of linguistic analyses and is also suitable for studies such as the present one, which involves the analysis of dialogues and narrations.

Table 1 Interlinear Glossed Text resources

	Akan IGT-corpus	Akan dataset ¹¹
Number of words	99 535	1 308
Number of phrases	8 587	236

The term 'phrase' is used in this context to refer to a string of words, such as a fragment, a sentence, or a small discourse unit. The dataset created for this research comprises phrases that contain

⁹ Also, Kügler (2016) studies the phonetic effects of subordination. He describes left-edge pitch resets for subordinated complementizer clauses. His study does not include relative clauses.

¹⁰ I would like to thank Abigail Agyeiwaa, Eric Agyemang, Ellen Agyei-Tuffour, Michael Asiedu Adjei and Anna Struck for their help.

¹¹ The dataset is part of the supplement to this paper. Beermann (2025)

constituent-questions or relative clauses extracted from the coherent texts and dialogues within the Akan corpus.

Its size is shown in column three of Table 1. The data is structured as Interlinear Glossed Text (IGT), which is a format rich in linguistic annotation. The source is in a simple XML format as illustrated in Figure 1.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<typecraft xsi:schemaLocation="http://typecraft.org/typecraft.xsd"
xmlns="http://typecraft.org/typecraft"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <phrase id="657530" valid="VALID">
    <original>na dɛ̃n?</original>
    <translation>what happened?</translation>
    <translation2></translation2>
    <description>WH-NA</description>
    <globaltags id="1" tagset="Default"/>
    <word id="657530-1" text="na" head="false">
      <pos>PRT</pos>
      <morpheme text="na" baseform="na" meaning=""/>
    </word>
    <word id="657530-2" text="dɛ̃n" head="false">
      <pos>Wh</pos>
      <morpheme text="dɛ̃n" baseform="dɛ̃n" meaning="what"/>
    </word>
  </phrase>
</typecraft>
```

Figure 1 XML representing the question: Na dɛ̃n? ‘What happened’

Figure 1 illustrates that the data, in addition to being morphologically glossed, as is common in linguistics, is also part-of-speech tagged. Our goal in working with this data is to analyze the functions and meanings of questions and relative clauses in authentic Akan discourse. Therefore, we had to rely on nuanced translations. Although each phrase was initially accompanied by an English translation, we regarded it as essential to refine these translations during the data preparation process. Additionally, as part of the data preparation, we worked on consistency in the grammatical annotations and, when necessary, enhanced the contextualization of the text units by revisiting the original material.

3.2 Methodologies. We used several linguistic methodologies in the exploration of the Akan dataset. Some of the data was already annotated with semantic labels that indicate the Information Structure effects introduced by the Akan particle *na* (Beermann, 2019). However, assessing text for discourse senses is a challenging undertaking that necessitates the expertise of trained annotators. This would have prolonged the annotation phase, something this study could not accommodate. Therefore, alternative methodologies had to be considered.

We had observed that focused constituent-questions were more frequent in actual discourse than the other Akan question forms.¹² Additionally, we noticed that relative clauses, when part of actual discourse, tended to attract the particle *na*.

¹²Omane and Höhle (2021) in a language acquisition study for Akan Constituent-question report a similar result for their adult group which suggests that adult speakers of Akan prefer producing ex-situ (focused) compared to in-situ questions in elicited production task applied as part of their experimental set up.

Upon closer examination, we also noticed that questions were regularly performing functions beyond merely inquiring, but it was unclear if this applied to all questions and contexts. Similarly, we noted a pattern in the occurrence of relative clauses without the clause final marker. To gain a better understanding of these phenomena, we decided to conduct further analyses on both constructions using questionnaires. For questions we selected three parameters: the context of the utterance, the illocutionary force of the question, and its linguistic form, as outlined in Table 2. In addition, we made available an instantiated template of our Excel workbook, which gives a more comprehensive overview of the features and parameters we considered.¹³

Table 2 Evaluation Parameters for the investigation of Akan questions

Features	Parameters	Possible values
setting	context	private dialogue, radio show, narrative ...
speech act	illocution	asking for information, exclamation ...
syntax	structure	phrase-initial, phrase-final ... ¹⁴

In comparison to constituent-questions, our data set for relative clauses was smaller. Out of the 43 relative clauses present in the corpus, we selected 21 that exhibited variations in the presence of the clause-final marker, and which were appropriately embedded in authentic discourse. While working with a small dataset has limitations, it still provides valuable insights into the usage of situated relative clauses which cannot be gained from the study of isolated ones. The following two subsections present the development of our two questionnaires.

3.3 Questions. The questionnaire included contextual questions based on the data set, for which we created situational contexts that reflected those observed in the Akan corpus. The process involved two phases. In the initial phase, both the situation description and the related question(s) were presented in English. Situation 6, a movie dialogue, is an example.

Situation 6

The following utterances are taken from a movie. We are taken to a village where a beast torments the people that live there. Alone in the last week two people were killed. One of the villagers says:

What sins did we commit for evil to torment us like that?

Translate the question (into Akan):

Three Ghanaian speakers translated the questions. If several ways to ask a question were possible, they were recorded. The result was a questionnaire describing a situation followed by a set of questions in Akan which had been deemed as contextually adequate by the Ghanaian translators. We now added to each of these sets of contextualized questions a question that the translators had deemed as grammatical but as situationally awkward or impossible. Finally, we constructed one additional situation which allowed us to include context-free questions to the survey.

Altogether, the questionnaire consisted of 135 questions in Akan. The questionnaire was sent out with the following instructions:

“Akan allows different question forms. We would like to find out how a question is best phrased given a certain situation. Before you start, please read the descriptions carefully. We are looking for a question that

¹³ The instantiated template reflecting our work with the questionnaire on Akan questions in discourse can be found in the supplement to this article (Beermann, 2025).

