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## THE PERFECT IN GÃ

*Akua Campbell*

### **Abstract**

This paper investigates the meaning and distribution of the perfect in Gã (Niger-Congo, Kwa). Data from natural speech and elicitation reveals that in addition to uses of the perfect that have been established cross-linguistically, Gã makes use of the perfect for the predication of qualities (perfect of quality), for overtly signalling a change of state (inchoative perfect) and for marking iterative, habitual or predictable events (sequential perfect). A polysemous view of the perfect is advanced, and the semantic element of relevance is proposed as constituting the semantic core of the perfect. The paper also shows that the Gã perfect may be in the nascent stages of grammaticalization to a perfective or past tense, as it is now possible to use the perfect with hodiernal and prehodiernal temporal adverbs. The paper's significance lies in its documentation of an ongoing grammaticalization process that is uncommon in Niger-Congo and a novel use of the perfect in the sequential perfect, which has not been attested cross-linguistically.

**Keywords:** perfect, Gã, grammaticalization, past tense, aspect

### **1. Introduction**

In this paper, I examine the function and distribution of the perfect in Gã, a Niger-Congo (Kwa) language spoken by about 1 million people in southwestern Ghana, around the capital – Accra. This work focuses only on the present perfect, and aims to situate this perfect in the general typological framework of the perfect as discussed in Dahl (1985, 2000), Comrie (1976) and others. An important finding of the work is that Gã appears to be in the process of developing a hodiernal and prehodiernal perfective use of the perfect, where the present perfect can be used with events marked by hodiernal ('today past') and prehodiernal time

adverbials. This could be an indication of the nascent stages of a well-documented grammaticalization process whereby present perfects come to be used as perfectives (Bybee et al 1994, Schwenter and Cacoullos 2008, Squartini and Bertinetto 2000).

This study also uncovers a number of interesting uses of the perfect in the syntax of Gã. I propose a polysemous approach to these meanings which have at their core the semantic components of either ‘current relevance’ or ‘change of state/event’ or both, and I propose that both semantic values are unified by the notion of relevance. I show that Gã is one of a few languages that heavily employ the perfect (marked by the prefix **é-**) for the predication of qualities or properties. An example of this use is given in (1). A second important use of the perfect is aspectual, that is, to indicate a change of state. Although change of state has been recognized cross-linguistically as an implied component of the meaning of the perfect, especially with telic verbs (Mittwoch 2008, Ritz 2012:36), its manifestation in Gã stands out because when it occurs with a particular group of property verbs, it explicitly encodes a change of state, as in (2).

- (1) **Wó!nú = !é é-dò<sup>1</sup>**  
soup=DEF PRF-become.hot  
‘The soup is hot.’

- (2) **Òkó é-kè**  
Okó PRF-be.tall  
‘Okó has become tall.’

Finally, there is a third unusual use of the perfect – an aspectual use – which I term the sequential perfect. Unlike the typical perfect, which links a present state to a past situation, the sequential perfect is concerned with pluractional (iterative, habitual) or predictable events. An example is given in (3).

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<sup>1</sup> Abbreviations in this work, where applicable, follow the guidelines laid out in the Leipzig Glossing Rules: 1-first person, 2-second person, 3-third person, ASSOC-associative, COMP-complementizer, DEF-definite, FUT-future NOM-nominalizer, HAB-habitual, IMP-imperative, IMPERS-imperonal, INDEF-indefinite, INGR-ingressive, INTJ-interjection, ITIV-itive, NEG-negative, OBJ-object, PRF-perfect, PERT-pertensive, PL-plural, PRED-predicative, PROG-progressive, PROX-proximal, PRT-particle, REL-relativizer, SG-singular, SBJV-subjunctive, TOP-topic, VENT-ventive. Diacritics: [´]-high tone; [˘]-low tone; [ˆ]-falling tone; [!]-tone on following syllable is downstepped



## 2.1 Identifying the perfect

Reichenbach (1947) proposed a characterization of the perfect that has proven popular because it allows for easy comparison with other temporal and aspectual categories, especially the past tense and the past and future perfects. Reichenbach establishes a reference time (r), a speech time (s) and an event time (t) on a timeline. The present perfect is used when the speech and reference time coincide and are posterior to the event time. By comparison, for the past tense, the event time and reference time coincide, and these are anterior to the speech time. These are illustrated in Figures 1 and 2 below.



Figure 1: Present Perfect



Figure 2: Past Tense

The conflation of speech and reference time in the present perfect captures a crucial component of its meaning, which is that although the event occurs in the past it is somehow related to the present. As Comrie (1976:52) puts it, “the perfect indicates the continuing present relevance of a past situation”, a feature that is also termed current relevance. Using Comrie’s example, when someone utters (4), the implication is that this loss has some impact on the situational context. Perhaps the addressee expected the speaker to cut open a box and the speaker by uttering this sentence intimates that he or she cannot.

(4) I have lost my penknife. (Comrie 1976:52)

Portner (2003:499) calls such perfects ‘resultative perfects’ and claims that with these perfects the present state provides some evidence of the past event via a causal relation. Therefore, in the *penknife* example, the past event of losing the penknife is evidenced in the fact that the speaker cannot open the box at the time of utterance. This view of current relevance is shared by Dahl and Hedin (2000) who note that use of the perfect to mark an event shows that the event has some repercussions for discourse participants.

Even when the current relevance of the perfect sentence is difficult to decipher, Portner (2003:502) maintains that its relevance can be arrived at when we assume that every perfect sentence contains a presupposition that it is an answer to an implicit question – a topic – in the discourse. The perfect sentence is relevant because it provides some information that is implicitly sought by the discourse. Nishiyama and Koenig (2006:271) provide some counter-examples that call Portner’s claims into question. They observe that interrogative sentences with verbs in the perfect are often used as conversation openers, to initiate new topics (e.g. *Have you done a lot of camping recently?*). There is therefore no prior discourse topic or question to which the perfect sentence will be a response to. Nevertheless, current relevance is viewed as the defining characteristic of the perfect, as captured in the following statement by Lindstedt (2000:368) that “[a] CR perfect is a perfect in its most central, prototypical meaning.”

Following from the current relevance semantics of the perfect, there is one syntactic constraint that affects perfects in many languages, and this is the inability to be modified by a definite past temporal adverbial. In Standard American English for example, the following is ungrammatical:

(5) \*The children have played yesterday.

The exception is that definite adverbials can be used when the event in the past occupies a period that ends at the time of speech. Hence, (6) is perfectly grammatical.

(6) The children have played today.

Ritz and Engel (2008:136) and Dahl and Hedin (2000:395) account for this by noting that the present perfect is focused on the present time, i.e. speech time rather than event time. It is therefore pragmatically odd to specify a time in the past as this overshadows the focus on the present. As observed by Portner (2003:493) this constraint appears to be pragmatically motivated, as it is perfectly possible to use the present perfect to predicate an event that occurred yesterday as long as one does not mention *yesterday* in the sentence.

Importantly, not all languages exhibit this adverbial restriction. Even for English, some dialects such as Australian English do allow past time specifications with the present perfect (Ritz 2012, Ritz and Engel 2008). Swedish, Danish and Bulgarian also permit modification of a present perfect with the adverb *yesterday* (Dahl 1985:137-138). However, several writers (Bybee et al 1994, Lindstedt 2000, Dahl 2000) have observed that when

languages relax the current relevance requirement of the perfect and accept definite past time adverbials, it is a sign of ongoing grammaticalization of the perfect into a perfective or past tense. This process has occurred to completion in several languages and language families, including many Germanic and Slavic languages (Abraham 2004). In the Romance languages, this diachronic process has been referred to as “aoristic drift” (Squartini & Bertinetto, 2000:404). Discourse-wise, such a form is then capable of being used in narratives, to foreground events and move the storyline forward. At this point it is no longer a perfect. A true present perfect is detached from past situations and is therefore not employed for foregrounded events in sequenced narratives (Schwenter and Cacoullos 2008:4). Ritz (2012) identifies the inability of the perfect to be used for talking about past events as a significant negative criterion for perfect identification.

To recap, a perfect connotes an inherent notion of change (Ritz 2012). It cannot be used to talk about past events, the effects of the event marked perfect are visible or otherwise pertinent to the current discourse and it cannot be modified by a definite past time adverbial. In the next section, we turn our attention to different uses of the perfect cross-linguistically.

## 2.2 Uses of the perfect

Comrie’s (1976) classification of the perfect into four ‘types’ has endured over the decades as it captures the various manifestations of the perfect cross-linguistically. He identifies a perfect of result (resultative perfect, stative perfect), experiential perfect (existential perfect, indefinite perfect), perfect of persistent situation and perfect of recent past (‘hot news’ perfect). With the perfect of result, a present state is viewed as the result of a past event or action (Comrie, 1976:56). So for example, (7a) below implies John is still here, while (7b) does not necessarily have the same implication (Comrie 1976:56). This use of the perfect exemplifies the quintessential current relevance meaning discussed in the previous section.

- (7) a. John has arrived.  
b. John arrived.

One grammatical category that often features in discussions on the perfect is the resultative. This is because perfects are postulated to have arisen out of resultatives in many languages (Bybee et al 1994, Comrie 1976) and the two are semantically very similar. Nedjalkov and Jaxontov (1988:6) define resultatives as verb forms that express a state resulting from a previous event. Such a state is tangible and verifiable with the senses. They make a

distinction between resultatives and another related concept – statives (Maslov’s statal perfects); with statives/statal perfects, there is no implication of a preceding event which gives rise to the state. By this criterion, *The mug is broken* would be a resultative because for the mug to break there must have been a preceding event (falling, throwing it to the ground etc.). On the other hand, *The boy is asleep* would be stative because there is no obvious or intuitive precipitating event resulting in the boy’s falling asleep. Such a nuanced distinction is difficult to maintain, as there will be several instances where a categorical classification would be near-impossible. Consequently, Nedjalkov and Jaxontov (1988) jettison this strict divide and resolve to refer to both situation types as resultatives. They therefore only recognize perfects and resultatives as distinct categories.

As noted by Ritz (2012) and others, because resultatives naturally encode a change of state, they tend to involve mainly telic verbs. However, in their development from resultative to perfect, the current result component is generalized to current relevance, allowing for the use of atelic verbs (Lindstedt 2000:368). Dahl (2000:134) observes that while resultatives are more focused on resulting states, perfects are more focused on the event. Another crucial difference between the two is syntactic: while resultatives can be modified by the adverb *still*, perfects cannot (Lindstedt 2000, Dahl 2000, Maslov 1988, Ritz 2012). So whereas (8a) is possible in English, (8b) is not.

- (8) a. The rat is still dead.  
b. The rat has still died.

There is clearly a lot of overlap between resultatives, statives and perfects as well as subtle semantic and syntactic differences. It is no surprise then, that in some languages, a perfect form may be used to express two or three of these grammatical categories, as is the case in Fante, Swahili, Greek and Kpelle, where stative present constructions in English are translated using perfect forms (Comrie 1986:57).

The second type of perfect mentioned by Comrie (1976) is the experiential perfect. This perfect denotes that an action has occurred at least once prior to the time of speech e.g. *Jane has been to London*. The perfect of persistent situation indicates that a situation that was initiated in the past continues into the present e.g. *We have lived here for a long time*. Finally, Comrie’s perfect of recent past or ‘hot news perfect’ (which Kiparsky 2002 subsumes under resultative perfects) is used when the past situation is relatively recent. It is difficult to cipher the current relevance in such uses of the perfect except for the recency

of the event described. It is this ‘hot news perfect’ that was identified by Nishiyama and Koenig (2006) as well-suited for conversation starters or to signal a change in topic.

I shall now turn to the facts of the perfect as they pertain to Gã, but before that a quick overview of Gã verb syntax and morpho-phonology is warranted.

### 3. Some notes on Gã verb syntax and morpho-phonology

Gã is an SVO language with obligatory subjects. The vast majority of predicates are verbs, with a few mostly deictic predicative particles. Several properties or qualities that in other languages are expressed by adjectives are expressed by verbs in Gã. Verbs can be inflected for future tense, progressive, iterative, perfect and habitual aspects, and subjunctive and imperative moods. There is no past tense. When the verb is unmarked it often has a default past time interpretation, but depending on the type of verb, it may have a progressive or habitual interpretation instead. Serial verbs are common and for the most part require concordant marking of inflectional categories on all verbs in the series. Inherent complement verbs (ICVs) are another common predicate type. These are bipartite verbs made up of a verb and an obligatory nominal or postpositional complement.

Gã has two phonemic tones – High (´) and Low (`) and a phonetic Downstepped High tone, indicated by an exclamation mark (!) before the syllable bearing the Downstepped High tone. Tone is independent of the syllable it occurs on, and this leads to situations where a verbal category is coded by a tone alone when the segments of the relevant morpheme are deleted or fused with other morphemes. This fact is particularly germane to this paper because the perfect morpheme é- undergoes such a process. When the subject of a verb marked with the perfect is a pronoun, the perfect prefix gets deleted and its high tone is borne by the last syllable of the pronominal subject. Example (9a) shows the realisation of the perfect prefix when its subject is a full noun phrase, while (9b), (9d) and (9e) show the perfect with first singular, second singular and third plural pronoun subjects respectively. In these examples, the perfect is marked only by the high tone on the subject, which is the high tone that remains after the segment of é- is deleted. (9d') – (9e') show the same proposition but with unmarked verbs. These are given a past interpretation. Note that the tone on the last syllables of these subject pronouns in citation form is low.

- (9) a. **Ákú é-bà**  
Aku PRF-come  
'Aku has come.'

- b. **ǐ = bà**  
1SG.PRF=come  
'I have come.'
- c. **\*ǐ = é-bà**  
1SG=PRF-come
- d. **Ó = bà**  
2SG.PRF=ba  
'You have come.'
- d.' **Ò = bà**  
2PL=come  
'You came.'
- e. **Àmǐ = bà**  
3PL.PRF=come  
'They have come.'
- e.' **Àmè = bà**  
3PL=come  
'They came.'

The progressive and subjunctive markers undergo a similar phonological process but these will not be explicated further for brevity's sake. It should be mentioned that tones are susceptible to change based on the presence of neighbouring tones, and that fusion and deletion of segments without deletion of tone is a common feature of Gã.

#### 4. Uses of the perfect in Gã

Five uses of the perfect have been identified in Gã, three of which coincide with those identified by Comrie and two that are not in Comrie's classification, although one would most likely have been subsumed under the perfect of result. These uses are:

- Perfect of result
- Perfect of quality
- Perfect of persistent situation
- Experiential perfect
- Sequential perfect

#### 4.1 Perfect of result

This perfect expresses the present state or present result of a past event. It thus demonstrates the current relevance or present relevance meaning characteristic of the category. As noted by Dahl and Hedin (2000:391), current relevance is a graded concept. The current relevance of a situation may be the palpable resultant effects of an action or change, or it could be the impact that a situation may have on participants in the discourse in terms of any consequential actions needed to be taken. In Gã, no perfect exhibits this current relevance sense more vividly than a subset of the perfect of result that I term the *change-of-state perfect/inchoative perfect*. This is the use of the perfect with certain property-denoting verbs to explicitly express a change from one state to another, similar to the use of inchoative aspectual markers in the languages that have them. Examples of verbs which encode inchoative aspectual meaning when marked for perfect are **wà** ‘be hard’, **kè** ‘be tall’, **lèê** ‘be broad’, **ɲǔǔ** ‘be sweet’.

- (10) **Blòdó = !é é-wà**  
 bread=DEF PRF-be\_hard  
 ‘The bread has become hard.’
- (11) **Gbé!ké = !é é-kè wàà**  
 child=DEF PRF-be\_tall very\_much  
 ‘The child has become very tall.’
- (12) **Àtsòmǔ = !ǔ é-ɲǔǔ tsǔ**  
 chips=DEF PRF-be\_sweet too\_much  
 ‘The chips have become too sweet.’

The sentences in (10) to (12) all communicate that the state predicated by the verb did not exist in the past – that in fact the opposite state was what obtained (the bread was not hard,

the child was not tall, the chips were not sweet) – and that presently, the state denoted by the verb is what obtains. This new state is embodied by the verb itself, and is easily verifiable with the human senses. Without the perfect marker, there is no inchoative sense, and the verbs simply predicate a current state without any implication that an opposing state once existed (13) – (15).

- (13) **Blòdó = !é wà**  
 bread=DEF be\_hard  
 ‘The bread is hard.’
- (14) **Gbé!ké = !é kè wàà**  
 child=DEF be\_tall very\_much  
 ‘The child is very tall.’
- (15) **Àtsòmǎ = !ǎ ǎǎǎ tsǎ**  
 chips=DEF be\_sweet too\_much  
 ‘The chips are too sweet.’

The use of the perfect to signal a change of state has been reported in other languages, example Niuean (Matthewson et al 2015), Tongan (Koontz-Garboden 2007), Zulu (Buell 2005) and Xhosa (Savić 2020).

The current relevance of the perfect of result may not be as tangible as that seen in the change-of-state type. In (16) – (18), the relevance of the actions marked by the perfect is derived from knowledge about the situational context. Example (16) was uttered by a speaker narrating a story based on a picture book (*Frog Story* by Mercer Mayer). Although as noted earlier, the perfect is not used for narration, it was employed frequently by some story tellers in this task because the characters and actions were unfolding pictorially in the present. In these cases, their storytelling was, in actuality, a description of the scenes and actions they were seeing in the book at the moment of speech, hence the use of the present perfect. The implication of (17) for the conversation is that the man in question is still out of town at the time of speech. The speaker had been informing the addressee about the children of a relative who had died. Example (18) is taken from a short story. The appropriateness of the perfect for (18) stems from its relevance to the discourse topic (Comrie 1976), in the sense that the writer had spoken at length about the aunt’s hesitancy to allow her niece to go to school. Sentence (18) therefore presents new information that is

crucial to the development of the story, but at the same time is background information that does not move the story forward but provides context for the next crucial actions.

- (16) **Kòkòdédé!né = !é**      **é-bà**      **è = wèkú-mèì**      **à-ηò**  
 frog=DEF      PRF-come      3SG=family-PL      PERT-presence  
 ‘The frog has come to his relatives.’      [FS:S]
- (17) **Shí**      **nùú = !é**      **!lé**      **é-fà**      **gbè**  
 but      man=DEF      TOP      3SG.PRF-uproot      road  
 ‘But as for the man, he has travelled.’      [DF]
- (18) **È-nyèkwé**      **!lé**      **é-kplé**      **!nó**      **á!ké**      **è-bàá-nyé**      **é-tsá**  
 3SG-aunt      DEF      PRF-consent      top      that      3SG-FUT-able      3SG.SBJV-join  
**skúl-yà-à**      **nò**  
 school-go-NOM      top  
 ‘Her aunt has agreed to allow her to continue her schooling.’ (Casely-Hayford 2018; my glosses and translation)

Following Kiparsky (2002), I include under perfect of result Comrie’s “hot news perfects” or perfects that are used discursively to introduce events that have occurred recently. This is because, just like the perfects in (16) – (18), the current relevance of these perfects lies in their being discursively relevant to the participants. Sometimes, this relevance is given overtly by the speaker, an example of what Inoue (1979) and Dahl and Hedin (2000) call the explanatory sense of the perfect. In example (19) taken from a sermon, the speaker – a priest – makes a statement about his and his peers’ past activities using the present perfect. In the reason clause that follows, he makes it clear why those activities are relevant to the current situation, and that is the fact that his Gã may have some elements of the Twi (Akan) language interspersed. Examples such as (19) can also be explained using Portner’s (2003) concept of the perfect being an answer to some discourse question. In this case, the speaker anticipates that the question from his congregation would be something akin to “Why do you keep using Twi words/phrases in your sermon?”.