¹⁴ Phrase-initial/final refer to the position of the question word or phrase.

sounds natural and adequate in the given situation. The questionnaire describes 10 situations which we have taken from:

- Ghanaian broadcasts where a radio host discusses public issues with his guests. Host and guests tend to switch between Akan and English.
- Akan movies and short stories
- Everyday conversations

You are asked to evaluate lists of questions. Which of the questions do you like best? Mark that question in a bright color, which will make it easy for the reviewer to identify your choices. If you feel several of the questions in the list fit the situation well, mark all of them.”

The study was carried out as an online survey.¹⁵ We evaluated the 10 returned surveys by charting the answers according to the parameters of interest. For a full representation of the set-up see Table 3.

Table 3 Features and Parameters for the evaluation of Akan questions in context

Features	Parameter	Possible values
ID	ID	S4-Q4-b, ...
weight	score	1,2,3, ...
setting	context	private dialogue, radio show, narrative ...
speech act	illocution	asking for information, exclamation ...
syntax	structure	p(hrased)-intial, p-final ...
construction label	label	wh-focus, wh-default ... ¹⁶

The questionnaire is made available together with the other material informing this study at the Open Science Foundation (Beermann, 2025).¹⁷

3.4 Relative Clauses. The second questionnaire features 21 examples with relative clauses. We had chosen RCs that modified different types of relative heads: indefinite, definite, and those occurring without determiners. The informants had to judge from the context of the utterance whether a sentence-final marker was needed. This set-up required that the material was complex enough to be able to present RCs as part of a natural discourse. To keep things simple, we presented the RCs in bold, and a final marker was always added, regardless of whether it had been present in the original material.¹⁸

The following instructions were sent out together with the questionnaire:

“Relative clauses may occur with the sentence-final determiner *no*. Yet in some cases its occurrence seems obligatory while in other cases it is best not to have one. This questionnaire consists of 23 examples which contain a relative clause marked with a sentence final ‘NO’. Yet not all these occurrences of ‘NO’ make sense. Some of them are obligatory while some should be removed, and others are optional.

Please remove those instances of ‘NO’ that should not occur or include them in brackets if they are optional.”

¹⁵ The online survey was conducted in two different communities: one in Kumasi, Ghana, and the other comprised of Asante-speaking Ghanaian citizens residing in Berlin, Germany.

¹⁶ Wh-focus and wh-default are names of values.

¹⁷ The Open Science Foundation (OSF) is a nonprofit organization that promotes open science, aiming to make research more transparent, efficient, and reproducible.

¹⁸ That turned out to be a bad idea because it introduced mistakes which we could have easily avoided. The questionnaires are included in the supplement to the article where also further comments concerning design are included.

We received 9 answers which again were charted. Both questionnaires are part of the supplement to this article.

4. Results

In this section, we will discuss our results. They will be evaluated based on our earlier observations, linguistic reasoning, and expert intuition.

4.1 Akan questions in use

4.1.1 Description of the survey results. In the evaluation of the survey results, we distinguish patterned answer-sets from those with answers scattered over the given choices. An answer-set is considered as patterned when one of the questions in the set receives two or more votes than the next runner-up.¹⁹ The number of patterned versus non-patterned answer-sets is shown in Figure 2.

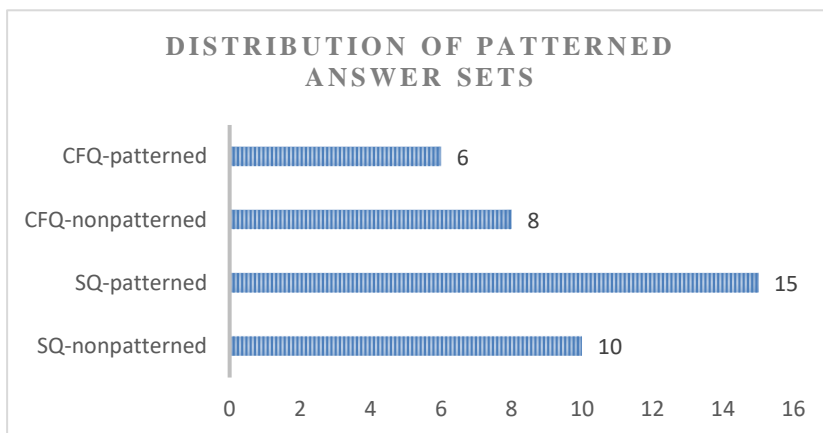


Figure 2 Distribution of patterned answer sets for situated (SQ) and context-free questions (CFQ)

Out of the 25 sets of situated questions, 15 received structured answer sets. Among the 14 context-free questions (CFQ), we obtained 6 structured answer sets, while 8 sets had scattered responses. This indicates that the majority of answers for situated questions followed patterns, whereas most context-free questions did not. Previous research suggests that focused and non-focused questions carry the same meaning (Marfo 2005:133; Marfo and Bodomo 2005), and that both question types are used "without any known obvious restrictions on the contextual appropriateness of one structure or the other. However, our present study suggests a different finding: Given sufficient context, and in a few grammatical configurations, Akan speakers prefer the focused constituent-question over the others. This is illustrated in Figure 3. It shows that the FCQ is the preferred question form for all 'patterned' answer sets.²⁰

¹⁹ Participants could select several questions as being adequate. The number of answers could therefore be higher than the number of participants in the survey.

²⁰ The abbreviations 'Copula-const' and 'NFQ-form' in the legend of Figure 3 stand for 'questions in copular constructions', and for 'non-focused questions' respectively. The results shown in Figure 3 included the frequencies of question forms found for the six patterned answers for context-free questions. We suspect that subject questions, which questions and possessive questions are structural triggers for focus question forms

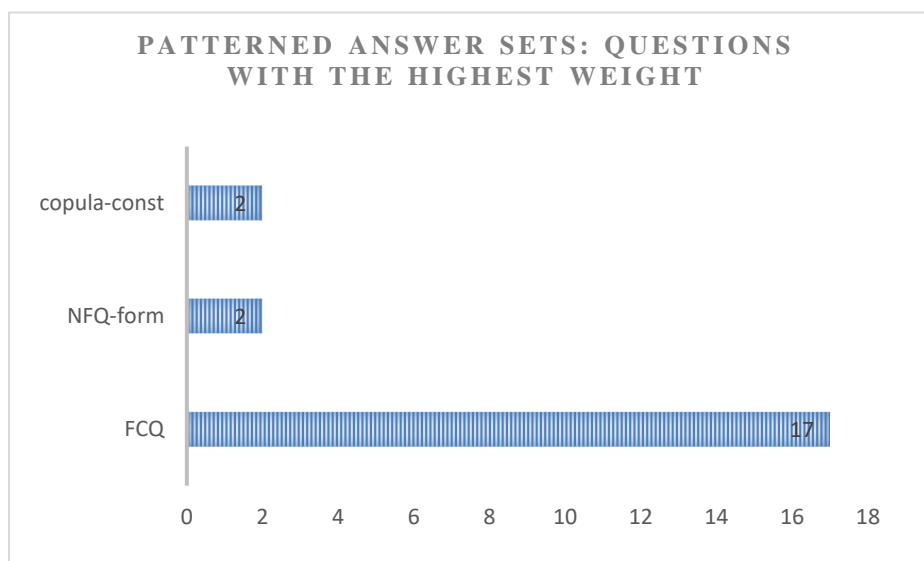


Figure 3 Question forms for the highest-ranking choice in patterned answer- sets

Our study thus confirms a general trend observed in previous research. However, upon closer examination of our results, it becomes clear that it might not be the act of inquiring that is more frequently performed by FCQ questions, but rather the fact that the focused question form encompasses additional speech acts beyond simply seeking information. One of the main aims of this paper is to demonstrate that focused Akan questions serve a variety of speech acts beyond merely seeking information. However, it is important to note that these questions do indeed still perform the function of inquiring, as evidenced by our findings.

4.1.2 Focused constituent-questions and illocutionary metonymy. It is well known that asking a question is not necessarily identical to asking for information (Athanasidou 1991, Steensig and Drew 2008). Previous work on Akan questions, however, considers them exclusively from that perspective.²¹

Using Akan data collections, we found that interrogatives which were questions by form, also performed other functions than asking. Speech acts rarely have only one meaning, and this is also true for questions. They can be rhetorical questions, questions as expressions of misgivings, lamentations or surprise, or questions as requests. First, we will illustrate the use of questions in real-world dialogues for each of the mentioned speech acts and then analyze the survey results in the next section.²²

Rhetorical questions

Rhetorical questions are asked to make a point, not to get an answer. Despite looking like questions, they don't seek information. Instead, they are used as a rhetorical tool to emphasize, persuade, or add dramatic effect to an assertion. With this as background, the following example used in our questionnaire has been categorized as a rhetorical question.

²¹ This holds as well for work in language acquisition which build on African studies (Omane and Höhle 2021).

²² The reader finds discourse scenarios reflecting these speech acts in our questionnaire on Akan questions where they are called Situations.

A radio host and his guests discuss, controversially, the need for calendars for the Kotoko football club. While one guest points out that all football clubs use calendars in their work with the team, the host expresses scepticism towards their importance. He poses what we have categorized as a rhetorical question:

- (3) a. aden nti na Kotokofoɔ no nea wɔ-nim ara
 why PRT Kotoko people DEF thing 3PL-know only
 ε-ne calender
 3SG-be calendar
 ‘Why is it only the calendar that the Kotoko supporters know?’

It can be noted in passing that not only context and intonation affect whether a question is interpreted as a rhetorical question, but maybe the question form itself also could be a factor. It appears that embedded questions like (3b) for example cannot so easily be interpreted as a rhetorical question.

- b. Agya wo-be-tumi a-kyere me dee nti a Kotokofoɔ
 Father.HON 2SG.SBJ-FUT-can PRF-show 1SG.OBJ why Kotoko
 hia
 need calendar²³
 ‘Father, can you tell me why Kotoko people need a calendar?’

We will not pursue the issue here and instead only focus on FCQ.

Expressions of misgiving

Misgivings convey doubt or apprehension. The speaker expresses unease, often suggesting reconsideration before proceeding. The following question (4) is taken from Situation 3 in our questionnaire which we have categorized as a speech act expressing skepticism in the form of a misgiving.

A group of friends listens to a radio show where the host questions Yaw Tetey about an economy in distress. One friend voices dissatisfaction with Tetey's answers. Another person present suggests that there might be something wrong with the questions posed by the host:

- (4) Aden na ɔ-re-bisa Tetey n-sem yei? hia calender
 why PRT 3SG.SBJ-PROG-ask Tetey PL-question this need calender
 ‘Why is he asking Tetey these questions?’

While the others in the group express unhappiness with Tetey's answers, the person uttering (4) seems to be cautioning the others while redirecting their attention to the host and his line of questioning.

Lamentations and expressions of surprise

A speech act labeled as "lamentation" is characterized by the expression of deep sorrow, regret, or grief. They often include emotional language, evocative imagery, and sometimes a sense of longing or helplessness. A lamentation in the form of a question is found in Situation 6 in our questionnaire.

The following utterance is taken from a movie. We are in a village where a beast torments the villagers. In the last week alone, two people were killed. One of the villagers' cries

²³ We have translated ‘dee nti a’ to mean ‘why’, or ‘the reason for’ while in other contexts dee is better translated as ‘what’.