- (19) **Wó=yà-fò**                      **shĩ**    **yè**    **Twí**    **area=!á hèwó-!ó**  
 1PL.PRF=go-cut                      down    be\_at    Twí    area=DEF so=TOP  
**jé!mé=!é**                      **wìémó=!ó**    **wò=fútù-ò**    **lè**                      **hèwó=!ó**  
 there=DEF                      language=DEF 1PL=mix-HAB 3SG.OBJ so=TOP  
**ké**                      **àléénó**                      **Twí=!é**                      **é!kó**    **bà-fútù**    **mĩń=!é**  
 if                      perhaps                      Twí=DEF                      some    VENT-mix inside=DEF  
**nyé-mó-à**                      **lè**                      **nàkãĩ ó=nù**  
 2PL.SBJV-hold-IMP.PL 3SG.OBJ that 2SG=hear  
 ‘We have gone and roamed around in the Twi-(speaking) area. So, over there we mix up the languages. So if perhaps I mix in some Twi, take it as it is, ok.’ [CH]

#### 4.2 Perfect of quality

In Gã, verbs are a very common means of attributing a property or quality to a noun. Such verbs are termed property verbs (Campbell 2017). Among these property verbs, there are some whose predication requires perfect marking. I term this use of the perfect the *perfect of quality*. The verbs that exhibit this function are those which possess inherent, inchoative semantics, in the sense that when they occur unmarked, they indicate a transition into a state. Modification by the perfect then codes the resulting present state. Examples of sentences with the perfect of quality are:

- (20) **È=hè**                      **é-sà**                      **kè**                      **gbòbimò**                      **ná!ákpá**  
 3SG=body                      PRF-become\_fit                      with                      hunting                      very.much  
 ‘He is very skilled at hunting.’
- (21) **Shìkpó!ń**                      **é-fò**  
 Ground                      PRF-become\_wet  
 ‘The ground is wet.’
- (22) **Pápá Nĩĩ**                      **é-!lú**                      **wàà**  
 Papa Nii                      PRF-become\_foolish                      very\_much  
 ‘Papa Nii is very foolish.’

- (23) **Àtálé = !é**      **é-wò**      **mú!jí**  
 dress=DEF      PRF-put      dirt  
 ‘The dress is dirty.’

When not marked with the perfect, these verbs have a dynamic, inchoative reading (24) – (25).

- (24) **Shìkpóŋ = ð**      **fɔ**      **ní**      **nyðŋmɔ́ = ð**      **né**      **nyé = !é**  
 ground=DEF      become\_wet      when      rain=DEF      fall      yesterday=DEF  
 ‘The ground got wet when it rained yesterday.’

- (25) **Àtálé = !é**      **wò**      **mú!jí**  
 dress=DEF      put      dirt  
 ‘The dress became dirty.’

Other verbs that take obligatory perfect marking to encode a quality/present state are **gbí** ‘be dry’, **tɔ́tɔ́** ‘be tangled’, **tsù** ‘be ripe’, **bò** ‘be muscular’, **gírí** ‘be enraged’, **shà** ‘be unintelligent’, **hè kpó** ‘be good at something’. The use of the perfect to mark attributes is also reported for Swahili, Fante and Kpelle (Comrie 1976:57) and was first reported for Gã by Dakubu (2008:94). Crane and Persohn (2019:304) also observe that it is very common in Bantu languages. As these are all Niger-Congo languages, we may be looking at a genetic phenomenon. For some verbs, there is ambiguity over whether the perfect should receive a quality/present state or inchoative reading:

- (26) **Òkó**      **é-shwì**  
 Oko      PRF-be\_fat  
 ‘Oko has grown fat.’ OR ‘Oko is fat.’

A change of state interpretation is obtained when perfect of quality verbs are modified by the adverb *òyá* ‘quickly’, as shown in (27) and (28). This can be accounted for by the fact that this adverb modifies a verb by specifying the rate of occurrence of the situation coded by the verb. If the verbs in (27) and (28) for example, were given a stative interpretation (as they are in (20) and (21)), then modification by *òyá* ‘quickly’ would be impossible, as states simply ‘hold’ without any internal changes whose rate can be measured. However, as noted by Smith (2009:63), the beginnings and endings of states are dynamic and therefore

durative. The grammaticality of sentences like (27) and (28) shows that the speaker is focused on the change into the state (of wetness and being good at something), which sanctions the use of **òyá** ‘quickly’.

(27) **È=hè**            **é-sà**                    **òyá**  
 3SG=body      PRF-become\_fit      quickly  
 ‘He has gotten very good quickly.’

(28) **Shìkpó!ḡ**        **é-fḡ**                    **òyá**  
 Ground            PRF-become\_wet      quickly  
 ‘The ground has become wet quickly.’

Perfects of quality can therefore be viewed as the mirror images of inchoative perfects in terms of their aspectual semantics. While with perfects of quality, perfect marking results in a stative interpretation with no inchoative semantics, with inchoative perfect verb types an inchoative meaning results in the presence of the perfect. Conversely, when perfects of quality verb types occur without the perfect, they present inchoative semantics, and when inchoative perfect verb types occur without the perfect they lose their inchoative meaning. The question of which semantic types of verbs exhibit which perfect function is an important one that needs further investigation. As yet, however, there does not appear to be any obvious or clear-cut semantic tool for predicting which property verbs would fall into which category.

#### 4.3 Perfect of persistent situation

This use of the perfect differs from the perfect of result in that with the perfect of persistent situation, the event is presented as being initiated in the past but continuing into the present, whereas with the perfect of result the event is completed in the past. The present semantics of the perfect of persistent situation is conveyed by time adverbial clauses such as **étsè** ‘for a long time (Lit: ‘It has been a long time’) and **nyòjì ét!ê né** ‘It’s been three months’. Example (29) conveys the sense that the subject referents are still in residence at the location, while (30) states that the floor has been wet continuously in the past three months and is currently wet.

- (29) **Wó = hĩ**      **bí!é**      **wó = tsè**  
 1PL.PRF=live    here    1PL.PRF=keep\_long  
 ‘We’ve lived here for a long time.’
- (30) **Shìkpó!ń = !ó**    **é-fɔ**                      **nyò-jĩ**              **ét!ê**      **né**  
 Ground=DEF    PRF-become\_wet      month-PL      three    PRX.PRED.PRT  
 ‘The ground has been wet for three months now.’

#### 4.4 Experiential perfect

This is used to indicate that an action has occurred at least once in the past. Like the perfect of persistent situation, it cannot be accomplished without the aid of an adverbial, in this case **dáń** ‘before’.

- (31) **Hĩmò**              **é-yè**              **wò**              **dáń**  
 hunger              PRF-eat              1PL.OBJ              before  
 ‘We have experienced hunger before.’ [YM]
- (32) **Ó = nã**              **Á!má**    **dáń**  
 2SG=see              Ama    before  
 ‘You have seen Ama before.’

#### 4.5 Sequential perfect

This is the most unusual use of the perfect in Gã, in that, unlike typical uses of the perfect which involve a connection between the past and the present, the sequential perfect is unconcerned with past events and their present effects and is rather focused on pluractional, iterative or habitual situations or situations that are predictable. It is also clearly aspectual. Its novelty is deserving of a more comprehensive treatment than can be accomplished here, and so I will give a brief overview of the structure and functions of this perfect. A fuller investigation will be carried out in later research. Example (33) exemplifies a typical use of this perfect. It commonly occurs in the narration of a sequential set of events comprising a temporally ordered series of activities that are presented as formulaic, fixed and methodical (Campbell 2017:257). As such, it is common in procedural narratives and descriptions of routines, and usually invites a habitual interpretation. The clauses containing the perfect are often introduced by the adverbs **kèkè** ‘(and) then’ or **bè** ‘(and) then’.

- (33) **À = tɔ̀-ɔ̀**                      **tsó**    **lè**    **à = fɔ̀-ɔ̀**                      **shì**    **kèkè**    **!!é**  
 3.IMPERS=fell-HAB    tree    DEF    3.IMPERS-put-HAB    down    then    TOP  
**á = !kpó**                                      **è-hè**                      **tótó**    **!!é**  
 3.IMPERS.PRF=remove                      3SG-body                      bark    DEF  
 ‘The tree is felled and then its bark is removed.’ (Lit: ‘They fell the tree and then they have removed its bark.’)

**À = fɔ̀-ɔ̀**                      **hè**    **kèkè**    **!!é**    **á = !ká**  
 3.IMPERS=wash-HAB    body    then    TOP    3.IMPERS.PRF=dry  
 ‘It is washed and then it is dried.’ (Lit: ‘They wash it and then they have dried it.’)  
 [BGL<sup>3</sup> 1976:56; Cloth-weaving]

The sequential perfect is also commonly found in the main clause of bi-clausal constructions, where the main clause is a temporal adverbial or conditional clause marked by **ké/ké!jí** ‘when/whenever/if’, as seen in (34).

- (34) **Shì**    **yítsò-àgbò-tsè**                      **fèé**    **nó**    **!kó**    **ní**    **dò**    **è = nà̀nèmèí**    **!!é**  
 But    head-big-NOM                      do    thing    INDEF    REL    hurt    3SG=friends    DEF  
 ‘But Bighead did something that hurt his friends.’

**Ké!jí**    **è = tsé**                      **mánò tsùrú**    **!!é**    **kèkè**    **!!é**    **é = yè**  
 when    3SG=pluck                      mango ripe                      TOP    then    TOP    3SG.PRF=eat  
 ‘Whenever he plucks a ripe mango, then he eats it.’ (Lit: ‘...then he has eaten it.’)

**Ké!jí**    **è = tsé**                      **énmílíkítí**    **!!é**    **kèkè**    **é = fɔ̀**  
 when    3SG=pluck                      unripe                      TOP    then    3SG.PRF=throw  
**é = !há**                      **è = nà̀nèmèí**    **!!é**    **yè**    **shìkpó!ń**  
 3SG.PRF=give    3SG=friends    DEF    be.at    ground  
 ‘Whenever he plucks an unripe one, then he throws it to his friends on the ground.’  
 (Lit: ‘...then he has thrown it to his friends on the ground.’) [BGL1976:72;  
 Folktale]

<sup>3</sup> Bureau of Ghana Languages

The temporal adverbial clause cannot refer to a specific event that has been realized. It must refer to an event that is unrealized (future) or that is non-specific or indefinite (habitual, iterative). Compare (35a), which has the indefinite time adverbial marked by *ké* ‘whenever’ and (35b), which has the definite time adverbial used for past situations, *ní* ‘when’.

- (35) a. **ké ì-bà nǔ́ǔ́ kèkè = !é í = bà-fèé**  
 when 1SG-come immediately then=TOP 1SG.PRF=VENT-make  
*í=smoothie*  
 1SG=smoothie  
 ‘When I come (home) then I immediately make my smoothie.’  
 (Lit: ‘When I come (home), then immediately I have made my smoothie.’)  
 [DT]
- b. **\*ní ì-bà nǔ́ǔ́ kèkè = !é í = bà-fèé**  
 when 1SG-come immediately then=TOP 1SG.PRF=VENT-make  
*í=smoothie*  
 1SG=smoothie  
 ‘When I came (home), then I immediately made my smoothie.’

The sequential perfect appears to link an event at one point in time to another event temporally anterior to it and between which there are no intervening events. This sequence of events should be recurring (habitual or iterative) or should be predictable in the sense that the event coded by the sequential perfect is presented as an expected consequence of that coded by the adverbial clause, as in (35a), (36) and (3) above.

- (36) **À = bàá-!féé òtó fí!óó kò kèkè kèkè = !é nyé = yè**  
 3.IMPERS=FUT-do food\_type little INDEF just then=TOP 2PL.PRF=eat  
 ‘A little *otó* will be made for you, and then you will eat.’ (Lit: ‘...and then you have eaten.’[OYO])

It is difficult to see what aspect of the meaning of the perfect makes it suitable for this function, except perhaps for its use as marker of state change. With the sequential perfect this is extended to event change. That is, recurring events which are sequentially ordered are predictable; one knows that event A will be followed by event B. Therefore, one can use

a grammatical form that conveys this notion of change and which further intimates that the change has already occurred.

A similar grammatical phenomenon is seen in the Slavic languages, where the present perfective is also employed for use for sequentially related events and habitual events (Dickey 2000:56).

#### 4.6 Modification by time adverbials

Adverbials which refer to past times in the ‘today’ window (hodiernal past) e.g. **ɲmɛ!nɛ** ‘today’, as well as those which contain the proximal demonstrative determiner **nɛ!ɛ** ‘this’ can be used with perfects (37), (38), (39a), (40a). When the hodiernal past time specification is not modified by **nɛ!ɛ** ‘this’, its acceptability is not universal (39b), (40b).

- (37) **Nũũ=!ɛ**      **é-fà**      **gbè**      **ɲmɛ!nɛ**  
 man=DEF      PRF-uproot      road      today  
 ‘The man has travelled today.’
- (38) **Áfí**      **nɛ!ɛ**      **é = bà-dàmò**      *fourteenth*  
 year      this      3SG.PRF=VENT-stand      fourteenth  
 ‘This year, it has fallen on the 14<sup>th</sup>.’ [OYO]
- (39) a.      **Àmɛ-yè**      **nîî**      **lèé!bí**      **nɛ!ɛ**  
 3PL.PRF-eat      thing      morning      this  
 ‘They have eaten this morning.’
- b.      **?Àmɛ = yè**      **nîî**      **lèé!bí**  
 3 PL.PRF =eat      thing      morning  
 ‘They ate in the morning.’
- (40) a.      **Wó = wìé**      **8 o’clock**      **nɛ!ɛ**  
 1 PL.PRF =speak      8 o’clock      this  
 ‘We’ve spoken at 8 o’clock (today).’

- b.      ?Wó=wíé                      8 o'clock  
          1 PL.PRF =speak              8 o'clock  
          'We spoke at 8 o'clock.'

The picture is a bit muddier when past adverbials for times prior to today (prehodiernal) are employed. Most speakers are uncomfortable with a hesternal perfect, i.e. the co-occurrence of **nyè** 'yesterday' and the perfect, so that a sentence such as (41a) is unacceptable or problematic for some speakers but acceptable for others.

- (41) a.      ?Nùú=!é              é-fà              gbè              nyè  
          man=DEF              PRF-uproot              road              yesterday  
          'The man travelled yesterday.'

Further probing reveals however that the perfect would be compatible with **nyè** 'yesterday' if some context were provided to make the proposition containing the perfect relevant to the discourse topic, as in (42). This is evidence that even when the overt temporal distance of the event as indicated by the adverbial does not overlap with the time of speech, the action can still be marked by the perfect as long as it has current relevance.

- (42)      Nùú=!é              é-fà              gbè              nyè              hèwó=ó      wò=nyé-éé  
          man=DEF              PRF-uproot              road              yesterday              so=TOP      1PL=be\_able-NEG  
          wó=yá-hé                      wò=wòjĩ=è              yè              è=dè  
          1PL.SBJV=ITIV-get              1PL=paper.PL=DEF              be\_at              3SG=hand  
          'The man travelled yesterday so we cannot go and get our papers from him.'

Sentence (43) would be grammatical if it were uttered in February, for example.

- (43)      Bìdnyà              bèi              à-míj= !é              àmé= !tsú              nîi              wàà  
          Christmas              time              PERT-inside=DEF              3PL.PRF=work thing              very\_much  
          hèwó= !ó              há              ní              àmè= !jós              àmè= hè  
          so=TOP              give              COMP              3PL.SBJV=rest              3PL=body  
          'At Christmas time they worked very hard, so let them rest.'

Perfects of quality behave similarly with regard to time adverbial modification. ‘Today’ adverbs are fine but **nyè** ‘yesterday’ (44a) faces some opposition from speakers. Again, these reservations disappear once current discourse relevance is established, as in (44b).

- (44) a. **?Shìkpó!ń = !s**      **é-fɔ̃**      **nyè**  
 ground=DEF      PRF-become\_wet      yesterday  
 ‘The ground was wet yesterday.’
- b. **Shìkpó!ń**      **é-fɔ̃**      **nyè**      **hèwó = !s**  
 ground      PRF-become\_wet      yesterday      so=DEF  
**é-!hí-ń**      **wò**      **kpò-jè-è**  
 NEG-be.good-NEG      1PL.OBJ      compound-exit-NOM  
 ‘The ground was wet yesterday so we could not go out.’

Interestingly, topicalising the time adverbial, especially in a contrastive topicalization construction, makes co-occurrence with **nyè** ‘yesterday’ more palatable (45).

- (45) **Nyè = !é**      **lé**      **shìkpó!ń**      **é-fɔ̃**  
 yesterday=DEF      TOP      ground      PRF-become\_wet  
 ‘As for yesterday, the ground was wet.’

Past times referring to *yesterday* and before are also acceptable with the perfect when **né!é** and the adverb **ńńń** ‘just’ are used.

- (46) **Lólè**      **é-tswà**      **lè**      **nyè**      **ńńń**  
 care      PRF-hit      3SG.OBJ      yesterday      just  
 ‘A car hit him just yesterday.’
- (47) **È = pàpá**      **é-!gbó**      **ótsí/afi**      **ńí**      **hò**      **né!é**  
 3SG=father      PRF-die      week/year      REL      pass      this  
 ‘His/Her father died this past week/year.’

To sum up, the perfect is compatible with events that occurred on the day of speech, as long as the time specified includes the time of speech, as is the case with events modified by **nmé!né** ‘today’. The proximal demonstrative determiner **né!é** appears to function

pragmatically to draw the temporal scope of events closer to the time of speech and even with it, thus enabling compatibility with the perfect. Hence, hodiernal and prehodiernal events with temporal adverbials modified by **ně!ě** can occur with the perfect, as long as the temporal distance is not too great. Sentence (48) for instance, is ungrammatical because a time of 40 years in the past is not felicitous with **ně!ě**.

- (48) \***È = !gbó**      *nineteen seventy-two*      **ně!ě**  
           3SG.PRF = die    nineteen seventy-two      this  
           ‘S/he died in 1972.’

What is most interesting about the data is the fact that some speakers judge as felicitous the occurrence of the perfect with definite hodiernal and prehodiernal time adverbials that do not contain **ně!ě**. This would suggest that Gã is at an early stage of the grammaticalization of the present perfect into a perfective marker. Compatibility with definite past adverbials has been noted to be one of the first steps toward relaxing the current relevance requirement of the perfect and freeing it up to take up a more tense-like past function (Bybee et. al. 1994, Dahl 1985, Schwenter 1994).

## 5. A polysemous view of the Gã perfect

At this point one may question whether, as put forward by Comrie (1976:14) for the perfect in other languages, current relevance is the semantic component that unites all the various uses of the Gã perfect. At this stage of the investigation, the answer leans toward a ‘no’, because of the sequential perfect and its disconnection from any fixed temporal anchor, present or otherwise. For Dahl (1985:133), the ‘Gesamtbedeutung’ – the essence of the perfect – is that the point of reference (vis-a-vis Reichenbach) differs from the point of the event. But again, the sequential perfect does not perfectly conform. For all except the sequential perfect use, the reference and speech time coincide, and the event time precedes them. However, with the sequential perfect, the reference, event and speech time are all separate; the reference time always precedes the event time, however, their temporal location in relation to speech time depends on the temporal reference of the initial clause. For habitual and future situations, the speech time precedes the reference and event time while for past situations, the speech time follows the reference and event time. These are illustrated in Figures 3-5.