- (5) *bone* *ben* *na* *yε-a-yε* *a* *honhom* *yi* *ha* *yen* *saa*
 sin which PRT 3PL.SBJ-PRF-do REL spirit this torment 1PL.OBJ such
 ‘What sins did we commit for this spirit to torment us like that?’

In a further example, Beatrice enters the room. There is a big basket with something in it on the table. She is surprised and spontaneously exclaims:

- (6) *Wurade*^{24, 25} *ε-deen* *na* *ε-wɔ* *adee* *yi* *mu?*
 My gosh it-what PRT it-be_LOC thing this inside
 ‘My gosh, what does this package contain?’

Requests

Questions we categorized as requests are illustrated using an exchange between the host of a Ghanaian radio show and one of his guests. The host has just said: “Our economy is in distress...”. Turning to his guest Yaw Tettey, he says:

- (7) *YawTettey* *deen* *na* *wo-wɔ* *ka* *fa* *wei* *ho?*
 YawTettey what PRT 2.SG-have say pick_up this self
 ‘Yaw Tettey, what do you have to say about this?’

A request is a polite form to ask for something, and in this way, it is different from demands. The question: “What do you have to say?” may be used to encourage the other person to express a personal view. In many situations, however, it may be used to involve the other person in the conversation, encouraging active participation and dialogue. We understood (7) in the latter sense.

Having illustrated the use of speech acts for the classification of focused questions, we now will have a look at the results of our query. It shows that from the 135 questions assigned to 10 Situations, and using the heuristics illustrated above, we have found that less than half of these questions were information seeking while more than half of them performed other speech acts than asking for information.

²⁴ Situation 8 in the questionnaire presents a situation where Beatrice enters a room and finds a package on the table which triggers the utterance in (6). She then turns to Lilian who was in the room when she enters and asks if Lilian knows who has delivered the package. Please turn to our questionnaire for further information.

²⁵ In our material we found *wurade* as an expression of surprise and the word *Awurade* as reference to God, as in: Metena Awurade fi daa. ‘I will dwell in the house of the Lord forever’.

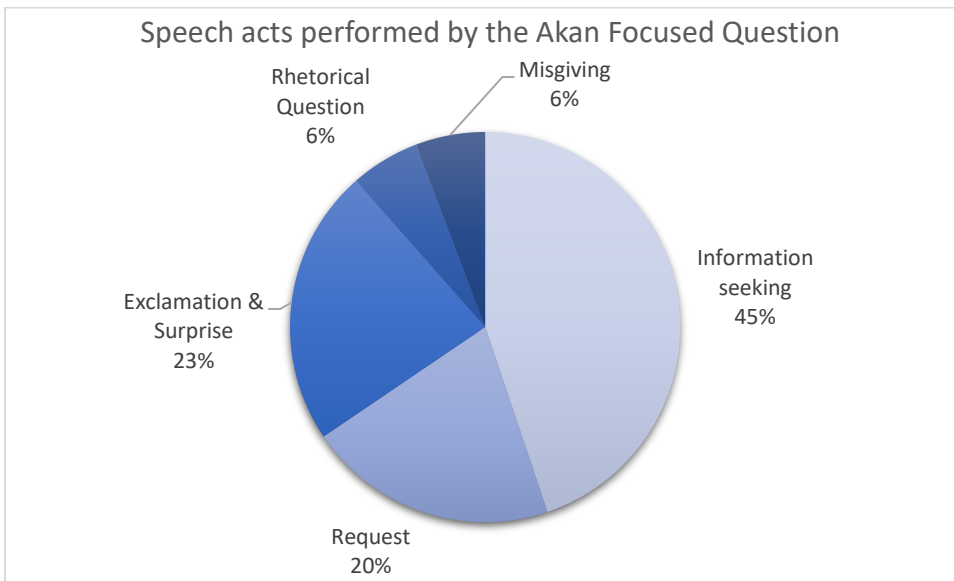


Figure 4 Speech Acts performed by Akan Focused Questions

The classification of speech acts in Figure 4 hinges on our categorization of different types of speech acts. The types used in this study have been elucidated and exemplified in the preceding paragraphs. Yet, alternative classifications are possible, as speech acts are not as distinct as we might prefer. For example, expressions of doubt or requests may resemble rhetorical questions, and lamentations may serve as rhetorical devices to elicit empathy or share grief. Crucial in the context of this study, however, is that in Akan, the focused question form is utilized to convey different types of speech acts, a phenomenon we have termed as *illocutionary metonymy*.

Speech acts expressing more than one force may be called *illocutionary blenders*. As one of the anonymous reviewers of this paper pointed out, illocutionary blending poses a problem for studies like this one because they seem to defy the classification essential for the analytic operationalization of speech acts. However, there are methodologies that allow us to address the challenge posed by illocutionary blending. Here, we have employed two approaches. First, we have strictly evaluated speech acts within their specific context to understand their primary function. Second, we have analyzed a corpus of dialogues to identify patterns and variations in speech act usage.

A simple case of illocutionary blending was in fact given in (6). The sentence-initial expression *Wurade* indicates Beatrice's surprise, while the utterance takes the form of a question, blending surprise and inquiry. In other cases, both the hearer and the analyst must rely on contextual clues to grasp the intended meaning of the question. Consider example (7) again. The host's question is as much a request for information as it facilitates turn-taking in a conversation. It is the context in which these questions are asked that makes it clear that participation is expected. In a debate, such as the Ghanaian radio show where a host discusses issues of public interest with his guests, the question: "What do you think?" serves as a cue for the guests to contribute their viewpoints. We have added an excerpt of the actual dialogue as Supplement 11 to the data supplement accompanying the article.

To summarize the last two points: The classification of speech acts in the study is based on specific categories, but alternative classifications are possible due to the overlapping nature of speech acts, here called illocutionary blenders. To address this problem, the study employs contextual evaluation and corpus analysis of dialogues whereby contextual clues help determine the intended meaning.

To summarize more broadly, we have described the versatility of the Akan focused question and suspect that their higher frequency compared to other Akan questions is due to their ability to instantiate a variety of speech acts. If we are correct, it is their multifunctionality that makes them more frequent and prevalent in actual discourse. While it is common for questions to serve purposes beyond information-seeking, the particularity in Akan is the link between focus and illocutionary metonymy. We cannot stress this enough, as prior research has focused exclusively on their role in seeking specific information within the scope of the focused expression. Under illocutionary metonymy, the function of the focus induced by these questions is contextually interpreted rather than narrowly defined. The emphasis is on the message conveyed by the speech act embodied by the focused question, which establishes a contextual focus for the unfolding discourse. This can include developing a storyline or aiding speakers in maintaining the thread of conversation, as demonstrated in the turn-taking example. We have identified several speech act functions and explored their crucial role in shaping the flow of Akan discourse.

4.2 Akan relative clauses in use. Relative clauses (RCs) were also investigated using a questionnaire. During earlier work on an Akan dictionary (Beermann, 2021), we noticed that they occur without the CFM in over half of the documented cases. Similar observations have been made by McCracken (2013), which is, to our knowledge, the only other corpus study looking at Akan RCs. One factor known to influence the presence of the CFM is the referential status of the relativized head. As is well known, the referentiality of noun phrases plays a crucial role in the semantic anchoring of the noun phrase itself and for the interpretation of the text as a whole. This also applies to NPs modified by relative clauses, where the referentiality of the relativized head equally affects the interpretation. Particular to the present study of RCs is that they were examined in construction with the focus particle *na*, which by itself significantly impacts the semantic construal of the overall message. In addition, the relationship between the CFM, its presence or absence, and the referential status of the relativized head is mediated by *na* as we will see immediately. This makes the study of the CFM and the referential status of the relativized head a central analytic concern.

The second reason for focusing on the use of the CFM is methodological. We need to create a reference point to compare our results to existing studies of Akan relative clauses. Since little is known about the interpretation of Akan relative clauses in dialogue, it is crucial to ensure that our work can be evaluated against established research. This will facilitate a clearer understanding of the phenomenon.

Continuing from here, we will now look at two different construction types:

C1: *Na* occurs internal to a relative clause, directly following the relative marker.

C2: In a clausal complex, a clausal unit introduced by the particle *na* influences the interpretation of a preceding RC.

C2 is more prevalent in our data. However, we also intend to discuss insights regarding C1- type constructions. These instances raise questions about the status of *na* as a Time marker (Boadi 2008; Zimmermann and Duah 2022).

We will begin by presenting our findings on the relationship between the CFM and the referential status of the relativized head. Next, we will examine RCs that incorporate *na* as a Time marker and then explore the foregrounding of RCs. Finally, we will reflect on the significance of these observations for actual discourse.

- b. wɔn a wɔ-tɔn adeɛ hɔ no deɛ n-neɛma re-kɔ yie
 3PL.SBJ REL 3PL-sell things there CFM TOP PL-thing PROG-go well
 ‘Those that sell things there do well.’

In (8a) the relativized head ‘team’ is a predicate nominal and as such non-referential, as it does not refer to an entity but rather classifies or describes the subject. In (8b), the noun occurs with an indefinite determiner. In (9a), we have a relativized plural noun, and a CFM occurs exemplifying the Group 1 RC-pattern listed in Table 4. In the context of (9a) the noun receives a particular interpretation. Example (9b) starts with a pronoun as a relativized head and the CFM occurs. Also in our questionnaire relativized pronouns were the clearest cases of relativized heads that required a CFM. If the pattern found in our material (Table 4) proves to be more general, as we suspect, Akan requires semantic compatibility between the CFM and the relative head, thus confirming previous claims. This finding also converges with recent evidence from Isaac and Donkor (2020), who examine relative clause formation in Akan proverbs compared to their occurrence in normal sentences. The authors confirm the known dependency between the CFM and the definiteness of the relativized head, which we have described here based on our corpus material. Comparing RCs in standard language use and their use in proverbs, Isaac and Donkor further observe that “the presence of the head noun determiners will still render the sentences meaningful only when we want to show definiteness but in the context of generalization, it will always be omitted.” The authors continue to show that Akan proverbs disfavor the CFM when used with zero-determiner relativized heads. They relate their findings to the fact that proverbs in Akan, as in many other languages, are used to express traditional beliefs or general advice, and in that sense relate common sense and experience rather than specifying particular objects.

Our study of relative clauses also showed that zero-determiner heads were common among the relativized nouns, indicating that some would require a CFM, while others would not.

Despite their omnipresence, little is known about their referential status and their behaviour under relativization. According to Boadi (2005), they are either generic or particular expressions and as such specific rather than definite, as they do not refer to identifiable objects. Our corpus, given its size and annotations, does not allow for further study into the referential nature of these expressions.

In summary, the findings shown in Table 4 suggest that the occurrence of the CFM is influenced by the referential status of the nominal head, but it is not solely determined by it. Moreover, Akan allows nominals to occur without a determiner, and their referential status has not been sufficiently studied in this context. These are two good reasons why we should not base studies of the interpretation of relative clauses solely on the presence or absence of the clause-final marker and the referential status of the relativized head.