Figure 3: Present perfect

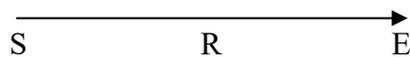


Figure 4: Sequential perfect (habitual, future)

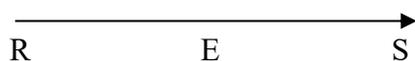


Figure 5: Sequential perfect (past)

One might proffer that it is the notion of change, also viewed as inherent in the perfect (Ritz 2012), that is the common semantic thread in all its uses in Gã. However, while the change semantics of the perfect is obvious in the perfects of result (especially the inchoative, where process or change-of-state verbs such as *become*, *grow* and *turn* are needed to render them into English), the experiential perfect and sequential perfect, it is hard to see what change occurs with the perfects of persistent situation and quality. In both cases, a situation obtains at the time of speech that has also obtained in the past. A person's attributes are presented as intrinsic and stable over time with the perfect of quality, and a situation is presented as starting in the past and continuing into the present without any change, in the case of the perfect of persistent situation.

I therefore propose a polysemous analysis of the Gã perfect, wherein the perfect overall is characterized by current relevance and change-of-state, and the different perfect functions exhibit at least one of these prime markers of perfecthood. These two semantic values are also unified by the notion of relevance, in that a situation assumes relevance in discourse once it undergoes some change. Therefore relevance is inherently intertwined with the notion of change. This relevance however, may or may not impact on the current discourse context and its participants, hence the need to distinguish relevance generally from 'current relevance'. So while both change of state and current relevance are pertinent to the perfect of result and experiential perfect, only current relevance is pertinent to the perfect of quality and perfect of persistent situation, and only change-of-state is applicable

to the sequential perfect. Nevertheless, the relevance component is discursively inherent within the change of state component, thereby unifying all the readings under the umbrella of ‘relevance’.

Table 1: Semantic components of the Gã perfect

	Change of State	Current Relevance
Perfect of result	✓	✓
Perfect of quality	✗	✓
Perfect of persistent situation	✗	✓
Experiential perfect	✓	✓
Sequential perfect	✓	✗

The perfect’s interaction with definite temporal adverbials is a fertile area for further research. Data in this work has shown that some speakers are beginning to allow the use of the perfect for events with overt hodiernal and prehodiernal time adverbials e.g. **lèé!bí** ‘morning’ and **nyé** ‘yesterday’. While all speakers surveyed accepted perfect sentences with prehodiernal time adverbials as long as current relevance was established or the demonstrative **né!é** ‘this’ was present, it is noteworthy that some speakers still found those sentences acceptable without the demonstrative or explicit current relevance contexts. For them, the perfect was a good candidate for talking about events initiated and completed in the past which have no bearing on the present. As noted by several authors (Copple 2011, Lindstedt 2000, Dahl 1985, Bybee et al 1994), this elimination of the current relevance constraint signals the beginning of the grammaticalization of the perfect into something else, in this case a perfective or past tense marker. This is still a long way away, as there is not yet universal acceptance of these specific uses. The perfect would have grammaticalized into a past tense when it can be used with past meaning in hodiernal and prehodiernal context without any adverbial specification (Schwenter 1994:89). It will then also be used for narrating past events, as is seen in narratives where the past tense is used to talk about foregrounded events and is able to move the storyline forward, unlike the present perfect which is used for commentary (Binnick 2006:40).

## 6. Conclusion

This paper has unearthed some facts about the Gã perfect that have implications for studies of the perfect in general. It has been shown here that in addition to the generally recognized uses of the perfect such as the result and experiential perfects, it is possible for the perfect to be used for the predication of qualities or attributes (perfect of quality). The perfect may also overtly predicate a change-of-state (inchoative perfect), or be used to mark predictable, iterative events that occur sequentially (sequential perfect). The last function is attested in Akan, a neighbouring language, suggesting an areal or genetic phenomenon. A polysemous analysis of the Gã perfect with relevance as the core semantic component of the various uses has been proposed. Finally, it has been shown that Gã may be at the earliest stages of developing a perfective or past tense marker from the perfect. This particular finding, and indeed all the others, would be more robust if confirmed by a large corpus of Gã, especially spoken Gã produced in informal settings.

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## VOWEL DELETION IN ÀBÈSÀBÈSÌ: A CASE STUDY OF ÈKÌRÒMÌ

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### Abstract

Àbèsàbèsì<sup>1</sup> is an endangered Nigerian language spoken in nine settlements within the Akoko North East and Akoko North West Local Government Areas (LGA) of Ondo State by an estimated total of less than 7,000 speakers. In this language, as in many other Benue-Congo languages, it is a common case that two vowels meet across a word boundary. Among different phonological processes that are triggered by the occurrence of two sounds at morphological boundary are: segment harmony, deletion/elision, assimilation, dissimilation, coalescence, velarization and palatalization. This paper investigates the phenomenon of vowel deletion in Àbèsàbèsì for an insight into the  $V_1 \# V_2$  vowel deletion in the language. Data collection adopts a participatory model. The paper attempts a descriptive and rule base account of the types of vowel deletion the language attests. For a better understanding of the segment behaviour, Data collection and presentation is limited to the Èkìròmì dialect as spoken in Ìkàrà̀m. Èkìròmì attests two types of  $V_1 \# V_2$  vowel deletion and certain environments where no vowel deletion takes place. This paper attempts to clarify the distributional properties of these two types of vowel deletion and to explain the cases where no deletion takes place. It shows that  $V_1 \# V_2$  vowel deletion, in most cases, affects the first of two consecutive vowels ( $V_1$ ) and proposes an explanation of the few cases, where the second vowel ( $V_2$ ) is affected.

**Keywords:** Àbèsàbèsì, Èkìròmì, Benue-Congo, Vowel Deletion, Phonology

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<sup>1</sup> Àbèsàbèsì is known as Akpes in literature and has the ISO-639-3 code *ibe* and the Glottolog code *akpe1248*.

## 1. Introduction

Vowel deletion is a well-attested process within the Benue-Congo language family, deletion is linguistic process languages employ to reduce the number of syllables and to maintain the rather rigid Consonant Vowel (CV) syllable structures predominant in the family. This study investigates the different types of vowel deletion in Èkìròmì, a dialect of the Àbèsàbèsì language spoken in the Akoko mountains of Ondo state, Nigeria. The researchers limit the scope to this dialect in order to be able to carry out an in-depth analysis. Apart from the typical vowel deletion triggered by two vowels meeting across a word boundary (henceforth  $V_1 \# V_2$ ), Èkìròmì also attests word final vowel deletion if a word is located at a syntactic boundary or uttered in isolation. Data used for this research is drawn from one of the researchers' documentations corpora and a rich corpus gathered in about ten years by researchers and various undergraduate students.<sup>2</sup> The data is evaluated using a descriptive method, while the distribution of the vowel deletion types is explained using a feature phonology approach.

After introducing the language and the dialect of interest, section 2 contains a description of the phonology in Èkìròmì and a summary of existing research on the dialect. While section 3 defines vowel deletion, the different domains of vowel deletion in Èkìròmì is introduced and illustrated with data in section 4. After that, section 5 discusses the different vowel deletion types discovered in the data and analyses their distribution.

### 1.1 Àbèsàbèsì

Àbèsàbèsì is spoken in eight communities in Àkókó North West and one community in Àkókó North East Local Government Areas of Ondo State, Nigeria, by an estimated number of less than 7,000 speakers<sup>3</sup>. The inhabitants of these settlements are predominantly farmers. Intergenerational transmission fails to take place (Agoyi 2014:4) and language attitudes, especially among young speakers, reveal a preference of speaking the dominant language in the area, Yorùbá (Agoyi 2008:2-4). These factors cause high endangerment of the

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<sup>2</sup> The examples are transcriptions from audio data submitted by students on field trips.

<sup>3</sup> Taking the inhabitant numbers of five communities given by a paper produced within the Millennium Villages Project (Chovwen et al. 2009:10), adding an estimated 800 inhabitants for Akunnu and a third of the population of Ajowa for the three Àbèsàbèsì-speaking communities of the nine communities within Ajowa, results in a total of 10664 people. Assuming a general percentage of 60% speakers across all communities, 6398 speakers are estimated.

language. Yorùbá and English are used as languages of instruction in schools and for official engagements. Adults use Àbèsàbèsì to communicate at home and in all informal occasions while Yorùbá or Nigerian Pidgin English is used to communicate with youths and children. The Àbèsàbèsì communities are in direct vicinity of communities speaking the Akokoid languages, Àhàn, Ayere, Ukaan and the Owé dialect of Yorùbá.

Genetically, the language has long been classified as an independent branch of the Benue-Congo family (Williamson & Blench 2000) within the Niger-Congo phylum. However, Elugbe (2012) proposes Akedoid as a branch of the Benue-Congo family, suggesting that Àbèsàbèsì and Ukaan are earlier branches of what is now as the Edoid languages. Agoyi (2008) in the study of internal classification of Àbèsàbèsì proposes four dialects: Akpes spoken in Àkùnnù and Ìlúdòtun, Èkìròmì spoken in Ìkàrààm and Àsẹ̀, Ìluẹ̀nì spoken in Ìbàrààmù, Ìyàni and Gèdègédé and Oşùgù spoken in Èşùkù and Dája.

## 1.2 Èkìròmì

As mentioned in the preceding section, Èkìròmì is one of the Àbèsàbèsì dialects spoken in Àsẹ̀ and Ìkàrààm in the northern part of Ondo State, Nigeria. While Ìkàrààm is a town with around 5000 inhabitants, Àsẹ̀ is a small farm settlement with only less than 80 inhabitants situated about three kilometres east of Ìkàrààm (Chowwen et al. 2009:10). Inhabitants of Ìkàrààm refer to their language as Èkìròm(i), while those of Àsẹ̀ refer to theirs as Ekìròm. This research, however, is solely based on language data recorded in Ìkàrààm.

The following section gives an overview of the phonology in Èkìròmì while summarizing existing research on the dialect.

## 2. Èkìròmì Phonology

Èkìròmì attests a total of 36 phonemes, of which 22 are consonants, 7 oral and 7 nasalized/nasal vowels. Moreover, our data reveal a number of labialized consonants. Raji (1986), the first researcher who worked on Èkìròmì, mentions labialization and lists the following labialized consonants: /b<sup>w</sup>, t<sup>w</sup>, d<sup>w</sup>, k<sup>w</sup>, g<sup>w</sup>, f<sup>w</sup>, ʃ<sup>w</sup>, h<sup>w</sup>, tʃ<sup>w</sup>, j<sup>w</sup>/. Agoyi (1997) argues that labialization is caused by a deleted rounded vowel following the consonant. As this phenomenon cannot be discussed in this paper, the study will not decide on the phonemic nature of these labialized consonants.

Table 1: Èkiròmì Consonant Chart

Plosives	p b		t d			k g	kp gb	
Nasals	m		n		ɲ	ŋ		
Fricatives		f	s	ʃ				h
Affricates				tʃ dʒ				
Trill			r					
Lateral			l					
Approximants					j		w	

Table 2: Èkiròmì Vowel Chart

	front	center	back
high	i, ĩ		u, ũ
mid	e, ě		o, ɔ̃
open-mid	ɛ, ě		ɔ, ɔ̃
low		a, ǎ	

Lau's (2019) corpus attests a few cases of palatalized consonants. No research has been undertaken so far on palatalization as a productive feature remains questionable. Another phonological process, which all Àbèsàbèsì dialects attest, is vowel harmony. Agoyi (2008, 2012) has carried out research on the topic and mentions different vowel harmony types in the dialects. Èkiròmì features one vowel harmony type solely controlled by the Advanced Tounge Root (ATR) feature and one type controlled by the ATR and the roundedness feature.

The tone system of all Àbèsàbèsì dialects consist of three register tones (high, mid, low). Agoyi and Emmanuel (in preparation) are working on the tone system; the study added a falling tone to the three register tones as suggested by Agoyi (1997).

There has been little research on vowel deletion in Àbèsàbèsì. Elugbe (2012) suggests word final vowel deletion of /i/ and /u/ in a rather short remark to explain the coda consonants and thereby strengthen his argument of a genetic relationship between Àbèsàbèsì and the Edoid languages; a similar claim he had posited before in Elugbe (1989). Agoyi (2015) proposes an optimality account of the syllable structure in Àbèsàbèsì and likewise explains the phonetic coda consonants by assuming an underlying vowel that has been deleted. This process will be referred to as word-final vowel deletion. The current research has not come across any study on the rules that govern  $V_1 \# V_2$  vowel deletion in morphological boundaries in Àbèsàbèsì phonology.

### 3. Deletion as a Phonological Process

Studies show that deletion is “another common process in the languages of the world that involves the loss of a segment under specifically imposed conditions” (Oyebade 2008:69). The deletion process can affect any segment: consonants, vowels or suprasegmental phonemes in a given language (Oyebade 2001; Abiodun-Oyelaran 1972). In phonological study, the deletion of vowels specifically is called elision. In the following sections, this paper investigates  $V_1 \# V_2$  vowel deletion in Èkìròmì. The study will start by presenting the different domains in which vowel deletion occurs in the language before distinguishing the different types of vowel deletion as perceived in the data collected. Finally, it will propose derived rules determining the vowel deletion type in Èkìròmì as perceived in the data collected.

### 4. Vowel Deletion Across the Grammatical Domains

Vowel deletion in Èkìròmì can generally occur wherever two vowels meet across morpheme boundaries. As Èkìròmì shows a general distinction between verbs and nouns – with verbs starting with a consonant and nouns starting with a vowel, typical  $V \# V$  occurrences can be found in the following grammatical domains:

#### Noun Phrase

- Noun + Nominal<sup>4</sup>

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<sup>4</sup> Nominal is used here to encompass all kinds of noun-like words that start with a vowel. These include categories that are traditionally referred to as nouns, pronouns, numerals, adjectives

Verb Phrase

- Verb + Nominal
- Pronoun + Nominal (in ditransitive constructions)

Others

- Relativizer + Nominal
- Focus Particle + Nominal
- Interrogative Pronoun + Nominal

Additionally, Èkìròmì attests word-final vowel deletion. This phenomenon has already been described and analysed by Agoyi (2015).

4.1 Noun Phrases

Vowel deletion in noun phrases occurs when a noun is followed by another noun, a pronominal, numeral or adjective. Nouns can follow nouns to function as an attribute or to form a compound with the other noun. Data set 1 shows several noun + noun constructions, with all possible vowel qualities for V<sub>1</sub> except /u/. It can be seen that it is always the first of two colliding vowels that is deleted. The last column shows the quality of the first vowel respectively.

					V <sub>1</sub>
1	a) afa book	+ oṣó-no wife-my	→	afoṣóno my wife's book	/a/
	b) ègè door	+ iḟo house	→	ègiḟo door of the house	/ɛ/
	c) áje mother	+ ɛna cow	→	ájena mother of the cow	/e/
	d) òli cloth	+ òsé-na father-my	→	òlòséna my father's cloth	/i/

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e)	atò floor	+	ífo house	→	atífo flor of the house	/ɔ/
f)	ajo eye	+	áj-no mother-my	→	ajájno my mother's eye	/o/

Other nominals modifying a noun behave exactly like nouns modifying nouns. The same kind of V<sub>1</sub> deletion can be observed. These nominals can be numerals (2a-b), demonstratives (2c-f) or adjectives (2g-h).

2

a)	ɔnĩ person	+	ekĩ one/INDF	→	ɔnɛkĩ one/a person
b)	ífo house	+	ífon five	→	íjfon five houses
c)	òwò hoe	+	èéni this	→	òwèéni this hoe
d)	òli cloth	+	èdén that	→	òlédén that cloth
e)	anĩ people	+	ìdín these	→	anidín these people
f)	anĩ people	+	ìdén those	→	anidén those people
g)	ɔnĩ person	+	ɛɲa new	→	ɔnɛɲa stranger
h)	ɔhune tree	+	idug PL\big	→	ɔhunídug big trees

Noun + nominal constructions with /u/ as the first vowel, however, display a minor deviation from that pattern. Data set 3 shows constructions with /u/ as V<sub>1</sub> and changing V<sub>2</sub> values that are noted in the last column.<sup>5</sup> The mentioned deviation can be found in (3d) where the second of the two vowels is deleted instead of the first one. This occurs in a construction, where V<sub>2</sub> has the value /i/. Other constructions with /u/ as V<sub>1</sub> and /i/ as V<sub>2</sub> are given in data set 4. In all the data, in context, V<sub>2</sub> deletion is observed. This V<sub>2</sub> deletion seems to only be triggered by /u/ as V<sub>1</sub>. Other vowels as V<sub>1</sub> in combination with /i/ as V<sub>2</sub> do not result in a V<sub>2</sub> deletion as shown in (1b), (1e), (2b), (2e), (2f), (2h) above. This weakens possible claims of /i/ generally being a ‘weak’ vowel that tends to be deleted – as it is attested in Yorùbá (Abiodun 2004).

3

				V <sub>2</sub>	
a)	onu mouth	+	áj-no mother-my	→ onuájno my mother’s mouth	/a/
b)	onu mouth	+	ena cow	→ onúna the cow’s mouth	/ɛ/
c)	onu mouth	+	ebo dog	→ onébo dog’s mouth	/e/
d)	onu mouth	+	iji water	→ onúji water side	/i/
g)	onu mouth	+	òsé-na father-my	→ onòséna my father’s mouth	/ɔ/
f)	onu mouth	+	ojo-no wife-my	→ onójono my wife’s mouth	/o/

<sup>5</sup> Note that V<sub>2</sub> can never be /u/, as Èkìròm does not allow words to start with a /u/. Moreover, a deleted /u/ in V<sub>1</sub> position often results in the labialization of the preceding vowel, unless the second vowel is rounded.

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4						
a)	òkú all	+	iniṅ thing	→	òkúniṅ everything	/i/
b)	òkú all	+	ig <sup>wi</sup> material	→	òkúg <sup>wi</sup> all materials	/i/
c)	ìtù heap	+	ilibó cassava	→	ìtùlibó cassava heap	/i/

Out of the eight possessive pronouns in Èkìròm, five start with a vowel, which means they could theoretically also trigger vowel deletion. These are: 3SG.HUM ‘u’, 3SG.NHUM ‘e’, 1PL ‘ès’, 2PL ‘èn’, and 3PL.NHUM ‘i’. Examples for noun + pronoun constructions are displayed in dataset 5.

5					
a)	òdè stool	+	u her/his	→	òdèu her/his stool
b)	òlì cloth	+	u her/his	→	òlúu her/his cloth
c)	ìfo house	+	ε it	→	ìfɛ / ìfɛɛ <sup>6</sup> its house
d)	ìfomo farm	+	ès our	→	ìfomes our farm
e)	atfì egg	+	èn your (PL)	→	atfèn your eggs

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<sup>6</sup> In careful speech, speakers actually produce a version that attests no deletion but a full assimilation of the first vowel. The same holds for 5f)



b)	tʃèrē repair	+	onī person	→	tʃèronī door of the house	/ɛ/
c)	de buy	+	enam meat	→	denam buy meat	/e/
d)	tʃī have	+	oɲo wife	→	tʃoɲo have a wife	/i/
e)	lɔ throw	+	ísaj stone	→	lísaj throw stone	/ɔ/
f)	logìnō destroy	+	emū money	→	lògìnēmū waste money	/o/

Verb + noun constructions also attest V<sub>2</sub> deletion at the collision of /u/ and /i/. Data set 8 displays verbs ending in /u/ followed by nouns starting with vowels of different qualities. V<sub>2</sub> can be seen in the last column. The V<sub>2</sub> deletion occurs in (8d). Other examples of /u/#/i/ collision in verb + noun constructions can be seen in data set 9.