Relative clauses with internal occurrences of na. The particle *na* may occur internal to the Akan relative clause. This is one of the configurations where the RC is in construction with *na*. This does not necessarily make it a focused construction in a strict sense, that is, it does not contribute new, or contrastive information. From the perspective of discourse structure, however, it plays also as a relative tense marker a central role in assuring text coherence by determining temporal relations. For the following reflections, we build on Boadi (2008), who argues that the particle *na* is a “non-tensed expression of Past Time.” According to Boadi, a *na*-marked verb is interpreted as PAST relative to another event. One of the examples Boadi gives is here reproduced in (10).²⁷

²⁷ Boadi’s example is given in Fante. The Twi *na* is in Fante *mà* according to Boadi. Boadi further points out that *na* as anteriority marker can also be used in relation to future events (Boadi 2008:33 and 87).

- (10) (Abera) Esi dú-ù hɔ no, nnà Kofi rè-dzidzi
 when Esi reach-COMPL there DEF then Kofi PROG-eat
 ‘When Esi got there Kofi was eating.’ (Boadi, 2008, p 86, exe: (28a) (Fante)

(10) states that Kofi had already started eating when Esi arrived. In linguistic terms, the particle *na* takes scope over the eating event, establishing a temporal ordering where the eating begins prior to Esi's arrival. This also holds for relative clauses, where *na* directly follows the relative pronoun as an anterior marker, it indicates that the event described by the relative clause occurs before the reference event in the main clause.

Notice that the reference time is not necessarily the Past tense. Boadi (2008) gives an example where the reference time is the Future. Another linguistic example illustrating this can be found in Hataav and Essegbey (2024, p3, example (3b)).

Our material shows that anterior tense is used in narratives and everyday dialogue.

Genre: Storytelling

- (11) a. ohene bi tena-a ase [a na ɔ-n-ni yere]
 king some.INDEF sit-PAST under REL PRT 3SG-NEG-not_have wife
 ‘There lived a king who had no wife.’

In (11a), the verb of the extraposed non-restrictive relative clause (given in square brackets) is non-tensed but, in the scope of *na*, interpreted as being in the PAST. Sentences such as (11a) typically occur at the beginning of a story, where they serve to introduce the characters and set the scene. The relative clause provides information about the king and makes it clear that his lack of a wife was already a fact when the story unfolds.

Consider also (11b)

Genre: Storytelling

- b. nti ɔ-sɔre kɔ-ɔ nsuo bi [a na ɛ-da hɔ] ho
 so 3SG-get_up go-PAST water INDEF REL PRT 3SG.NEUT-lie there skin.
 ‘So, he got up to walk to the river there. (lit.: which lay there).’

(11b) is taken from an Ananse²⁸ story where Ananse has Turtle as a guest, but each time Turtle is about to eat from the food Ananse cooked, Ananse sends him out to wash his dirty hands in the river. The reference time is again the past, marked on the main verb ‘go’. The RC specifies that Turtle went to the river located right there. The role of *na* here is not strictly to determine the relationship between two events, but to introduce a past state - specifically, the river running by Ananse’s house, before the events of the story unfold.

While the difference between an anteriority marker and a tense marker is clear conceptually, this distinction is not always easy to draw in discourse. Consider, for example, (11c), where *na* is used rhetorically to express that the love once felt belongs to the past, not to the present. The reference point here is the speaker's time, and it is the function of *na* to place a feeling in a time before a fictive day that may never have existed (“maybe there was a day”).

Genre: Conversation

- c. ebia na da bi wɔ hɔ [a na me-pe wo]
 maybe PRT day INDEF be there REL PRT 1SG-want 2SG
 ‘Maybe there once was a day when I loved you’

²⁸ Ananse is a famous character in Akan fables.

To summarize: Relative clauses with an internal occurrence of *na* involve the particle in its role as an anteriority marker. We have limited data to examine this function more extensively. However, insights from Boadi's work, as taken up by Hataf and Essegbey (2024), and others, as well as general research on the use of relative tense suggest that *na* serves to establish a timeline situating prior states and events relative to a reference time, thereby contributing to narrative coherence and continuity.

Foregrounded relative clauses

In this section, we examine relative clauses of type C2 where the second conjunct is introduced by the particle *na*, which affects the interpretation of the RC in the first conjunct.

Consider the example in (12):²⁹

- (12) Person 1: Merekyere m'adwene, especially, *na* wɔrekyere se ahɔhɔ wɔ kurom ha [**a wɔredi dwa**], *na* wɔ-feel se ahɔhɔ no yen mmara bi kyere se retail business deɛ, hɔhɔ biara nnibi.

Person 1: I am only giving my opinion, especially since they (a group of people the speaker had been referring to) were saying that there are foreigners in our town **[who are trading]**, **however/but/while**, they feel that some of our laws when it comes to retail do not permit foreigners to engage in it.

In (12), person 1 is one of the guests on a Ghanaian radio show. He is reporting a conflict in a town where foreigners trade and where the citizens feel that is forbidden by Ghanaian law. The speaker refers to the *ahɔhɔ wɔ kurom* 'the foreigners in the town'. He then uses the relative clause, *a wɔredi dwa*, which means 'they trade', to compare this piece of information with what the citizens think, namely: *wɔ-feel se ahɔhɔ no yen mmara*, meaning 'they feel that the foreigners by our law... should not do that'. These are two assertions, (i) the foreigners trade, and (ii) the citizens think it is against the law. The conjunction between these two statements is *na*. In this configuration the relative clause is not restrictive, instead it is interpreted in the context of what follows. The speaker's assertion consists of expressions of two states of affairs which are stitched together to form one argument. Different from the English conjunction, serving as its translation, *na*'s meaning is strictly contextual. It often simply means 'and', but in (12) when it follows the relative clause it translates to: 'however', 'but', or perhaps 'while'.³⁰

A second C2 case is (13) where the guests of a radio show discuss matters of the Kumasi Kotoko football club. One of the guests advocates the use of a calendar. He says that every team needs one. Speaking for the Kotoko supporters, he then says that they are still waiting for something to happen.

- (13) Person 1: Na ɔmo ye team they have to prepare. Team biara pe se ɔmo prepare. Calendar is meant for the team [**a ɛɛ se ɔmo prepare**] *na* yete hɔ dadaada na afei.³¹

Person 1: They were a team which had to prepare like every team likes (to do). All teams must prepare. A calendar is meant for a team **[that has to prepare]**, **yet**, it has been a long time we have been sitting here.

²⁹ In (12) the embedded relative clause and the following conjunct introduced by *na* are given in bold and surrounded by square brackets.

³⁰ (12) contains a second instance of 'na' directly following the English word 'especially'. Here, 'na' functions as an anteriority marker. The phrase 'wɔrekyere', which literally means 'they are saying', should therefore be interpreted as a prior event.

³¹ In (13) the embedded relative clause under consideration and the following conjunct introduced by *na* are given in bold and surrounded by square brackets.

In (13) we are asked to consider the issue of the calendar, which, according to the speaker, every team needs. Yet nothing is happening. The speaker's argument thus consists of two propositions: (i) every team needs a calendar, (ii) nothing happens. These are again stitched together forming the argument that the speaker advances. In this context *na* is best translated as 'yet', 'however', or simply 'and'.

In both examples, the relative clause constitutes a part of what is foregrounded. In similar veins, Amfo (2007) notes that it is the function of *na*, when used as a conjunction, to tell "the interlocutor to look out for certain kinds of inferential relations between the conjuncts." She further mentions that the relation between conjuncts related by *na* "could be temporal, causal, parallel, contrastive, or the second conjunct can be interpreted as an explanatory comment on the information represented in the first conjunct."

In addition to what has been stated in previous publications, our findings suggest that *na* facilitates an interpretation with the relative clause integrated into what is asserted.

To summarize: In this sub-section we have seen relative clauses used in political discourse in construction with *na*. We have argued that conjuncts, tied together by *na*, form a discourse unit with the relative clause as an integral part of what is conveyed. In this way Akan relative clauses can be construed as part of the assertion rather than of the background.

5. Discussion of the results

In this section we discuss some of the consequences of the methodological and analytic choices we made, highlighting the differences to previous approaches. Our focus is on the interesting or unexpected findings that emerge, as well as on potential limitations. In Section 6 then, we will discuss some theoretical implications.

Previous studies of Akan focused-questions and relative clauses have primarily centered on their morpho-syntax at the sentence level. In contrast our study investigates these constructions as part of actual discourse. We have adopted an approach that builds upon a series of methodologies, allowing us to investigate a wider range of phenomena than is typically considered. While sentences are fundamental units of language structure and convey meaning, studying larger text units has revealed that Akan focused questions and relative clauses can serve as central pivot points for discourse coherence and narrative flow. It is a common perception among Akan scholars that focused constituent-questions are more frequent than the other Akan question forms. Through our research we have gained a more nuanced understanding of the factors contributing to this perception. Based on the observation that Akan questions can instantiate various speech acts, we propose that their multifunctionality contributes to their prevalence. However, whether the focused question is also the preferred form for inquiries remains an open issue which perhaps also could be pursued using empirical methods.

We have also observed information restructuring in relative clauses constructed with *na*. Due to the sentence-level focus of linguistic analysis, the effects on the interpretation of Akan relative clauses constructed with *na* have largely gone unnoticed. Our investigations have revealed notable deviations from the expected syntactic patterns for relative clause formation concerning the usage of the CFM, emphasizing the need to establish new benchmarks for capturing the characteristic patterns associated with CFM usage.

Investigating relative clauses in use we have also observed that *na* as an anteriority marker may occur internal to relative clauses. We have examined its role in establishing a storyline. However, it is important to note that our study was constrained by limited data resources. Future studies focusing on the role of relative tense in actual Akan discourse would significantly enhance our understanding of the multifunctionality of the particle *na*.

Furthermore, our study highlights the importance of considering the concept of 'discourse unit.' The definition of a discourse unit primarily depends on the specific study but generally refers to a string of symbols larger than a sentence but smaller than a complete text or conversation. Adopting an inductive approach, we frequently revisited our sources to expand or reevaluate previously extracted discourse units to ensure their interpretability. Consequently, our work involved establishing coherent discourse units both in isolation and in relation to the overall discourse they belonged to. They could be of any length and consist of a set of sentences or a clause as long as they contributed to a topic, theme, or argument. In practice, our definition of a discourse unit was context dependent. Different researchers may make varying choices based on their research goals and theoretical perspectives, which we believe is in the nature of things.

While the use of diverse linguistic analysis methods, including questionnaires and datasets, is increasingly common, integrating these methods with discourse analysis in African studies represents a relative novel approach. This integration introduces new challenges in data preparation, encompassing not only labelling but also translation that must be contextually grounded and closely aligned with the framing of the discourse. Such an approach benefits greatly from collaboration with linguists who are native speakers or proficient in the language under examination. Additionally, working with texts and dialogues offers numerous benefits, as it provides a more comprehensive understanding of the language's constructions and thus contributes to a more nuanced comprehension.

6. Theoretical implications

The present study has focused on exploring constructions in natural discourse, specifically examining the use of questions for purposes other than seeking information, and the interpretation of relative clauses as foregrounded elements rather than as elaborations of the background. Our analysis is data driven and has prioritized examining the occurrence patterns of these constructions and their interpretation within natural speech. Being well-aware of relevant theoretical developments, we have analyzed our findings without relying heavily on specific theoretical frameworks. This is not the least in the interest of making the findings of this study readily accessible from different theoretical holds.