8						V <sub>2</sub>
a)	ju bury	+	áj-no mother-my	→	jájno bury my mother	/a/
b)	hu hurt	+	ɛb <sup>w</sup> ij goat	→	h <sup>w</sup> ɛbij hurt the goat	/ɛ/
c)	nu go	+	èkìròm Ìkàrà̀m	→	n <sup>w</sup> ekirom go to Ìkàrà̀m	/e/
d)	du fetch	+	ĩ̀ni water	→	dũ̀ni fetch water	/i/

	e)	su annoy	+	òsé-na father-my	→	sɔsena annoy my father	/ɔ/
	f)	ku choose	+	òlí-so fabric-your	→	kolíso choose your fabric	/o/
9	a)	ku choose	+	iniŋ-so thing-your	→	kuniŋso choose your thing	/i/
	b)	ju bury	+	ìkpàr children	→	jùkpàr bury children	/i/
	c)	nu go	+	idʒɔ farm	→	nudʒɔ go to the farm	/i/
10	a)	sù	+	èni	→	sùèné	/i/
	b)	weary su weary	+	you (pl) su-àba weary them	→	you are weary sùba they are weary	
	c)	mi do	+	èsì us	→	mèsì (do something bad to us)	
	d)	ye see	+	èsì us	→	yèsì see us	
	e)	ʃfɛɛ mend	+	èsì us	→	ʃfɛɛrèsì mend us	
	f)	mi do	+	àbà +ɛni them+case	→	mabɛni do bad things to them	

11

- |    |            |   |                            |   |  |
|----|------------|---|----------------------------|---|--|
| a) | kù<br>make | + | èsì umang<br>us laughter   | → | k <sup>w</sup> uèsì umang<br>make us laugh |
| b) | ku<br>make | + | àba umang<br>them laughter | → | k <sup>w</sup> uaba umang<br>amuse them    |

#### 4.3 Other Constructions

There are a couple of other constructions that trigger vowel deletion. These are all words with a grammatical function, such as the complementizer *mí*, the relativizer *mi*, the focus particle *gí* and different interrogative pronouns. All of these words can appear before the subject of a clause. This means that their final vowels get in contact with the initial vowel of a noun or subject pronoun and therefore face vowel deletion. None of these function verbs end with a /u/, which means that the combination /u/ # /i/ is impossible in this domain. The following data therefore lacks V<sub>2</sub> deletion.

12

- |    |  |   |   |
|----|--|---|---|
| a) | ìwé mi ð de étfe<br>book REL 2SG buy market\LOC                  | → | ìwé mò détfé<br>the book you bought at the<br>market    |
| b) | ɔmijá-u gí ð gba tjà-u<br>knife 3SG REL 2PL give him             | → | ɔmijáú gâ gbà tjàú<br>you gave him his knife            |
| c) | màdí àn é mĩ<br>what you.PL ASP do                               | → | màdán jé mĩ<br>what are you doing?                      |
| d) | ìné ò dò mí ò gbà ná<br>how_much 2SG want COMP 2SG give<br>to_me | → | ínó dò mó gbà ná<br>how much do you want to give<br>me? |

## 5. Discussion

The data presented reveals the existence of two vowel deletion types in a  $V_1 \# V_2$  environment and cases where vowel deletion does not occur. The two vowel deletion types are  $V_1$  deletion and  $V_2$  deletion. In order to differentiate the three possible cases, their distribution rules will be formalized.

### 5.1 No Deletion

No deletion has been shown to occur only in the domains involving the three monosegmental object/possessive pronouns *u*, *i* and *ε*. The argument is that lack of deletion is not affected by the domain but rather by the fact that these morphemes consist of only one morpheme. Data sets 5 and 10 have shown that vowel deletion is not possible for those cases where the morpheme is at risk of being lost altogether. This is due to the combination of /u/ and /i/, which would otherwise affect  $V_2$  deletion. A linguistic sign in the sense of Saussure has both a form (significant) and a meaning (signifié). If the form part consisting of only one vowel was lost entirely due to vowel deletion, it could not carry the meaning any more.

### 5.2 $V_1$ Deletion

$V_1$  deletion could be confirmed in all grammatical domains. It will be easier to formalize rules for  $V_2$  deletion and no deletion, because they occur in more specific cases. Therefore,  $V_1$  deletion will be posited as the default case in this analysis. Hence,  $V_1$  deletion will occur, where the distribution rules for  $V_2$  deletion and no deletion do not apply.

### 5.3 $V_2$ Deletion

$V_2$  deletion has only been confirmed in the grammatical domains of noun phrases and verb phrases. This is not a restriction on the grammatical domains per se but rather due to the fact that the other domains either do not permit the combination of /u/ and /i/ (section 4.3) or only provide monosegmental morphemes as the  $V_2$  and therefore avoid  $V_2$  (data set 6).  $V_2$  deletion only occurs, if a high back vowel (/u/) follows a high front vowel (/i/). These two vowels generally play an important role in the phonology of Èkiròmì. They are the two final vowels that can be deleted at the end of a syntactic boundary (Agoyi 2015). Moreover,

the ATR+u vowel harmony type is only attested in the Èkìròmì dialect. This type causes vowels to harmonise based on the ATR feature but has a specific vowel value to harmonize with /u/<sup>7</sup>.

All possible grammatical domains where V<sub>1</sub> # V<sub>2</sub> vowel deletion is possible have been listed. Having looked at the different vowel deletion types across the different domains, we posit the hypothesis that the distribution of the vowel deletion types is not affected by the grammatical domains. Both vowel deletion types occur in all grammatical domains, where they do not have to be avoided due to monosegmental morphemes and V<sub>2</sub> occurs in all grammatical domains, where the combination of /u/ and /i/ is possible.

The factor affecting the distribution of the vowel deletion types is the vowel quality (V<sub>2</sub> deletion) and the avoidance of vowel deletion is caused by monosegmental morphemes being the second vowel.

## 6. Conclusion

This paper has provided a description of vowel deletion in the Èkìròmì dialect of Àbèsàbèsì in a V<sub>1</sub> # V<sub>2</sub> environment. It has shown that Èkìròmì attests two types of V<sub>1</sub> # V<sub>2</sub> vowel deletion and cases, where no deletion occurs at all. While V<sub>1</sub> deletion has been shown to be the default case for most of the V<sub>1</sub> # V<sub>2</sub> combinations, V<sub>2</sub> deletion only occurs in specific cases. V<sub>2</sub> deletion is triggered by [+high] feature in construction where two [+high] vowels occur in morphological boundary. That is in environment where [+high, + round vowel /u/ is V<sub>1</sub> (occurs as a morphological final vowel position) and front high vowel /i/ feature as V<sub>2</sub>, at word initial position. This rule is valid for all domains where this combination can occur except for monosegmental morphemes being V<sub>2</sub>, where vowel deletion does not take place when the morpheme is at risk of being deleted all together. Moreover, grammatical domains have been shown to have no influence on vowel deletion.

This research adds another view on the various types of V<sub>1</sub> # V<sub>2</sub> deletion within the Benue-Congo language family and their distribution. This research could be expanded by investigating suprasegmental features that are affected or caused by vowel deletion.

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<sup>7</sup> Claimed by Agoyi (2008). New data, however, reveals that /u/ and /i/ can have an inherent [+ATR] or [-ATR] value that does not reflect in the pronunciation, but only in vowel harmony. This is indicative of a convergence of /u/ and /ʊ/ as well as /i/ and /ɪ/. The specific vowel value to harmonize with /u/ only holds true for /u/ with an inherent [+ATR] value.

Nasalization, tones and labialization have been deliberately excluded from this work but could give further insight into the phonological system of Àbèsàbèsì.

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**VARIATION IN BOUNDARY CONSONANT DELETION IN ENGLISH  
AMONG SELECTED MALE AND FEMALE UNDERGRADUATES  
OF THE UNIVERSITY OF NIGERIA**

*Jane Chinelo Obasi*

**Abstract**

This study investigates variations in boundary /t/ consonant deletions in English among young educated Nigerians in connected speeches. Thirty students comprising of fifteen males and fifteen females in their third and final years, from the Department of English and Literary Studies at the University of Nigeria, Nigeria, participated in this study. Recordings were made of their t-deletions in selected phonetic tokens in connected speeches. All /t/ consonant deletions produced at word and morpheme boundaries in the given sentences for the study were identified and analysed perceptually. Labov's Variationist theory was adopted as the theoretical framework. The Statistical Package for Social Science (SPSS) software was used for the t-test (Independent Sample Test) analysis to determine the significant differences in the realisation of boundary /t/ consonants between the male and female genders. With the level of significance at 0.05, the /t/ deletion in the male participants in connected speeches was more significant than that of their female counterparts.

**Keywords:** Gender; variation; consonant deletion; variationist theory; gender influence; boundary consonants

## **1. Introduction**

Since English was introduced in Nigeria, the educated elite in the society has closely attempted to learn and speak standardised British English. This has led to the rise of several kinds of literature on the phonology of English. Studies like Banjo (1971; 1996) and Jibril (1982) have proven that the attempt to achieve native-speaker perfection by a non-native speaker is merely an exercise that lacks basic justification since the variety of English

spoken in Nigeria cannot be said to be truly British. This seemingly unachievable target has triggered the rise of studies aimed at describing the regional varieties of spoken and written English, and has created room for the recognition and acceptance of a regional variation in the company of World Englishes.

Nigerian English, however, is a nativised variety of English spoken in Nigeria that has its own indexical markers that differentiate it from other World Englishes. Scholars like Adebija (1989); Abdullahi-Idiagbon and Olaniyi (2011); Gut and Milde (2002); Udofot (1997), among numerous others have attempted to characterise this variety of English. Some other scholars have categorised Nigerian English into Standard and Non-Standard varieties; and along basilectal (non-standard), mesolectal (general, almost standard) and acrolectal (Standard Nigerian English) lines. Thus, acceptability of Nigerian English is no longer in question. Eka (2005: 53) sums up the issues validating the existence of Nigerian English when he states: “the questions of “correctness” or “wrongness” have vanished into the annals of history...“acceptability”, “intelligibility” and “communicativeness” are the binding forces for all Englishes and for their projected existence as variants of the English language.”

Several works of literature exist that study the different variations within Nigerian spoken English. According to Olaniyi (2016: 42), “scholars such as Jibril (1982); Eka (1985); Olaniyi (2011), among others have accorded ethnicity a prominent place in the identification of Nigerians especially when they communicate in the further tongue.” Also, “many Nigerians are able to identify a speaker’s ethnic group as soon as he speaks few words of English” (Bamgbose, 1971: 24 in Olaniyi, 2016: 42).

In Nigeria, the majority of the studies on phonetic variation have been largely limited to the level of education and ethnic identity (Udofot, 2002; Olaniyi, 2014). This is perhaps, connected to the interest of researchers in the validity of Labov’s model of language variation. However, Labov (1963; 1966; 1990; 1991) maintain that “gender and age are key factors of speech variation in any given speech community” (cf. Oladipupo & Akinjobi, 2015: 93).

Gender is a common term in many disciplines such as sociology, anthropology, law, and literary studies. Nordquist (2019) quoting Duranti (2009: 30-31) states that “extensive research on language, culture, and identity has sought to uncover ‘the logic of sex differences in languages...’”. This is seen in the study by Major (2004) who examines gender and stylistic differences in English native speakers and native speakers of Japanese and Spanish. While the results of the native speaker showed that significant differences exist based on gender and style, the overall results of the study revealed that gender

differences are acquired before stylistic differences (Major, 2004: 1). Also, Jahandar et al. (2012) investigate the impact gender has on pronunciation accuracy of advanced Iranian English as Foreign Language learners and the extent to which male and female learners outperform each other in their speech production. The result of this study showed that the female subjects performed more than the males in producing accurate consonants, but not the case during vowels production (Jahandar et al. 2012).

Other studies like that of Elliot (1995); Flege and Fletcher (1992), among others have reported the effect of how language learners' gender affects their phonetic realisation in consonant clusters and vowels. Conversely, this study takes a particular interest in examining the effect gender has in the realisation of final /t/ consonant clusters in connected speeches among young educated Nigerians.

Studies in linguistics and other related areas show that gender differentiation in linguistic behaviour is common. Many theories have argued both in agreement and disagreement of the existence of any valid differences in the language use of men and women. This has given rise to different models of gender differences, such as the Deficit Model, the Dominance Model, the Cultural Difference Model, the Social Construct model, and so on. Therefore, "gender is treated as the accomplishment and product of social interaction [and] the focus is on the way individuals 'do' or 'perform' their gender identity in interaction with others, and there is an emphasis on the dynamic aspect of interaction" (Holmes & Meyerhoff, 2003: 11).

### 1.1 Boundary Consonant Deletion

Boundary Consonant Deletion is a process by which "consonant clusters at word or morpheme boundaries are simplified in connected speech by deleting one or more of the clusters to maximise ease of articulation" (Oladipupo & Akinjobi, 2015: 96). Soneye and Oladunjoye (2015) observe that English as a Second Language (ESL) speakers in general, and in Nigeria in particular, resort to cluster reduction through several ways, as a means of simplification. At syllable level, Nigerian English, unlike the British English, does not allow a complex syllabic structure of up to three consonants at the onset (beginning) position and a maximum of four consonants at the coda (Soneye & Oladunjoye 2015: 258). Thus, when three or more consonants cluster in a syllable, ESL users in Nigerian tend to reduce or omit one consonant. This results in the articulation of for instance, 'next' as /nest/ instead of /nekst/, 'interact' as /intarat/ instead of /intərækt/, and 'six' as /sis/ instead of /sɪks/.

Suffice it to say that scholars like Weatherall (2002), Newman et al. (2008), Soneye and Oladunjoye (2015), among others, have attempted to establish the differences in language use influenced by gender. Yet, most of their works have been drawn basically from language of discourse. Also, while scholars like Oladipupo (2015) have worked on r-liaison and consonant cluster deletion in young Nigerian English speakers, Iyiola (2015) has studied auto-segmental features of consonant deletion among selected French learners of Ijebu undergraduates in the Southwest of Nigeria. Still, attention has not been paid to articulatory variation observable between different genders with respect to boundary consonant /t/ deletion in connected speeches in English using the third and final year students of the Department of English and Literary Studies of University of Nigeria as the population for the study. This is the gap this research intends to fill. Taking cognizance of the fact that the participants are young educated speakers of English in their third and final years of university education in the above department in Nigeria, it is expected that exposure to education will awaken their consciousness to the realisation of /t/, where necessary at word boundary. Therefore, meeting with the students at various locations on campus; classrooms, hostels, and relaxation centers helped them to render original speeches outside a formal setting. The t-test analysis enabled the researcher to describe the results obtained from recorded speeches which was perceptual.

## 1.2 Consonant Reduction in English

Consonant reduction/deletion is a phenomenon in English language which occurs mainly in connected speech. It is observed that words when pronounced in connected speeches differ from their articulation in isolation. Like other varieties of English, Nigerian English (NigE) has also received attention in the area of consonant reduction in connected speeches. For instance, Oladipupo and Akinjobi (2015) examine “the variable use of r-liaison and boundary consonant deletion processes of young Nigerian speakers of English” (Oladipupo & Akinjobi, 2015: 92). This study was made up of a population of 180 young NigE speakers who were evenly stratified into gender and class, and their data analysed with Analysis of Variance (ANOVA).

Soneye and Oladunjoye (2015) on the other hand, examine the reduction modes of consonant cluster in Educated Nigerian English. They drew their corpus from the International Corpus of English (ICE), Nigerian broadcasts and news, and from unscripted speeches of educated Nigerians (Soneye & Oladunjoye, 2015: 255). Their findings revealed the prevalence of a systematic deletion of triple clustered words in ENSE, and

conclude that coda cluster patterns in ENSE contribute significantly to the distinctiveness of Nigerian English within the purview of World Englishes.

Evans and Watson (2003) examined the “acoustic and articulatory features of reduced /t/ in three dialects of English: American English (AmE), Australian English (AuE) and Standard Southern British English (UKE)” (Evans & Watson, 2003: 917). The study revealed that AuE and AmE speakers produced /t/ in accented words with the greatest evidence of reduction while the UKE speakers showed very little effect of prosodic accents across the four conditions. This strongly suggests that consonant reduction as a result of prosodic accents is dialect specific.

In the light of Labovian sociolinguistic literature, much scholarly works have been carried out in relation to boundary consonant deletions. Scholars such as Jurafsky et al. (2001) have studied deletions in boundary consonants and found that the final /t/ or /d/ is deleted in high-probability content words because they are shorter in duration. Also, Raymond et al. (2006) study internal deletion of /t,d/ in spontaneous speech. While comparing the results of their study with the previous studies on word-final alveolar stop deletion, and other deletions at the word internal alveolar stop process they observed that word-internal alveolar stop deletion is not a unitary phenomenon, but are two different processes coming up at different points during production of speech (Raymond et al. 2006). Bybee et al. (2016) raise an argument based on the fact that “very frequent phrases and words undergo extreme reduction [as a result of] ongoing language use which turns out to provide evidence for the cognitive processes that shape phonology and grammar” (Bybee, 2016: 422). Therefore, “special reduction is one end of a continuum of interaction between the normal phonetic processes that occur in automated production and the frequency of use of words and phrases in particular contexts” (Bybee, 2016: 422).

Other scholars like Rhodes (1992), Smith et al. (2009), Roberts (1997), Guy (1992), and Fosler-Lussier & Morgan (1999), who have done extensive research in line with /t,d/ deletions in consonant clusters have also made valid findings which correlate with the above reviewed literatures. Thus, it is obvious that the issue of consonant cluster reduction/deletion in the English language has received some attention.

## **2. The Variationist Theory**

Sociolinguistics studies on how language use is influenced by social factors (i.e., gender, age, class). William Labov, a prominent American sociolinguist pioneered this model of linguistic study which is referred to as Labovian or Variationist theory/sociolinguistics.

According to Gordon (2014), “the central doctrine of this field holds that variation is inherent to linguistic structure”. Also, in trying to point out the basic notion of the variationist model of linguistics, Gordon (2014) believes that the way a language is spoken and written across individuals as well as across situations encountered by the same individual has marked differences and such differences are important for a language to function. From Labov’s study on Martha’s Vineyard (Labov, 1963: 1972), it is possible to study linguistic change between speakers of different generations. Because Labov’s variationist theory is interested in studying linguistic change between speakers of different generations, it is, therefore, applied in this study to examine the linguistic change (boundary t-deletion in English) that occurs between the male and female third and final year students of the University of Nigeria. This makes the variationist theoretical model valid for this study.

### **3. Methodology**

#### 3.1 The Participants

The participants for this study were thirty (fifteen male and fifteen female) students of the Department of English and Literary Studies at the University of Nigeria, Nsukka, Nigeria. The choice of the participants was considered because, the nature of this research required examination of the variations in gender noticeable in boundary /t/ consonant deletion, and their degree of articulation or deletion in connected speeches among young educated Nigerians. It is important to state that the environment of the participants played a significant role in the collection of data for this study. While the choice of the participants (third and final years students) of the university under study represented the young educated speakers of English, according to Udofot (1997), the different locations of the students the data was collected made the students’ renditions more original because of the informal setting. Even the classroom renditions were before the lectures began.

#### 3.2 The Data

This study used the vocal renditions of male and female students in their third and final years of study in the university. As a result, a stratified sampling technique was adopted to select the students. Each of the male and female participants was made to read the three sentences below:

- The girl next door said she can't swim.
- Amongst all the workers, just one person agreed that this is the worst job he ever had.
- I started friendship with an artist, he paints landscape, and for the past three years, he's worked hard and become successful. Now, his most famous painting is printed on postcards.

Because the research aimed to examine the variation in boundary /t/ consonant in connected speeches, attention was paid to the tokens from each of the sentences that contain boundary /t/consonants during renditions by the participants. The three sentences in all contain ten phonetic tokens (next, can't, amongst, just, that, worst, paints, past, most, postcards) with potential /t/ deletions. Renditions of the three sentences from each of the thirty participants were collected through the audio recording at various locations of the students: classrooms, relaxation areas, and hostels. In other words, each of the thirty participants (fifteen males, and fifteen females) read the three sentences containing ten phonetic tokens. Thus, three hundred (300) tokens were analysed in all. This formed the population for the study.

### 3.3 Analysis Procedure

Qualitative and quantitative research designs were adopted as they enabled adequate analyses of the data collected for this study. This study also adopted a perceptual method of analysis. The data from the target students which was audio-taped was played back, transcribed, and presented in tables and their articulations in potential /t/ deletion environments were identified. Variationist theory, which is of the view that variation is inherent to linguistic structure, was adopted as the theoretical framework. The Statistical Package for Social Science (SPSS) software was used for the t-test (Independent Sample Test) analysis to determine the significant differences in the realisation of /t/ boundary consonants between the male and female genders. For the Independent Sample t-test in SPSS, P value = 0.05.

## 4. Data Presentations and Discussion

Each of the thirty participants (fifteen males and fifteen females) read the three sentences that contained ten phonetic tokens where /t/ consonant occurred at a word boundary. Therefore, three hundred tokens were analysed in all. The perceptual presentation of the

variable phonetic realisations of the /t/ boundary consonant deletion among the participants is presented in Tables 1, 2, 3, 4, 5, and 6 below. The Number Analysis in Table 7 and the Group Statistics in Table 8 were used for the t-test analysis in Table 9 as presented below. For better understanding, the tables are discussed in pairs for each token to capture the gender differences in the realisation of the final /t/ consonant in connected speeches.

Sentence 1: The girl next door said she can't swim

Table 1: Female Renditions for Sentence 1

Voices	Next		Can't	
	<b>/nekst/</b>	<b>/t/deletion for /nekst/</b>	<b>/ka:nt/</b>	<b>/t/ deletion for /ka:nt/</b>
FV1	/nes/	deleted	/kan/	deleted
FV2	/neks/	deleted	/ka:nt/	not deleted
FV3	/nekst/	not deleted	/ka:nt/	not deleted
FV4	/nes/	deleted	/ka:nt/	not deleted
FV5	/nekst/	not deleted	/kan/	deleted
FV6	/nest/	not deleted	/kan/	deleted
FV7	/nes/	deleted	/kan/	deleted
FV8	/nekst/	not deleted	/kan/	deleted
FV9	/nez/	deleted	/kan/	deleted
FV10	/nekst/	not deleted	/kan/	deleted
FV11	/nes/	deleted	/ka:nt/	not deleted
FV12	/nest/	not deleted	/ka:nt/	not deleted
FV13	/nekst/	not deleted	/ka:nt/	not deleted
FV14	/nez/	deleted	/kan/	deleted
FV15	/nez/	deleted	/kan/	deleted

Note: FV= Female Voice

Table 2: Male Renditions for Sentence 1

Voices	Next		Can't	
	<b>/nekst/</b>	<b>/t/deletion for /nekst/</b>	<b>/ka:nt/</b>	<b>/t/ deletion for /ka:nt/</b>
MV1	/neks/	deleted	/kan/	deleted
MV2	/nes/	deleted	/kan/	deleted
MV3	/nest/	not deleted	/ka:nt/	not deleted
MV4	/nes/	deleted	/kan/	deleted
MV5	/nekst/	not deleted	/ka:nt/	not deleted
MV6	/neks/	deleted	/ka:nt/	not deleted

MV7	/nekst/	not deleted	/kan/	deleted
MV8	/nes/	deleted	/kan/	deleted
MV9	/nez/	deleted	/kan/	deleted
MV10	/nes/	deleted	/kan/	deleted
MV11	/nez/	deleted	/ka:nt/	not deleted
MV12	/nes/	deleted	/kan/	deleted
MV13	/nes/	deleted	/kan/	deleted
MV14	/nest/	not deleted	/ka:nt/	not deleted
MV15	/nes/	deleted	/kan/	deleted

Note: MV=Male Voice

Tables 1 and 2 above are representations of the female and male renditions of the phonetic tokens (*next* and *can't*) where [t] occurred at word boundary in a connected speech as seen in Sentence 1 (The girl next door said she can't swim). For the female participants in Table 1, FV3, FV5, FV6, FV8, FV10, FV12, and FV13 did not delete the boundary /t/ of 'next' /nekst/ in Sentence 1 while the remaining females did. Even though the realisation of /nekst/ by FV6 and FV12 was incorrect in Sentence 1 as they realised it as /nest/, the final /t/ was prominent during rendition which was the focus of the study. For their male counterparts in Table 2, MV3, MV5, MV7, and MV14 did not delete the boundary /t/ of 'next' /nekst/ in Sentence 1 while the remaining male participants deleted /t/. However, MV3 realised /nekst/ as /nest/. Importantly, the final /t/ was realised by MV3 which was the focus of the study. It is, therefore, obvious from the above Tables 1 and 2 that more females realised final /t/ in the connected speech. The t-test analysis will further prove the reliability of the result.

For 'can't' /ka:nt/ in Table 1 above, FV2, FV3, FV4, FV11, FV12, and FV13 realised the final /t/ in Sentence 1 while the remaining females deleted it. For the male participants in Table 2 above, MV3, MV5, MV6, MV11, and MV14 perfectly realised the final /t/ of 'can't' /ka:nt/ in Sentence 1 while the remaining males deleted it. Here also, more females realised the final /t/ in /ka:nt/ than the males.

Sentence 2: Amongst all the workers, just one person agreed that this is the worst job he ever had.

Table 3: Female Renditions for Sentence 2

Voices	Amongst		Just		That		Worst	
	/əmʌnst/	/t/ deletion in /əmʌnst/	/dʒʌst/	/t/ deletion in /dʒʌst/	/ðæt/	/t/ deletion in /ðæt /	/wɜ:st/	/t/ deletion in /wɜ:st/
FV1	/əmʌnst/	not deleted	/ dʒʌst/	not deleted	/da/	deleted	/wɜ:st/	not deleted
FV2	/ amons/	deleted	/dʒɔz/	deleted	/da/	deleted	/wɔs/	deleted
FV3	/əmʌnst/	not deleted	/dʒʌst /	not deleted	/da/	deleted	/wɜ:st/	not deleted
FV4	/amons/	deleted	/dʒɔs/	deleted	/da/	deleted	/wɔs/	deleted
FV5	/amons/	deleted	/dʒɔs/	deleted	/da/	deleted	/wɔs/	deleted
FV6	/ əmʌnst/	not deleted	/ dʒʌst/	not deleted	/da/	deleted	/wɜ:st/	not deleted
FV7	/amons/	deleted	/dʒɔs/	deleted	/da/	deleted	/wɔs/	deleted
FV8	/ əmʌnst/	not deleted	/dʒʌst/	not deleted	/da/	deleted	/wɜ:st/	not deleted
FV9	/ əmʌnst/	not deleted	/dʒʌst/	not deleted	/da/	deleted	/wɜ:st/	not deleted
FV10	/amons/	deleted	/dʒɔs/	deleted	/da/	deleted	/wɔs/	deleted
FV11	/amons/	deleted	/dʒɔs/	deleted	/da/	deleted	/wɔs/	deleted
FV12	/amons/	deleted	/dʒɔs/	deleted	/da/	deleted	/wɜ:st/	not deleted
FV13	/amons/	deleted	/dʒʌst/	not deleted	/da/	deleted	/wɔs/	deleted
FV14	/ əmʌnst/	not deleted	/dʒʌst/	not deleted	/da/	deleted	/wɔz/	deleted
FV15	/amons/	deleted	/dʒɔs/	deleted	/da/	deleted	/wɔz/	deleted

Table 4: Male Renditions for Sentence 2

Voices	Amongst		Just		That		Worst	
	/əmʌnst/	/t/ deletion in /əmʌnst/	/dʒʌst/	/t/ deletion in /dʒʌst/	/ðæt/	/t/ deletion in /ðæt /	/wɜ:st/	/t/ deletion in /wɜ:st /
MV1	/amons/	deleted	/dʒɔs/	deleted	/da:/	deleted	/wɔs/	deleted
MV2	/amons/	deleted	/dʒɔs/	deleted	/ðæt/	not deleted	/wɜ:st/	not deleted
MV3	/ əmʌnst/	not deleted	/dʒʌst/	not deleted	/da:/	deleted	/wɜ:st/	not deleted
MV4	/amonst/	not deleted	/dʒɔs/	deleted	/da:/	deleted	/wɜ:st/	not deleted
MV5	/amons/	deleted	/dʒɔs/	deleted	/da:/	deleted	/wɔs/	deleted
MV6	/əmʌnst/	not deleted	/dʒʌst/	not deleted	/da:/	deleted	/wɔs/	deleted
MV7	/amons/	deleted	/dʒɔs/	deleted	/da:/	deleted	/wɔs/	deleted
MV8	/amons/	deleted	/dʒɔs/	deleted	/da:/	deleted	/wɔs/	deleted

MV9	/amɒns/	deleted	/dʒɒs/	deleted	/dæt/	not deleted	/wɒs/	deleted
MV10	/amɒns/	deleted	/dʒɒs/	deleted	/da:/	deleted	/wɒs/	deleted
MV11	/əmʌnst/	not deleted	/dʒɒs/	deleted	/ðæt/	not deleted	/wɒs/	deleted
MV12	/amɒnst/	not deleted	/dʒʌst/	not deleted	/da:/	deleted	/wɜ:st/	not deleted
MV13	/amɒns/	deleted	/dʒʌst/	not deleted	/da:/	deleted	/wɜ:st/	not deleted
MV14	/amɒns/	deleted	/dʒɒs/	deleted	/da:/	deleted	/wɒs/	deleted
MV15	/amɒnst/	not deleted	/dʒʌst/	not deleted	/ðæt/	not deleted	/wɜ:st/	not deleted

In Tables 3 and 4 above, the male and female participants realised the final /t/ consonant clusters in the tokens in Sentence 2 in many different ways. The /t/ consonant cluster in ‘amongst’ /əmʌnst/ was realised as /əmʌnst, amɒns, amɒnst/ by both genders with the female participants achieving more accurate articulations than the male participants.

For the female participants in Table 3 above, FV1, FV3, FV6, FV8, FV9, and FV14 realised the final /t/ of ‘amongst’ /əmʌnst/ in Sentence 2 while the rest deleted it. For the male participants in Table 4 above, MV3, MV4, MV6, MV11, MV12, and MV15 did not delete the final /t/ of ‘amongst’ /əmʌnst/ in Sentence 2 while the remaining others deleted it. It is important to note that even though MV4, MV12, and MV15 realised the final /t/ of /əmʌnst/ in Sentence 2, they were heard to have articulated it inappropriately as /amɒnst/ instead of /əmʌnst/. Close observation from the Tables 3 and 4 above shows that more males deleted the /t/ in /əmʌnst/ than females.

For ‘just’ /dʒʌst/ in Sentence 2, FV1, FV3, FV6, FV8, FV9, FV13, and FV14 in Table 3 above did not delete the final /t/ while the remaining females deleted it. This shows that more females actually realised it. On the other hand, MV3, MV6, MV12, MV13, and MV15 in Table 4 above realised the final /t/ of ‘just’ /dʒʌst/ in Sentence 2 while the rest of the males deleted it. Also, for the token, ‘that’ /ðæt/ in Sentence 2, all the female participants in Table 3 above deleted the /t/ of it. However, for the male participants in Table 4 above, only MV2, and MV 15 realised it while the rest deleted it.

For ‘worst’ /wɜ:st/ in Sentence 2, FV1, FV3, FV6, FV8, FV9, and FV12 in Table 3 above realised the final /t/ while the others deleted it. For the male participants in Table 4 above, MV2, MV3, MV4, MV12, MV13, and MV15 did not delete the final /t/ of ‘worst’ /wɜ:st/ in Sentence 2 while the rest of the males deleted it.

Sentence 3: I started friendship with an artist, he paints a landscape and for the past three years he's worked hard and become successful, now his most famous painting is printed on postcards.

Table 5: Female Renditions for Sentence 3

Voices	Paints		Past		Most		Postcards	
	/peints/	/t/ deletion in /peints/	/pa:st/	/t/ deletion in /pa:st/	/məust/	/t/ deletion in /məust/	/pəust.ka:ds/	/t/ deletion in /pəust.ka:ds/
FV1	/peints/	not deleted	/pas/	deleted	/məust/	not deleted	/pəust.ka:ds/	not deleted
FV2	/peins/	deleted	/pas/	deleted	/məust/	not deleted	/pəus.ka:ds/	deleted
FV3	/peints/	not deleted	/pa:st/	not deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
FV4	/peints/	not deleted	/pa:st/	not deleted	/məust/	not deleted	/pəust.ka:ds/	not deleted
FV5	/peins/	deleted	/pas/	deleted	/məust/	not deleted	/pəust.ka:ds/	not deleted
FV6	/peins/	deleted	/pa:st/	not deleted	/məus/	deleted	/pəus.ka:ds/	deleted
FV7	/peins/	deleted	/pa:st/	not deleted	/məust/	not deleted	/pəus.ka:ds/	deleted
FV8	/peins/	deleted	/pa:st/	not deleted	/məus/	deleted	/pəus.ka:ds/	deleted
FV9	/peints/	not deleted	/pas/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
FV10	/peints/	not deleted	/pas/	deleted	/məus/	deleted	/pəus.ka:ds/	deleted
FV11	/peins/	deleted	/pas/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
FV12	/peints/	not deleted	/pa:st/	not deleted	/məust/	not deleted	/pəust.ka:ds/	not deleted
FV13	/peints/	not deleted	/pa:st/	not deleted	/məust/	not deleted	/pəust.ka:ds/	not deleted
FV14	/peins/	deleted	/pas/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
FV15	/peins/	deleted	/pas/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted

Table 6: Male Renditions for Sentence 3

Voices	Paints		Past		Most		Postcards	
	/peints/	/t/ deletion in /peints/	/pa:st/	/t/ deletion in /pa:st/	/məust/	/t/ deletion in /məust/	/pəust.ka:ds/	/t/ deletion in /pəust.ka:ds/
MV1	/peins/	deleted	/pa:s/	deleted	/məus/	deleted	/pəus.ka:ds/	deleted
MV2	/peints/	not deleted	/pa:s/	deleted	/məus/	deleted	/pəus.ka:ds/	deleted
MV3	/peins/	deleted	/pa:st/	not deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
MV4	/peints/	not deleted	/pa:s/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted

MV5	/peins/	deleted	/pa:s/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
MV6	/peins/	deleted	/pa:s/	deleted	/məus/	deleted	/pəus.ka:ds/	deleted
MV7	/peins/	deleted	/pa:s/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
MV8	/peins/	deleted	/pa:s/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
MV9	/peins/	deleted	/pa:s/	deleted	/məus/	deleted	/pəus.ka:ds/	deleted
MV10	/peints/	not deleted	/pa:s/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
MV11	/peints/	not deleted	/pa:s/	deleted	/məus/	deleted	/pəus.ka:ds/	deleted
MV12	/peints/	not deleted	/pa:s/	deleted	/məus/	deleted	/pəus.ka:ds/	deleted
MV13	/peints/	not deleted	/pa:s/	deleted	/məus/	deleted	/pəust.ka:ds/	not deleted
MV14	/peints/	not deleted	/pa:s/	deleted	/məus/	deleted	/pəus.ka:ds/	deleted
MV15	/peints/	not deleted	/pa:s/	deleted	/məust/	not deleted	/pəust.ka:ds/	not deleted

Tables 5 and 6 above are the perceptual representations of the female and male renditions of the phonetic tokens: *paints*, *past*, *most*, and *postcards*, where [t] occurred at word boundary in a connected speech as seen in Sentence 3. ‘Paints’ /peints/ was realised as /peints, peins/ by both genders. However, the number of female participants that did not delete /t/ at word boundary was higher than that of the male participants. That is, FV1, FV3, FV4, FV9, FV10, FV12, and FV13 in Table 5 above did not delete the final /t/ of ‘paints’ /peints/ in Sentence 3 while the rest deleted it. For the male participants in Table 6 above, MV2, MV4, MV10, MV11, MV12, MV13, MV14, and MV 15 realised the final /t/ of ‘paints’ /peints/ in Sentence 3 while the remaining others deleted it.

The differences in realisation of /t/ boundary consonant were also seen in ‘past’ /pa:st/ as both genders realised it in variable ways as /pas, pa:st, pa:s/. While many of the female participants in Table 5: FV3, FV4, FV6, FV7, FV8, F12, and FV13 realised the boundary /t/ of ‘past’/pa:st/ in Sentence 3, all the male participants except MV3 in Table 6 deleted it. For ‘most’ /məust/ in Sentence 3, FV1, FV2, FV4, FV5, FV7, FV12, and FV13 in Table 5, did not delete the final /t/ while the remaining females deleted it. For the male participants in Table 6, only MV15 realised the final /t/ of /məust/ in Sentence 3. The final /t/ of ‘post’ in ‘postcards’ /pəust.ka:ds/, however, was realised by FV1, FV3, FV4, FV5, FV9, FV11, FV12, FV13, FV14, and FV15 in Sentence 3, while the remaining few others deleted it. For the male participants in Table 6, MV3, MV4, MV5, MV7, MV8, MV10, MV13, and MV15, did not delete the final /t/ of ‘post’ in ‘postcards’ /pəust.ka:ds/ in the connected speech in Sentence 3 while the remaining other males deleted it. To further ascertain the differences in gender in the realisation of the boundary /t/ consonant in

connected speeches (Sentences 1, 2, and 3), the t-test (Independent Sample Test) was used as the analytical tool.

Table 7 below shows the number analysis of Tables 1, 2, 3, 4, 5, and 6 above. Table 7 became necessary because it was used to build the Group Statistics in Table 8 which was further used for the t-test analysis in Table 9.