This approach has allowed us to identify for Akan focused questions and relative clauses in construction with *na* three functions: as focus marker introducing illocutionary shifts, as relative tense marker and as conjunction. In each of these capacities it facilitates different interpretational construals of the questions and relative clauses in its scope. Interesting in this context is the work by Hatav and Essegbey (2024) who present a unified account of the uses of *na*. Pursuing an eclectic approach, they draw on a variety of well-known linguistic theories (e.g., Asher and Lascarides on discourse markers, Mats Rooth on focus, Fiedler and Schwarz for information restructuring)³². They also discuss truth-conditional semantics citing Montague and Partee to provide a comprehensive account of the different uses of *na*. They propose a unifying concept of *Root-na* seen as an abstract morpheme. Instances of *na* are thus considered as derivations or tonal spell-out of the underlying morpheme. Unlike the present study, which uses a corpus-based constructional approach, Hatav and Essegbey's work is based on generative lexical semantics.

Yet, it is not surprising that both studies converge in identifying the same key functions of the particle *na* in the construal of discourse coherence. It was Givón (1983) who noted that the most intriguing aspect of studies concerned with meanings and interpretations is to see how much of clause grammar and the propositional content of individual clauses is really about the coherence of the wider

³² References to work mentioned in the parentheses as well as references to Montague and Partee can be found in Hatav and Essegbey (2024)

discourse. This seems particularly true for multifunctional categories such as *na*. These elements often pose a challenge for categorization, as they cannot easily be assigned to a single part-of-speech within traditional linguistic frameworks. Not surprisingly, an anonymous reviewer called for a clearer categorization of the particle *na*. However, unless one stipulates a different part-of-speech for different tonal realizations of the particle reflecting their position in the intonational realization of the Akan clause, simply identifying of *na*'s functions seems sufficient. Ideally, multifunctional categories like *na* require a more flexible approach to word class categorization than the classical one, to encapsulate the various roles these formatives can play. For a construction-oriented approach like the present one, the part-of-speech tag, or tags assigned to *na* is of little relevance. It should be noted that ultimately, the choice of category will always depend on the theoretical approach, language specific factors, and the context of analysis.

Interesting for the analysis of questions in the present context are earlier formal semantic approaches that reflect on additional aspects of meaning by acknowledging that not only Sense but also Force determines meaning within agreed-upon frames of reality.³³ While this perspective on meaning introduces new challenges, such as determining the propositional content of speech acts such as rhetorical questions, implicit commands, exclamations and more, it appears as if early semantic approaches highlight, more than the recent literature, that propositions have a component of meaning related to Force. To encompass the range of speech acts that can be performed by Akan focused questions, we have employed the term "illocutionary metonymy". Currently, there is limited literature available on these phenomena, leaving open what may be the principled limitations on uses of what carries the grammatical form of a question.

In recent literature, semantic studies on rhetorical questions (RQs) have been of particular interest. RQs pose a question but function differently from regular questions, as they don't necessarily require an answer, although they usually expect a response. One direction of analysis is represented by Bienzma and Rawlings (2017) who consider RQs as interrogatives in meaning, however presupposing that the context already implies the answer, which makes them non-inquisitive in context, thereby retaining an element of assertion in their meaning.

In our view, RQs are questions only in form, their 'meaning' aligns with the speech act they impersonate. A promising line of investigation would be to explore more fully what types of speech acts in Akan can be expressed by focused questions. This probably can be achieved by further refining the methodological approach used in this study. It appears to us that corpus studies will bring us closer to investigating speech acts and other communicative frames within the conversational contexts where their potentials unfold.

Such a line of investigation might be close in spirit to the approach pursued in the study of *Conceptual Metaphors*, a linguistic phenomenon that involves mapping the structure and meaning of one conceptual domain onto another. Although illocutionary metonymy is not discussed by Lakoff and Johnson in their book 'Metaphors we Live By (1980), it should likewise be understood in terms of the interplay between types of speech acts. They are equally integral to natural speech, enhancing our comprehension, contributing to overall coherence, and introducing a poetic element to communication.

Regarding their role in the Akan language, the exploration of Akan metaphors (Asante 2015) and their significance in the Akan oral tradition (Anane 1979) can serve as a valuable reference point for future studies.

While the Akan focused question has been of considerable interest, little has been written about the usage and interpretation of relative clauses in conjunction with the particle *na*. Also, for RCs, we highlighted the function of *na* as a pivot that indicates shifts in interpretation due to the reorganization

³³ For more discussion see Dummett (1973) and his chapter on assertions.

of information. Information Structure Theory describes such reorganization effects in terms of information packaging. The restructuring effects we have observed can be traced both at the discourse level and the sentence level. Specifically, the sentence-level restructuring pertains to relative clauses used in conjunction with *na*. In these instances, the propositional content of an embedded relative clause is effectively "re-packaged" as part of the main clause's assertion. In previous work, Duffield et al. (2010) argued for English that restrictive relative clauses, rather than simply providing additional descriptive information, contribute to the main assertion or proposition of the sentence. For Akan, we have studied this effect in relation to the use of the relative clause final particle *no*. Specifically, we have tried to elucidate the role of the referential status of the relative head in relation to the use of the CFM and looked for a traceable relation between those factors and the interpretation of the relative clause as foregrounded rather than backgrounded information.

Abbreviations

1SG	First Person singular	OSF	Open Science Foundation
2SG	Second Person singular	PRT	Particle
3SG	Third Person singular	PAST	Past
3PL	Third Person plural	PL	PL
CFM	Clause Final Marker	POSS	Possessive
CFQ	Context Free Question	PRF	Perfect
COMPL	Completed	PROG	Progressive
DEF	Definite	RC	Relative Clause
DEM	Demonstrative	REL	Relative Marker
IGT	Interlinear Glossed Text	SBJ	Subject
INDEF	Indefinite	SG	Singular
NFQ	Non-focused Question	SQ	Situated Question
N	Noun	TOP	Topic
NEG	Negative	XML	eXtensible Markup Language
NEUT	Neuter		
NUM	Numeral		
OBJ	Object		

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