Table 7: Number Representation of the Phonetic Realisations of /t/ at Word Final in Sentences 1, 2, and 3

S/ No of Tokens	Words	Female (15)		Male (15)	
		N(√)	N(X)	N(√)	N(X)
1	next /nekst/	5	10	2	12
2	can't /ka:n't/	6	9	5	10
3	amongst /əmʌnst/	6	9	3	12
4	just /dʒʌst/	7	8	5	10
5	that /ðæt/	0	15	4	11
6	worst /wɜ:st/	6	9	6	6
7	paints /peints/	7	8	8	7
8	past /pa:st/	7	8	1	14
9	most /məʊst/	7	8	2	13
10	postcards /pəʊst.kɑ:ds/	10	5	8	7

N(√) = No that realised /t/ consonant at word final; N(X) = No that did not realise /t/ consonant at word final

Table 8: Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Token 1	Female	15	1.67	.488	.126
	Male	15	1.87	.352	.091
Token 2	Female	15	1.60	.507	.131
	Male	15	1.67	.488	.126
Token 3	Female	15	1.60	.507	.131
	Male	15	1.80	.414	.107
Token 4	Female	15	1.53	.516	.133
	Male	15	1.67	.488	.126
Token 5	Female	15	2.00	.000	.000
	Male	15	1.73	.458	.118
Token 6	Female	15	1.60	.507	.131
	Male	15	1.60	.507	.131
Token 7	Female	15	1.53	.516	.133
	Male	15	1.47	.516	.133
Token 8	Female	15	1.53	.516	.133
	Male	15	1.93	.258	.067
Token 9	Female	15	1.53	.516	.133
	Male	15	1.87	.352	.091
Token 10	Female	15	1.33	.488	.126
	Male	15	1.47	.516	.133

Table 9: Independent Samples Test

	Levene's Test for Equality of Variances					t-test for Equality of Means				
	F	Sig.	t	df	Sig.(2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference		
								Lower	Upper	
/nekst/	equal variances assumed	7.338	.011	-1.288	28	.208	-.200	.155	-.518	.118
	equal variances not assumed			-1.288	25.261	.209	-.200	.155	-.520	.120
/ka:n't/	equal variances assumed	.516	.478	-.367	28	.716	-.067	.182	-.439	.306
	equal variances not assumed			-.367	27.959	.716	-.067	.182	-.439	.306

/əmʌnst/ equal variances assumed	5.333	.029	-1.183	28	.247	-.200	.169	-.546	.146
equal variances not assumed			-1.183	26.923	.247	-.200	.169	-.547	.147
/dʒʌst/ equal variances assumed	1.544	.224	-.727	28	.473	-.133	.183	-.509	.242
equal variances not assumed			-.727	27.911	.473	-.133	.183	-.509	.242
/ðæt/ equal variances assumed	50.286	.000	2.256	28	.032	.267	.118	.025	.509
equal variances not assumed			2.256	14.000	.041	.267	.118	.025	.520
/wɜ:st/ equal variances assumed	.000	1.000	.000	28	1.000	.000	.185	-.379	.379
equal variances not assumed			.000	28.000	1.000	.000	.185	-.379	.379
/peɪnts/ equal variances assumed	.000	1.000	.354	28	.726	.067	.189	-.320	.453
equal variances not assumed			.354	28.000	.726	.067	.189	-.320	.453
/pɑ:st/ equal variances assumed	40.786	.000	-2.683	28	.012	-.400	.149	-.705	-.095
equal variances not assumed			-2.683	20.588	.014	-.400	.149	-.710	-.090
/məʊst/ equal variances assumed	15.740	.000	-2.066	28	.048	-.333	.161	-.664	-.003
equal variances not assumed			-2.066	24.695	.049	-.333	.161	-.666	.000
/pəʊst. equal variances assumed	1.544	.224	-.727	28	.473	-.133	.183	-.509	.242
ka:ds/ equal variances not assumed			-.727	27.911	.473	-.133	.183	-.509	.242

The t-test analysis in Table 9 was done using the Statistical Package for Social Science (SPSS) software. With the level of significance at 0.05, it is concluded that the phonetic realisations that are equal to or less than 0.05 are significant while those that are more than 0.05 are not significant. For instance, ‘next’, ‘amongst’, ‘that’, ‘past’, and ‘must’ as presented in the Independent Sample Test showed a significant difference in their realisations by the male and female gender under study; while ‘can’t’, ‘just’, ‘worst’, ‘paint’, and ‘postcards’ showed no significant difference. Thus, the boundary /t/ consonant deleted in the connected speeches by the male participants under study is more significant than that of their female counterparts. In other words, the significant difference for that of the female participants is higher than that of males in the realisation of the boundary /t/ consonant in connected speeches. Therefore, the null hypothesis, which before the t-test analysis states that there is no difference between the two groups in the realisation of /t/ consonant, at word-final in connected speeches is hereby rejected. Thus, the researcher is 95% confident that the female genders among the young educated Nigerians selected for this study has a higher articulatory proficiency for /t/ consonants at word boundary than their male counterparts.

## 5. Conclusion

This study examined variation in gender in boundary /t/ consonant deletion in the spoken English of male and female students of the aforementioned university. In the process of this investigation, it has identified the phonological environments in which boundary consonant deletions thrive. From the analyses, therefore, it was discovered that the phoneme /t/ becomes deleted at word boundary when it occurs in certain word environments such as /d, s, ɔ, w, θ, dʒ, f, k/. The t-test analysis on a scale of 0.05 showed that the rate of deletion of the boundary /t/ consonant for the male participants was significantly higher than those of their female counterparts. Therefore, “elision is considered a phonetically motivating process that is characteristic of connected speech, in that it enhances the ease of articulation” (Hannisdal 2006: 63, in Oladipupo and Akinjobi 2015: 103). It was also observed that for the male and female participants, deletions resulted from cluster simplification in syllable codas to achieve gestural economy while at the syllable onsets, deletions were not visible. However, in isolation, this phoneme was distinctly realised. Thus, like Soneye and Oladunjoye (2015), it is obvious that coda clusters patterns in Educated Nigerian Spoken English (ENSE) contribute significantly to the distinctiveness of English use in Nigeria.

The result of this study which revealed that female participants were more distinct in the realisation of /t/ in word boundary than their male counterparts; and the number of female participants who realised the phoneme /t/ was significantly higher than those of the male respondents prove that variation in gender in the articulation of boundary consonant is eminent among young educated Nigerian speakers of English.

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## THE POLITICS OF QUESTIONING: ASPECTS OF UK AND GHANAIAN PARLIAMENTARY QUESTION TYPES

*Kwabena Sarfo Sarfo-Kantankah*

### **Abstract**

In spite of the many authoritative classifications of questions, the examination of questions in different institutional contexts continues to generate new and interesting insights into the nature of questions. Research shows that question forms and functions substantially differ in institutional contexts such as courtroom, classroom, medical and political/parliamentary contexts. Using data from the UK Prime Minister's Questions and Ghanaian Minister's Questions, this paper explores UK and Ghanaian parliamentary questions. Based on the contextual properties of parliamentary questions, the paper categorises questions into independent/direct *yes/no* interrogatives, independent/direct *wh*-interrogatives, independent/direct alternate interrogatives, dependent/indirect *wh*-interrogatives and multiple interrogatives. The Ghanaian data contain two additional question forms, namely, dependent/indirect *yes/no* interrogatives and dependent/indirect alternate interrogatives. The paper further indicates that the major difference between UK and Ghanaian parliamentary questions is indirect *yes/no* interrogatives with mental process verbs. Again, using what I call *tellex* (tell, explain) *yes/no* questions, I submit that indirectness is a key feature of parliamentary questions, as it reflects the adversarial and ideological nature of parliamentary discourse. I show that the *tellex* questions are used as strategies and tactics for political point-scoring.

**Keywords:** questions, parliamentary questions, direct and indirect interrogatives, *tellex yes/no* interrogatives

### **1. Introduction**

The study of questions has a long-standing history, starting from the ancient Greek philosophers and rhetoricians such as Socrates, Plato and Aristotle, who used questions and answers for rhetorical purposes and the acquisition of knowledge (Ilie 2015; Miller

1993). However, the study of questions took a grammar and linguistic turn when Aristotle advanced that questions were “utterances whose truth or falsehood cannot be established” (Ilie 2015: 1). In linguistics, various approaches have been employed to explore the forms, meanings and functions of questions, including the structural grammarians (who emphasise syntax, e.g. word order) and transformational-generative grammarians (who consider questions as derived from statements). Questions have also been classified in syntactic/structural, semantic and pragmatic ways. Structurally, interrogatives are typically constructed with: (a) subject-operator inversion (e.g. *Is the Prime Minister at all concerned?*, where the subject, *the Prime Minister*, swaps position with the operator *is*); (b) introduced with a *wh*- item (e.g. *Who is to blame for that piece of mismanagement?*), or (c) through the use of a minor sentence (e.g. *Any ministerial appointments?*).

In spite of the many authoritative definitions and categorisation of questions, the examination of questions in different institutional contexts continues to generate interesting insights into language use in general and questions in particular. Researchers do not agree on the exact types of questions due to their structural, pragmatic and functional complexities. Current literature shows that looking at questions from pragmatic perspectives and institutional contexts is essential for understanding how questions work (cf. Ilie 2015). Classifying questions based on specific contexts has scholarly benefits, as it prevents overgeneralisation of classifications and the controversy between form and function. Thus, this study examines questions from a parliamentary perspective by exploring and comparing aspects of UK and Ghanaian parliamentary questions. It contributes to the ongoing debate that context-specific categorisation of questions has the potential for understanding pragmatic, contextual and institutional importance of language use. It also contributes to the view that native and non-native varieties of English language use can exhibit interesting similarities and differences.

The rest of the paper is organised into five sections, namely: review of relevant literature, theoretical lens, methodology, analysis and discussion, and conclusion.

## **2. Review of relevant literature**

This section reviews literature on questions generally and institutional questions specifically. The general, non-context-specific categorisation of questions is examined first, followed by context-specific forms of questions, including studies on parliamentary questions. The purpose of the review is to demonstrate that classifying questions is contextually-conditioned and the fact that there are overlaps among the question types. Recognising the overlaps helps to appreciate the forms and functions of context-specific questions. Thus, the review of literature offers grounds for the reader

to appreciate the kind of question classification I provide in the analysis and discussion in this paper.

## 2.1 General, non-context-specific categorisation of questions

Quirk, Greenbaum, Leech and Svartvik (1985: 387-401, 408-410) put questions into three main categories (*yes/no*, *wh-* and alternate questions) and three minor questions (exclamatory, rhetorical and echo questions), according to the response they require.

*Yes/no questions* (with declarative and tag-questions being sub-categories) are questions that demand a *yes/no* answer, as in: *Are the students travelling abroad? Yes/no* questions are usually constructed with a subject-operator inversion, that is, the subject (e.g. *the students*) and the operator (e.g. *are*) in the declarative sentence (e.g. *The students are travelling abroad*) swap positions. Subsumed under *yes/no* questions are declarative and tag questions. Declarative *yes/no* questions have a statement form but are normally said with a rising intonation, as in: *The students are travelling abroad?* Tag questions are questions which are attached to statements – the question is tagged onto statements, as, for example, *The students are travelling abroad, aren't they?*

*Yes/no* questions usually contain some orientations, leanings or preferences for answers and indicate the questioner's interest and thought. Quirk et al. (1985) talk of positive and negative orientations. Such orientations are important because they normally influence how the answerer/responder answers/responds to the question. This means questions can often be "biased according to the kind of answer the speaker expects, and are based on neutral, positive or negative assumptions" (Downing and Locke 2006: 202). Neutral orientations/assumptions are usually marked by non-assertive forms such as "any", "anybody", "ever", "yet", as, for example: *Are you inviting anybody to the programme?* Positive orientation is often marked by assertive forms such as "some", "somebody", "always", "already" and "too", as in: *Are you inviting someone to the programme?* (Downing and Locke 2006: 201-202; Quirk et al. 1985). Again, Downing and Locke (2006: 201-203) assert that negative-interrogative *yes/no* questions are based on conflicting attitudes. The speaker had originally expected that the answer would be or should be positive, but new evidence suggests that it will be negative. This conflict produces a feeling of surprise, disbelief or disappointment. If the addressee is directly involved, the biased question can imply a reproach. For example, *Is no one going to answer me?* (Someone has to answer me, but it seems no one is ready to do so). However, in their "'Some' vs 'Any' Medical Issues", Heritage and Robinson (2011: 30) observe that "any"-designed questions have "negative polarity and will tend to exert a chilling effect on patient response". This reinforces the concept that linguistic structures usually have different pragmatic functions in different contexts.

Wh-questions are questions which are introduced by such *wh*-words such as *who*, *whom*, *whose*, *which*, *where*, *when*, *why*, *what* and *how*. The questions demand answers which supply missing pieces of information. For example, *Who are those singing behind the building?* When we are forming *wh*-questions, the *wh*-words together with the clause containing the *wh*-word are placed at the initial position, except when the whole clause is introduced by a preposition, that is, when the clause acts as a prepositional complement.

*Alternative questions* are questions which demand as answers one of two or more alternatives contained in the questions. They are constructed by conjoining two or more separate questions. For example, *Do you want the red one or the white one?*

Biber, Johansson, Leech, Conrad and Finegan (1999) and Biber, Conrad and Leech (2002) identify five types of interrogatives, which are similar to the Quirk et al. (1985) types discussed above. They include: (a) *yes/no* questions (which ask the truth or otherwise of a proposition); (b) *wh*-questions (which seek information); (c) alternative questions (which make a choice between two or more options); (d) tag-questions (which seek confirmation of an expressed proposition); and (e) declarative questions (use declarative structures, which are also a type of *yes/no* question).

Huddleston and Pullum (2002: 867-917), on the other hand, have classified questions severally from semantic and pragmatic perspectives. They include the following: polar questions, alternative questions, variable questions, information questions, direction questions, biased questions, neutral questions, echo questions and ordinary (non-echo) questions,

*Polar questions* are questions which demand a *yes* or a *no* for an answer, similar to the *yes/no* forms identified by Quirk et al. (1985), Biber et al. (1999) and Biber et al. (2002). *Alternative questions* give a set of answers for the answerer to choose from, similar to those of Quirk et al. (1985), Biber et al. (1999) and Biber et al. (2002). *Variable questions* are a form of open interrogatives, marked by phrases containing interrogative words: *what*, *when*, *where*, *which*, *who*, *whom*, *whose*, *why* and *how*. They are similar to *wh*-questions as indicated by Quirk et al. (1985), Biber et al. (1999) and Biber et al. (2002). Answers to variable questions are open-ended.

*Information questions* are questions whose answers are in the form of statements, as in: *Have you written the exam?* *Direction questions*, contrasted with information questions, have their answers being in the form of directives, as, for example: *Shall I call the doctor?* It should be noted that right answers to information questions are true, but answers to direction questions cannot be said to be true or false.

*Biased questions* are questions in which the speaker is inclined towards accepting one answer as the right one. This is usually understood in context, where the speaker expects a certain response from the addressee. Huddleston and Pullum subsume declarative and tag-questions under biased questions. *Neutral questions*, contrasted with

biased questions, are questions which do not prefer one answer to another – questions are not inclined towards one answer over another.

*Echo questions* (see also Quirk et al. 1985) are formed out of what we call stimuli. A stimulus makes a statement and that statement is repeated (either fully or partially or by a pro-form) with a rising tone to make it a question. For example: *The lecturer says we are reading 10 books in one month* (stimulus). An echo question to this stimulus can, among others, be: *We are reading 10 books in one month?* or *10 books in one month?* Each of these questions raises either a surprise on the part of the speaker in relation to the stimulus or that the speaker did not hear the stimulus properly and, therefore, needs a repetition of it. *Ordinary (non-echo) questions*, unlike echo questions, are questions whose subject matter happens to be the content of the utterances from which the questions are formed. In other words, the process of forming ordinary questions is the same as that of the echo question, except for the fact the answer to the ordinary question coincides with the content of the statement from which the question is constructed.

Closely related to the above-mentioned classifications of questions are close-ended and open-ended question (cf. Tkačuková 2010a, 2010b). Close-ended (or closed) questions are questions that allow for only a minimal range of answers/responses. Included in this category of questions are *yes/no*, alternative, declarative and tag questions. Due to their limited range of answers/responses, close-ended questions are said to be coercive. Open-ended (or open) questions are those which allow for a wider range of answers/responses. They mostly include *wh*-questions, which are said to be less coercive, since they allow the answerer/responder more room to decide which information to provide as an answer.

Ilie (2015) talks about other forms of questions such as standard and nonstandard questions, which include rhetorical questions, examination questions, riddle questions, rhetorical questions and echo questions (for the explanation of echo questions, see as discussed above). This classification is pragmatically based. The questions are categorised based on the appropriateness of their answers. This is based on the assumption that questions fundamentally seek answers or information. Thus, questions that demand answers or information are said to be *standard/genuine* questions. Questions which do not require answers or information, but elicit such responses as confirmation, permission, suggestion, order, advice and other forms of directives are *nonstandard* questions. According to Ilie (2015), *nonstandard* questions occur in both institutional and non-institutional settings and interactions. The relevant question type for the purpose of this paper is rhetorical questions.

*Rhetorical questions*: rhetorical questions are questions that demand no answers from the addressee. They are questions by form, but assertions/statements functionally (Quirk et al. 1985). According to Ilie (1994: 128), a “rhetorical question is a question

used as a challenging statement to convey the addresser's commitment to its implicit answer in order to induce the addressee's mental recognition of its obviousness and the acceptance, verbalized or nonverbalized, of its validity". Jameel, Al-Ameedi and Al-Shukri (2013) list the following as some of the functions of rhetorical questions: accusation, assertion, blame, boast, complain, criticism, lament, predicting, rebuke, reminding, suggestion, advice, command, plea, request, warning, refusal, invitation, protest, admonishing, contempt, desperation, displeasure, dissatisfaction and anger, helplessness, impatience, indignation, insult, powerlessness, uncertainty, surprise, irony and sarcasm.

Ilie (2015) has also categorised questions into answer-eliciting, action-eliciting and mental-eliciting questions. These are categories of questions which are based on *response elicitation* or their *eliciting force*, that is, "the kind of response expected and/or required by the question" (Ilie 2015: 5-6). Answer-eliciting questions usually demand information to fill an information gap, and therefore are considered as standard questions. They may also be confirmation eliciting, permission asking and echo and questions. The *action-eliciting* class of questions include information or answer eliciting questions. *Mental-eliciting* questions include rhetorical questions, which do not usually demand any response.

Questions can also be classified as *direct* and *indirect* or *independent* and *dependent* (Downing and Locke 2006: 106; Ilie 2015: 2). Whereas direct/independent questions are constructed with independent interrogative clauses (e.g. *Where are you?*), indirect questions are embedded in matrix/superordinate clauses, where the indirect question becomes a complement of a verb such as *ask, find, know, wonder* (e.g. *I am asking where you are.*).

A close look at the foregoing indicates that there are overlaps among the question types. For example, Tkačuková (2010a; 2010b, see also Gibbons 2003) identifies *wh*-questions, indirect questions and requests as open questions, while *yes/no*, declarative, tag and non-sentence questions are considered closed questions, depending on the kinds of answers expected from the answerer. Another observation is that expected answers or responses are a major influencing factor for the classification of questions. And since institutional contexts have specific expectations and responses to questions, institutionalized studies of questions are crucial for understanding the nature of questions.

## 2.2 Context-specific question types: institutional and parliamentary questions

Questions have been studied from various institutional settings such as classroom interactions (see Chang 2012; Koshik 2010; Sánchez-García 2020); media context (Clayman 2010; Heritage 2002; Thornborrow 2011); legal context (Ahmed 2012;

Gibbons 2008; Tkačuková 2010a); medical context (Heritage 2010; Heritage and Robinson 2011; Raymond 2010); and political and/or parliamentary contexts (Bird 2005; Heritage and Roth 1995; Sarfo-Kantankah 2018). For the purpose of this paper, and because of space limitation, I will discuss questions in legal and political/parliamentary contexts, as a result of certain pragmatic similarities in questions in the two contexts.

Research in courtroom and legal settings indicates that, for the purpose of achieving witness and information control (Archer 2005; Gibbons 2003), restrictive and coercive questions such as *yes/no* interrogatives, alternative questions, declarative and tag-questions are predominant, especially in cross-examinations (Gibbons 2008; Ilie 2015; Luchjenbroers 1997). Ahmed (2012) has noted that declarative questions with or without tag and *yes/no* interrogatives or choice forms are the most frequent question types found in cross-examinations in the courtroom. The preponderance of coercive questions stems from the powerful status of attorneys or counsels and magistrates in the courtroom. However, Ilie (1994, 1995, 2015) has noted that questions in the magistrate's court also function argumentatively and that coercive questions such as rhetorical and tag-questions are also asked by witnesses or defendants to counteract power manipulation in a notoriously asymmetrical and adversarial interaction. Coercive, witness and information control and argumentative questions are familiar in the parliamentary context too.

Parliamentary questions have severally been studied and classified from discourse-structure, syntactic and pragmatic approaches. From a discourse-structure approach, Sarfo-Kantankah (2018) states that parliamentary questions are usually designed to make assertions instead of asking for information or confirmation. Politically, MPs' questions normally seek to either praise and enhance the integrity of (Prime) Ministers or governments, or impute motives, insinuate wrong doings in order to embarrass and damage the image of the (Prime) Ministers or governments (cf. Ilie 2015). The questions are mostly designed for political point-scoring purposes. Thus, according to Sarfo-Kantankah (2018), from a discourse structure perspective, parliamentary questions are designed as: (Preface/pre-question statement) + Question + (postscript/post-question statement). In the design, "preface/pre-question" and "postscript/post-question" statements, which are optional, are statements respectively made before and after asking a question. The preface/pre-question and postscript/post-question statements provide the contextual basis for the interpretation of the questions. Sarfo-Kantankah (2018) notes that the questions may be constructed with: (i) a preface plus the question; (b) the question plus a postscript; (c) a preface, the question and a postscript; (d) a mid-script, and (e) the question only. The study shows that about 89% of the UK and 76% of the Ghanaian parliamentary questions are designed with accompanying statements as prefaces, post-scripts or mid-scripts. Such accompanying

statements set out the “facts” on which the questions are based. The statements often contain assumptions that either accuse, criticise or praise the (Prime) Ministers and/or their governments, make propositions, give information, imputations, insinuations and suggest their own answers or convey particular points of view (Sarfo-Kantankah 2018).

The above-stated question design is similar to Harris’ (2001: 458) finding that UK parliamentary questions are normally designed with a “proposition oriented in a broad sense either to information or, probably less frequently, to action”. Both Wilson (1990) and Harris (2001) note that the predominant question form in the UK parliamentary questions is the *yes/no* interrogative form. Our position is that, due to the nature of parliamentary questions and responses, it is unfruitful to classify parliamentary questions as simply *yes/no*, *wh*-questions, alternate questions, open or closed just by looking at the syntactic structure of the question. It is better to examine them using a multilevel approach, that is, considering the syntactic-semantic-pragmatic factors simultaneously. This is important because the grammatical form of a question does not normally determine its pragmatic function (see Hymes 1974).

### **3. Theoretical lens: formal-pragmatic-functional identification of interrogatives and mental process**

This section describes the theoretical approach employed in the study. It looks at how questions have generally been identified and indicates the approach adopted in this paper. It also explains mental process and why it is adopted as an additional theory.

The definition and classification of questions have been said to be elusive as a result of the multiplicity of ways in which they can be defined and classified (Tsui 1992) and the fact that what counts as a question is not self-evident (Holmes and Chiles 2010). They can be categorised as a semantic category, a pragmatic or speech act category, a discourse category and a syntactic category (Tsui 1992). As noted earlier in the literature review, semantically (based on expected response) and syntactically (based on how they are formed), Quirk et al. (1985) categorise questions into three major types, viz: *yes/no* questions, *wh*-questions and alternate questions. Biber et al. (1999: 203-210) and Biber et al. (2002) identify similar question types based on the same/similar assumptions as Quirk et al. (1985). The classification of questions by these scholars has been described as problematic because, for example, a *yes/no* question may not necessarily seek an affirmation or disaffirmation, but rather seek (detailed) information (cf. Tsui 1992). The response to a question, therefore, depends on the context of its use, especially when questions are said to contextually obtain different orientations (Downing and Locke 2006; Quirk et al, 1985; Tsui 1992).

Scholars disagree on whether or not there is a relationship between question form and function (see Freed 1994: 634, for further expatiation on the argument about

the form-function relationship). Freed (1994) herself finds a relationship between form and function, and calls for a careful investigation of the correspondence between the two. She identifies six question types based on their forms and functions.

According to Hymes (1974), while speech acts can be analysed from syntactic and semantic structure perspectives, the interpretation of utterances is a feature of interaction and context as well as of grammar. Hymes (1974: 53) notes that, from a speech act standpoint:

a sentence interrogative in form may be now a request, now a command, now a statement; a request may be manifested by a sentence that is now interrogative, now declarative, now imperative in form; and one and the same sentence may be taken as a promise or as a threat, depending on the norm of interpretation applied to it.

Hymes' position is that the meaning of an interrogative is dependent upon context, as each speech community develops its own norms for understanding question formulation and interpretation (cf. Freed 1994). Hymes' position affirms the difficulty in identifying interrogatives.

The foregoing, including the literature reviewed in section 2, points to the challenges regarding the description and classification of questions and that questions can be classified in several other ways for specific purposes. The various theoretical issues imply that question identification is context specific. Therefore, in this study, I use a three-way approach to identify questions, namely: formal approach (*yes/no*, *wh-*, *alternative*, *tag-* and *declarative* questions), and *direct/independent* and *indirect/dependent* (Downing and Locke 2006) and *pragmatic/functional* approach (cf. Freed 1994; Tsui 1992). This approach is employed to account for the complex levels of interpretation, especially how parliamentarians use questions for political manoeuvring and the exposure of hidden agendas as well as ideological and tactical bias and political point scoring. Political mind-games are encoded in mental process verbs, an aspect of transitivity, that is, the grammar of experience, representing the modelling of experience (Halliday 1994).

It was realised in the analysis that most of the indirect/dependent forms in the Ghanaian parliamentary data involved the use of mental process verbs. It, therefore, became necessary to give those questions some special attention. Mental processes concern states of mind or psychological events (Bloor and Bloor 2013). They demonstrate “how speakers encode in language their mental picture of reality and how they account for their experience of the world around them” (Simpson 1993: 88); with the “understanding that people possess beliefs, thoughts and intentions that are part of their internal world, distinct from the world of observable behaviour and physical events” (Shatz, Wellman and Silber 1983: 301-302).

#### 4. Methodology

This section describes the data and methods of analysis employed in the study.<sup>1</sup> The UK parliament is said to be the oldest in the world, whose practices and Hansard publications date back to the 18<sup>th</sup> century (Harris, 2001), while Ghana's parliamentary practice and Hansard publication were only about 25 years old at the time of my data collection. Again, we are comparing English language use from an English-as-a-first-language setting (UK) with English-as-a-second-language setting (Ghana), which can give insights into the concept of new Englishes and nativisation.

The data were randomly selected questions from Hansards of the UK Prime Minister's Questions (PMQs) (accessed from [www.parliament.uk](http://www.parliament.uk)) and Ghanaian Minister's Questions (GMQs), which were obtained from the Hansard Department of the Parliament of Ghana. The UK PMQs is a weekly 30-minute session of the House of Commons when the Prime Minister answers questions from MPs (House of Commons 2013), while the GMQs is a one-hour session when Government Ministers answer questions from MPs on government programmes, actions and policies. It was such questions that were the focus of attention for the study. The PMQs data consisted of randomly selected 33 sessions of Prime Minister's Question Time (PMQT), spanning 2005 through 2014. Four hundred and twelve (412) questions were randomly obtained for the purpose of the study. The GMQs, on the other hand, comprised 29 randomly selected sessions of Minister's Question Time, covering 2005 through 2013. Out of the data, 438 questions were randomly sampled for the study. After sampling the questions, I read each question and identified it according to its form (that is, structure), directness/indirectness and function.

#### 5. Analysis and discussion

This section analyses and discusses the findings of the study. It discusses the types of UK and Ghanaian parliamentary questions, and gives a special attention to indirect/dependent *yes/no* interrogatives with mental process verbs as the major difference between the UK and Ghanaian parliamentary questions, and *tellex yes/no* interrogatives.

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<sup>1</sup> The data were part of a major study of UK and Ghanaian parliamentary discourse (see Sarfo-Kantankah 2016, 2018) for a detailed description of the setting, that is, the UK House of Commons and the Parliament of Ghana, and the methodology of the study).

### 5.1 Types of UK and Ghanaian parliamentary questions

As noted earlier, the parliamentary questions were categorised according to their form (*yes/no*, *wh-*, *alternative*, *tag-* and *declarative* questions), their directness/indirectness and function. The analysis yielded the following question types.

- i. Independent/direct *yes/no* interrogatives, e.g.  
Madam Speaker ... Can he tell us the state of the infrastructure that compelled him and the Military High Command to suspend the recruitment?  
(GH: Mr. I. A. B. Fuseini, 10 Jun 09/Col. 441)
  - ii. Independent/direct *wh-*interrogatives, e.g.  
What plans does the Prime Minister have to protect the progress that has been made and the way in which waiting lists have plummeted?  
(UK: Linda Gilroy, 7 Apr 2010/Col. 966)
  - iii. Independent/direct alternate interrogatives, e.g.  
... will the Prime Minister support such an investigation, or is he afraid that there is something to hide?  
(UK: John Mason, 7 Apr 2010/Col. 970)
  - iv. Dependent/indirect *wh-*interrogatives, e.g.  
Mr. Speaker, I want to find out from the hon. Minister what approximate proportion of the annual production of about four hundred thousand metric tonnes of fish is attributed to aquaculture?  
(Mr. Effah-Baafi, 6 Jul 05/Col. 1653)
  - v. multiple interrogatives, e.g.  
Mr. Speaker ... [#i] I just want to know if that contract is going to be executed this year, and if so, [#ii] when it is going to start and [#iii] when it is going to be completed.  
(GH: Mr. J. K. Avedzi, 9 Jun 06/Col. 764)
- In addition to these, the Ghanaian data contained:
- vi. dependent/indirect *yes/no* interrogatives, e.g.  
Mr. Speaker, I would like to know from her whether some exercise has been carried out to determine such areas of high potential for aquaculture development.  
(Mr. J.A. Ndebugre, 6 Jul 05/Col. 1653)
  - vii. dependent/indirect alternate interrogatives.  
Madam Speaker ... I want to know whether this is a tradition for the district to provide or it should be provided by the Ghana Fire Service.  
(Mr. Amidu, 2 Jul 10/Col. 1786)

Independent interrogatives (also called direct interrogatives by Downing and Locke (2006) are characterised by main clauses (see Examples i-iii). Independent/direct *yes/no* interrogatives are usually constructed with a subject-operator inversion as in Example (i). The independent/direct *wh*-interrogative is a question directly introduced by *wh*-words such as *who*, *which*, *when*, *where* and *how*, and usually followed by a subject-operator inversion (Example ii). Alternate interrogatives are characterised by two or more clauses (in the form of options) connected by *or*. Example (iii) is an alternate interrogative with two clauses connected by *or*: ... [#i] *will the Prime Minister support such an investigation, or* [#ii] *is he afraid that there is something to hide?* Multiple interrogatives (cf. Dickson and Hargie 2006) are multipart questions which combine two or more question forms in one question turn, as in Example (v). This example has three different parts, each of which can be a question on its own: *I just want to know* [#i] *if that contract is going to be executed this year, and if so, [#ii] when it is going to start and* [#iii] *when it is going to be completed.*

On the other hand, dependent interrogatives are characterised by embedded questions (Examples v-vii), also called indirect questions by Downing and Locke (2006). Examples include: dependent *wh*-interrogative (Example iv), dependent *yes/no* (Example vi) and dependent alternate interrogatives (Example vii). They are characterised by subordinate clauses that are attached to matrix clauses. Example (iv) contains a matrix clause (*I want to find out from the hon. Minister*) and an embedded interrogative (*what approximate proportion of the annual production of about four hundred thousand metric tonnes of fish is attributed to aquaculture*). Example (vi) has a matrix clause (*I would like to know from her*) and an embedded interrogative (*whether some exercise has been carried out to determine such areas of high potential for agriculture development*). The matrix clause in Example (vii) is *I want to know*, while the two coordinated embedded interrogatives are *whether this is a tradition for the district to provide* and *it should be provided by the Ghana Fire Service*. Figure 1 represents the frequency of various interrogative forms identified in both the Ghanaian and UK data.

Figure 1 shows that *yes/no* interrogatives were the most frequent in both datasets, similar to Wilson's (1990) distribution of parliamentary question types. The independent and dependent *yes/no* interrogatives in the Ghanaian data (27% + 16% = 42%) are almost the same as the UK independent forms (46%). There are differences between the UK and Ghanaian dependent *wh*-interrogatives and multiple interrogatives, but I am unable to explore them due to space limitation and the need for in-depth analysis. I discuss only aspects of *yes/no* interrogatives in this paper, though, where necessary, other forms are utilised in the analysis.

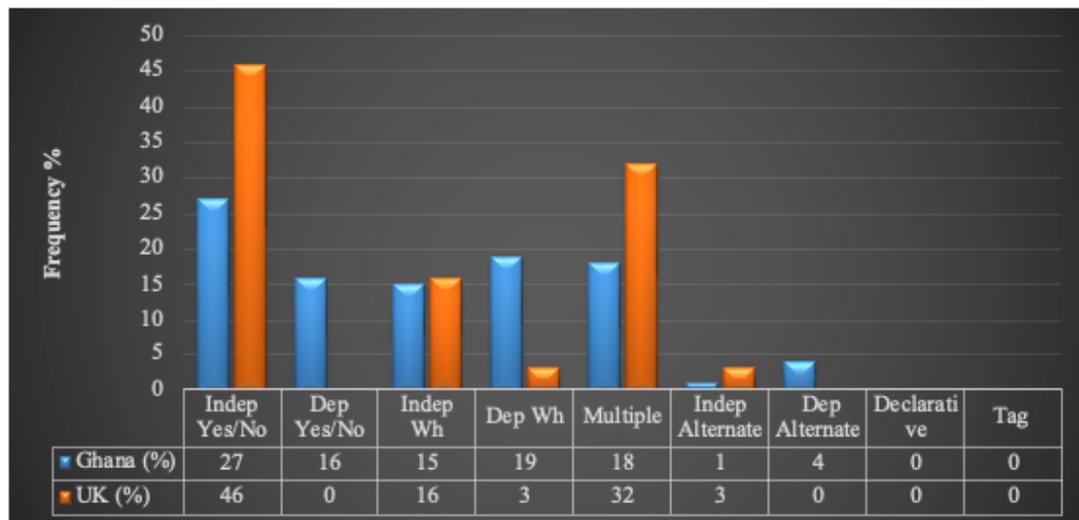


Figure 1: Categories of Ghanaian/UK parliamentary questions

### 5.2 Indirect *yes/no* interrogatives with mental processes: the major difference between Ghanaian Minister's and UK PM's questions

One major difference between the GMQs and the UK PMQs is the use of indirect *yes/no* interrogatives with mental processes in the Ghanaian data. As indicated in Figure 1, 16% of the GMQs were indirect/dependent *yes/no* interrogative forms, while there was none in the UK PMQs. The use of dependent/indirect interrogative forms as a major source of difference is also demonstrated by the use of dependent/indirect *wh*-interrogatives (Figure 1), where the Ghanaian MPs' use (19%) is six times that of the UK MPs' (3%). Indirect *yes/no* interrogatives (also called dependent/embedded interrogatives) are introduced by a requesting clause, and the *yes/no* question is embedded in that introductory clause. In this case, the embedded clause is usually introduced by either *whether* or *if* (Downing and Locke 2006: 105), as illustrated by Example 1.

Example 1: 8 Jun 06/Col. 709

**Mr. Moses Asaga [NDC]:** [i] Mr. Speaker, in Nabdam constituency, we have con-structed a police station, but we do not have the living quarters. Therefore, [Qi] *I want to know from the hon. Minister [Qii] whether there is a central Government budget for the building of police stations since we already constructed one but we need to complete it.*

**Mr. Kan-Dapaah [NPP]:** Yes, Mr. Speaker, there has always been from time immemorial, a budgetary allocation to the police to provide these facilities. The trouble is that it has not been sufficient enough to be able to meet the many needs of the many districts that we have. ...

In this example, the whole of the italicised structure is a superordinate clause, with an introductory matrix clause, [Qi] *I want to know from the hon. Minister*, and a subordinate clause/an embedded *yes/no* interrogative, [Qii] *whether there is a central Government budget for the building of police stations since we already constructed one but we need to complete it*. Number [Qii] contains two more clauses: a subordinate clause, *since we already constructed one*, and a co-ordinated clause, *but we need to complete it*; which form a postscript and a basis for the question. Number [Qi] is a boulomaic request, that is, an expression of a wish, hope or desire (Hengeveld 1988) or a “desiderative” expression (Halliday and Matthiessen 2004: 210), which Mr Asaga uses to express a desire “to know” whether there is a central government budget allocation for the building of police stations. The desiderative expression *I want to know* allows Mr Asaga to thrust himself into a senser position. And since it is *want to know from the Minister whether ...*, there is a complex chain of knowing, which allows Mr Asaga to request the opportunity to share in the knowledge of the Minister. There are two pragmatic implications for such a construction. First, the matrix clause (*I want to know from the Minister*) foregrounds the desire. Second, by thrusting himself into the senser position and expressing the desire or wish to know, Mr Asaga makes the question conditionally hearer-oriented (Grzyb 2011), showing his “entitlement” to ask the question and the “grantability” of response (Antaki and Kent 2012; Drew and Walker 2010: 109-110). Parliamentary questions allow MPs to hold (Prime) Ministers and their governments “accountable for their political intentions, statements, and actions” (Ilie 2006: 192). MPs are, therefore, entitled to ask their questions and (Prime) Ministers are obliged to answer/respond to them. Expressing and foregrounding the desire to ask the question, when Mr Asaga is entitled to ask, signals politeness, while it obliges the Minister to answer or respond more positively. Wilson (1990: 62) has said that supporting the use of first-person singular forms by mental-process verbs such as “think”, “want”, “wish” may reflect “intrinsic attitudes, particularly in the communication of *sincerity*”. Such expression of sincerity may scaffold the politeness contained in Mr Asaga’s question.

Other desiderative structures for constructing matrix clauses in the dependent questions are: *I would want to*, *I would like to*, *I will want to*, *I wish to* and *I would be grateful*, which are usually followed by such verbs as *know*, *find out* and *ask*. In other words, the dependent *yes/no* interrogatives have the following structures (Table 2), as illustrated in Examples 2-7.

Table 2: The structure of dependent *yes/no* interrogatives

	Desiderative	Verb	if/whether + nominal clause
i.	I want to	know (38)/find out (3)/ask (7) ...	+ if/whether + nominal clause
ii.	I would want to	know (12)/find out (8)/ask (3) ...	+ if/whether + nominal clause
iii.	I would like to	know (23)/find out (2)/ask (6) ...	+ if/whether + nominal clause
iv.	I will want to	find out (1) ...	+ if/whether + nominal clause
v.	I wish to	find out (1) ...	+ whether + nominal clause
vi.	I would be grateful .....	(1) ...	+ if/whether + nominal clause

“Know” (73 in all) and “find out” (15) are mental (cognitive) processes, which are knowledge seeking; whereas “ask” (16) is a verbal process, which demands an answer (note: these verbal processes are here only for the purposes of illustrating the dependent/indirect *yes/no* interrogatives). In all, the mental processes account for 85% of these processes in Table 2. The following are illustrations.

- (i) I want to know/find out ... + if/whether + a nominal clause

Example 2: GH 1 Feb 07/Col. 100:

**Alhaji Pangabu Mohammed [NDC]:** Mr. Speaker, *I want to find out from the hon. Minister whether there is good collaboration between the Ministry of Food and Agriculture and Ministry of Trade and Industry.*

- (ii) I would want to know/find out ... + if/whether + a nominal clause

Example 3: GH 6 Jul 05/Col 1641:

**Mr. John Gyetuah [NDC]:** Mr. Speaker, *I would want to ask the hon. Minister whether she could tell the House the stock level of fishes in the marine waters.*

- (iii) I would like to know/find out ...+ if/whether + a nominal clause

Example 4: GH 9 Feb 11/Col. 936

**Prof George Y. Gyan-Baffour [NPP]:** Madam Speaker, *I would like to know from the Hon Deputy Minister if he is aware that the resettlement programme that is going on now is supposed to be the nucleus of this Bui City concept that he has mentioned.*

- (iv) I will want to know/find out ...+ if/whether + a nominal clause

Example 5: GH 3 Jun 09/Col. 157

**Ms. Beatrice B. Boateng [NPP]:** Madam Speaker ... He mentioned the wearing of seat belts, et cetera. I know it embraces a lot, but I think there is something very important, like using mobile phones while driving. *I will want to find out whether that is part of the things he is going to enforce....*

- (v) I wish to find out ... + whether + a nominal clause

Example 6: GH 8 Jul 05/Col. 1768:

**Mr. Effah-Baafi [NDC]:** Mr. Speaker, *I wish to find out from the hon. Deputy Minister whether he is aware that the availability of a police facility is a prerequisite for the establishment of a banking institution, one of which is in the offing at Jema.*

- (vi) I would be grateful + if/whether + a nominal clause

Example 7: GH 3 Jun 2009/Col. 161:

**Mr. Joe Ghartey [NPP]:** *I will be grateful if the Hon Minister could tell us under what law the police are arresting people for tainted windows.*

Based on the above-given analysis, the general structure for the indirect *yes/no* interrogatives can be represented as:

*I want to/would like to/would want to/will want to/wish to + verb + (from X) + whether/if + Y.*

*Whether/if+ Y* is technically referred to as a *yes/no* interrogative nominal clause (Leech and Svartvik, 1994). The structure of the questions allows MPs to delay the questions by embedding them in another clause, which is a hedging strategy that reduces imposition and, therefore, marks politeness. This is reinforced by the matrix clauses being hedged performatives (Adika 2012: 159; Downing and Locke 2006: 211), as in Examples (ii)/3, (iii)/4, (iv)/5, (v)/6 and (vi)/7 above, signalled by *would*, *will* and *wish*. In all about 48% of questions in the GMQs employed these forms of structures. Apart from their pragmatic effects of foregrounding, mitigation and politeness, these interrogative forms may also be accounted for by mother tongue (L1) interference.

According to Adika (2012), most, if not all, indigenous Ghanaian languages lack modals. Anderson (2009: 72) states that when making polite requests, Ghanaian speakers of English “do not frequently use modals such as ‘can’, ‘could’, ‘may’, and ‘might’... [they rather] use more ‘want’-statements and imperative forms that may be perceived as impolite forms in native varieties of English”. Adika (2012: 159) reports that studies in ways of making request among Ghanaians

indicate that the syntactic forms combined with the lexical choices that characterise the semantic and syntactic structure of requests made by Ghanaians point to a uniqueness of use (cf. Bamgbose 1997) that distinguishes these forms from the stylistic preferences of inner circle users. Broadly, GhaE requests forms are characterised by direct request strategies involving the use of imperatives, need/want statements, hedged performatives, and mild hints among others. Also, unlike native speakers Ghanaian users of English do not frequently use modals when they make requests in naturally occurring situations; instead they prefer to use imperatives and ‘want’ statements because there are no modals in any of the indigenous Ghanaian languages.

The lack of modals and other auxiliaries in indigenous Ghanaian languages reflects in the absence of subject-operator inversions in the formation of questions in those languages, as in examples (i)/2-(vi)/7 above. The implication is that questions in Ghanaian languages are formed by means of declarative structures. Adika (2012: 159, see also Anderson 2006, 2009: 71) gives examples of ways of making requests in Ghanaian English as:

- i. *Imperatives*: Bring me the file of Mr. Ocran, please; Give me some rice please;
- ii. *Hedged performatives*: Please, I would be most grateful if you sign these letters for me.; I would like it if you gave me a pay-in slip.
- iii. *Want statements*: Please I want a pay-in slip; Please I need a pay-in slip.

- iv. *Query preparatory forms*: Please, can I have a pay-in slip? Could you please sign my form for me?
- v. *Mild hints*: Please sir, tomorrow is the deadline for registration; Please, I am here to register.

Adika (2012) and Anderson (2006, 2009) are quick to add that these are features of spoken rather than written Ghanaian English. To a very large extent, the Ghanaian parliamentary questions support Adika's claim, as about 48% of the question forms used the "would/want to" structures.

There are structural differences between some of Adika's examples and our parliamentary indirect *yes/no* interrogatives, though. First, apart from *hedged performatives*, Adika's *imperatives* and *want statements*, which are direct request forms, do not contain *whether/if* subordinators. The presence of *whether/if* expresses a weak obligation. This demonstrates the institutionalised and polite nature of these parliamentary questions. Second, *mild hints* are not found in our data. Third, the *query preparatory forms* are modalised forms and subject-operator inversions, which are also found in our data. This shows that requests made by Ghanaian speakers of English can be both direct and indirect, including a lexical form such as "please" (Anderson 2009: 81). "Please" occurred 40 times (0.27/1000 words) in the Ghanaian data, while it occurred nine times (0.05/1000 words) in the UK data. The majority of the GMQs (about 52%) were constructed using the subject-operator inversion rule of English. This points to the fact that, as English-as-second-language (ESL) speakers, Ghanaian parliamentarians are conversant with interrogative constructions in English. However, to the extent that the indirect interrogative forms are mainly a spoken feature, this suggests a transfer of L1 features into English in naturally occurring communicative situations and contexts. There is a fusion of English and Ghanaian language features in the parliamentary question forms.

Another group of *yes/no* interrogatives is what I have called *tellex* (tell, explain) *yes/no* interrogatives. While the *tellex* interrogatives are syntactically *yes/no* interrogatives, functionally, they are wh-interrogatives, as discussed in the next section.

### 5.3 Tellex *yes/no* interrogatives

MPs' *yes/no* interrogatives are often designed in such a way that they ask (Prime) Ministers to give narrative, explanatory responses or disclosure of information. The *tellex yes/no* interrogatives are characterised by narrative-requesting verbs such as "explain", "tell" and "clarify", similar to what has been called TED (tell, explain, describe) questions in legal contexts (cf. Oxburgh, Myklebust and Grant 2010; Gabbert, Hope, La Rooy, McGregor, Ellis and Milne 2016). But there was only

one instance of “clarify” and no use of “describe” in the data for the current study. The *Oxford English Dictionary* (online) (2014) gives about seven (7) senses for the verb “explain”, of which the relevant ones are (italics and emphasis mine):

- i. To unfold (a matter); to *give details of, enter into details* respecting (Sense 3a).
- ii. To *make plain or intelligible*; to **clear of obscurity or difficulty** (Sense 3b).
- iii. To assign a meaning to, *state the meaning or import of*; to interpret (Sense 4a).
- iv. To *make clear* the cause, origin, or reason of; to *account for* (Sense 5)
- v. To *make one’s meaning clear and intelligible, speak plainly*; to **give an account of one’s intentions or motives** (Sense 6).

It also defines the verb “tell” in about 25 senses, among which the relevant ones for our discussion are:

- i. To mention in order, *narrate*, relate. Make known, declare (Sense 1).
- ii. To *give and account or narrative of (facts, actions, or events)*; to narrate, relate (Sense 2a).
- iii. To **make known by speech** or writing; to *communicate (information, facts, ideas, news, etc.)*; to *state, announce, report, intimate* (Sense 3a).
- iv. To **declare, state formally or publicly**; to *announce, proclaim, publish* (Sense 3b).
- v. To *express in words* (thoughts, things known) (Sense 4c).
- vi. To **disclose or reveal** (something secret or private); to divulge (Sense 5a).

The highlighted parts of these definitions of “explain” and “tell” indicate that narratives are required. Particularly, the bold parts of senses 3b and 6 (“explain”) and 3a, 3b and 5a (“tell”) imply disclosure of hidden agenda, which is an important part of parliamentary discourse. Such questions are significant because “parliamentary dialogue contributes to revealing frames of mind and beliefs as well as exposing instances of doublespeak and incompatible or inconsistent lines of action” (Ilie, 2010a: 337) and it helps to “reveal hidden agendas and ideological, tactical, bias” (Ilie 2010b: 1). These definitions denote that when “explain” and “tell” are used in framing questions, as found in the data, they demand descriptions as responses or answers. They are knowledge-seeking or knowledge-establishing questions (Hall 2008) and, thus, require (Prime) Ministers to provide details of facts, actions and events. Let us consider Examples 8 and 9.

Example 8: GH 3 Jun 08/Col 259:

**Ms. Akua Dansua [NDC]:** Mr. Speaker, *can the hon. Deputy Minister tell this august House who the other members of the committee are?*

**Dr. (Mrs) Ashitey [NPP]:** Mr. Speaker, I do not have my list, but I know that Mr. Eleblu was the chairman of the committee.

Ms Dansua's question is a request for information, which is designed to reveal the Deputy Minister's bias in constituting the committee. The substantive question was about measures taken to implement recommendations of a special audit report on perceived malfeasances by the National Health Insurance Council. Some MPs had already raised doubts about the authenticity of the report and its recommendations. Therefore, Ms Dansua's question about the members of the committee reinforces the doubts, since the authenticity of the report partly depends on the quality of the membership of the committee. For example, was the membership partisan such that it could have ignored issues that could damage the image of the government in the report? Thus, Dr (Mrs) Ashitey's failure to provide the names of the other members of the committee is evasive, an attempt to avoid further debate about the legitimacy of the report. Consider also:

Example 9: UK 22 Mar 06/Col 282:

**Mr. Angus MacNeil (Nah-Eileanan an Iar) (SNP):** *Can the Prime Minister explain to the House why, even before the loan scandal and the Metropolitan police investigation, 80p in every pound of individual donations to the Labour party came from people who were subsequently ennobled by him?*

**The Prime Minister [Lab]:** I am proud, actually, that the Labour party has the support of successful business people and entrepreneurs. I am quite sure that that is not the case with the Scottish National party—for the very good reason that its policies would wreck the Scottish economy.

The expression "Can the Prime Minister *explain ... why*" demands detailed information. The question is a directive and a challenge to PM Tony Blair to explain why he ennobled people who donated to the Labour party. The question is also a criticism, as it draws a comparison with "the loan scandal", referring to the "loans for peerages" scandal (Helm 2006: no pagination). Being a narrative-requesting or information-requesting verb, "explain" requires Tony Blair to make plain, clear obscurity or give details of his

decision and action. It is an attempt to expose abuse of office by the Prime Minister by asking him to make self-revealing declarations in order to embarrass and damage his image (Ilie 2015). This is a parliamentary questioning strategy and tactics for political-point scoring. The demand for details is emphasised by “why”, an adverb of reason. The question imputes that Blair had had underhand dealings with “people who were subsequently ennobled by him” – it suggests people had paid bribes to get knighthoods. A “Yes, I can explain” or “No, I cannot explain” response without a further explanation would appear rude, strange or demonstrate a lack of understanding of the importance of the question. It would also imply admitting to being paid bribes. Tony Blair, rather sarcastically, explains why and defends his association with “successful business people and entrepreneurs” as a good one, thereby debunking the dishonesty implied by the question.

The *tellex yes/no* interrogative types included the following forms.

- GH: Can ... *explain* ... why (1)  
 Could ... *explain* what (1)  
 Can ... *tell* ... what (3), when (2), which (1), who (1), that (1), whether (1), the (5), some of the (2)  
 Will ... *tell* ... what (2), how (2)  
 Would ... *tell* ... what (2), which (1), when (1), zero-wh (2)  
 May ... ask ... *to tell* ... the form of assistance which ... (1)
- UK: Can ... *explain* ... why (13)  
 Could ... *explain* exactly what (1)  
 Will ... *explain* ... why (7)/what (1)/that (1)  
 Can ... *tell* ... why (5)/what (11)/how (3)/when (1)/whether (2)/of any (1), the number (1)  
 Will ... *tell* ... why (1), what (4), whether (5), how (1), which (1), that (2) to- infinitive (2)

Designed mostly to seek specific or detailed information, the *tellex* questions are highly ideologically biased. They are mainly constructed to request information that reveals damaging secrets about the (Prime) Ministers or governments. The *tellex* questions reflect the adversarial and ideological nature of parliamentary discourse. Asking (Prime) Ministers to reveal secrets and biases is an attempt to discredit them and damage their political career, for the opponents’ advantage, which is a political-point scoring strategy or tactics.

The *tellex yes/no* interrogatives can be considered at different levels: by form, they are *yes/no*; by function, wh-questions, and can also be considered as a hybrid, being a combination of a *yes/no* and a wh-question. Tkačuková (2010a, 2010b) calls them

indirect *wh*-questions. We need to recognise an unspoken *yes/no* answer embedded in the responses. By giving the information (Example 9), the (Prime) Minister has agreed to give it, which is a silent response to the *yes/no* part of the question. Example 8 can be split into: *can the hon. Deputy Minister tell this august House* as a *yes/no* and *who the other members of the committee are* as a *wh*-interrogative. In this sense, there is always a silent response to the *yes/no* part of the question, if the (Prime) Minister does not evade the question. This is similar in structure to quoted questions, such as Example 10.

Example 10: UK 22 Mar 06/Col. 284:

**Mr. David Heath (Somerton and Frome) (LD):** Last week I asked the Prime Minister a perfectly straightforward question about long-term care of the elderly, and he gave me a totally inadequate reply about pensions. *So can I ask him again: why do elderly people in this country continue to have to sell their homes to pay for their care in old age, eight years after he said that he would leave the country if that was still the case?*

*So can I ask him again* is a *yes/no* interrogative that introduces the quoted question: *why do elderly people in this country...?* *So can I ask him again*, a metadiscourse structure (cf. Hyland 1998), functions as request for permission to ask the question and shows the emphasis and urgency that Mr Heath attaches to the question. Of course he does not need permission from the PM to ask the question, and, therefore, it could be considered as marking politeness.

## 6. Conclusion

The purpose of this paper was to identify forms of UK and Ghanaian parliamentary questions from a multilevel approach, namely: formal, (in)directness and pragmatic/functional approaches. The question forms identified include: independent/direct *yes/no* interrogatives, independent/direct *wh*-interrogatives, independent/direct alternate interrogatives, dependent/indirect *wh*-interrogatives and multiple interrogatives. The analysis further shows that Ghanaian Members of Parliament (MPs) use two other forms of questions that are not used by UK parliamentarians, viz, dependent/indirect *yes/no* interrogatives and dependent/indirect alternate interrogatives. The paper demonstrates that the major difference between UK and Ghanaian parliamentary questions is the use of indirect *yes/no* interrogatives with mental process verbs by Ghanaian MPs. A detailed analysis shows that the indirect *yes/no* interrogatives have the structure:

*I want to/would like to/would want to/will want to/wish to + verb + (from X) + whether/if + Y.*

The *verb* includes main verbs such as *know*, *ask* and *find out*, *X* is the (Prime) Minister, and *Y* is the action or object requested of the (Prime) Minister. *Whether/if + Y* is technically referred to as a *yes/no* interrogative nominal clause (Leech and Svartvik, 1994: 313). The structure of the questions allows MPs to delay the questions by embedding them in another clause, which is a hedging strategy that reduces imposition and, therefore, marks politeness. The paper notes that, apart from their pragmatic effects of foregrounding, mitigation and politeness, these interrogative forms may also be accounted for by mother tongue (L1) interference. Research (see Adika 2012; Anderson 2009) shows that indigenous Ghanaian languages lack modals and, therefore, when Ghanaian speakers of English make polite requests, they do not normally employ modal auxiliaries such as *can*, *could*, *may* and *might*. They rather use *want*-statements and imperative forms, which is why we see the indirect *yes/no* interrogative forms among the Ghanaian parliamentary questions.

By further exploration of the *yes/no* interrogatives, the paper additionally identifies what I have described as *tellex* (tell, explain) *yes/no* interrogatives. The analysis shows that, while the *tellex* interrogatives are syntactically *yes/no* interrogatives, they are functionally *wh*-interrogatives. The *tellex* interrogatives are used largely for political manoeuvring and the exposure of hidden agendas as well as ideological and tactical bias and political point scoring. In other words, the *tellex* interrogatives are used for reasons that serve specific desired outcomes: to discredit political opponents for political purposes.

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## DIFFERENT PRONOUNS, SAME REFERENTS: A CORPUS-BASED STUDY OF *I*, *WE* AND *YOU* IN L2 LECTURES ACROSS DISCIPLINES

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### Abstract

In recent times, studies on *I*, *we* and *you* (tri-PP) in academic lectures have focused on the L1 context. This paper, however, investigates the commonalities in the discourse reference of *I*, *we*, and *you* across three disciplinary supercommunities (DSs): Humanities (HS), Social Sciences (HS), and Natural Sciences (NS), using a corpus from an L2 context. The concordance tool in *AntConc* was used to search for all instances of the tri-PP. The referents of the tri-PP were identified based on the contextual and co-textual clues. The study revealed three referents –lecturer, students, and lecturer + students – which were common to all the three investigated pronouns. Furthermore, the above referents were also noted to be common to all the three broad knowledge domains. In a nutshell, the study revealed cross-pronominal and disciplinary commonalities in the discourse referents in academic lectures. The implications for the theory of referentiality are also discussed.

**Keywords:** classroom discourse, academic lectures, personal pronouns, discourse referents, corpus-based approach

### 1. Introduction

Interpersonal or interactive resources constitute part of the language of academic lectures (see Crawford Camiciottoli 2007), which are generally employed to foster interaction between the discourse participants (i.e. lecturers and students). Among the available interactive resources are questions, imperatives, lexical bundles, metadiscourse, and personal pronouns (see Friginal, Lee, Polat & Roberson 2017; Lee & Subtirelu 2015; Liu

& Chen 2020, Nashruddin & Ningtyas, 2020; Sánchez-García 2020), which have engendered the attention of scholars in recent times. Personal pronouns, particularly *I*, *we* and *you* (the triumvirate personal pronouns, referred to hereafter as ‘tri-PP’) are key interactive resources in academic lectures (Akoto 2020; Akoto et al. 2021 a, b). Friginal, Lee, Polat and Roberson (2017, 95) note that ‘personal pronouns play important roles in the classroom, as these markers reflect levels of learner and teacher involvement, engagement, and interaction in classroom events’. Consequently, a number of studies have focused on various aspects of their use in spoken academic genres such as classroom lectures, supervisory sessions, and tutorial sessions. Most of such studies (e.g. Ädel 2010; Connor 2008; Dafouz, Nunez & Sancho 2007; Fortuño & Gómez 2005; Milne 2006; Rounds 1987b, and Zhang, Gao & Zheng 2014) explore the referents of the tri-PP, which play significant roles in lecturers’ interaction with their students.

Some studies considered the effect of disciplinarity on the discourse referents of the tri-PP in academic lectures (Akoto 2020; Akoto et al. 2021a, b; Yaakob 2013; Yeo & Ting 2014)). For instance, Yaakob (2013) and Yeo and Ting (2014) investigated the semantic referents of the tri-PP in university classroom lectures across disciplinary supercommunities (DSs). Yeo and Ting (2014) adopted the dipartite view on classification of disciplines into arts and science, while Yaakob (2013) adopted the quadripartite approach (arts and humanities, social sciences, life sciences, and physical sciences). Yeo and Ting (2014) observed that *you* was used to refer to speakers only, audience only and speakers + audience. Yeo and Ting’s (2014) study was generally confirmed by Friginal et al. (2017) who identified similar referents for *I*, *we* and *you*. Based on a similar lecture-introduction corpus from MICASE, Yaakob (2013) also examined the referents of the tri-PP across Arts and Humanities, Social Sciences, Life/Physical Sciences. He discovered that *I* as a lecturer, and *I* as a student were common to all broad knowledge domains. On the other hand, *we* recorded five semantic referents: lecturer, students, lecturer + students, people in general, and people in the field. Furthermore, *you* was used to refer to students, anyone, and anyone in the field. Unlike Yeo and Ting (2014), Yaakob (2013) noted both qualitative and quantitative differences in the semantic referents of the tri-PP. For instance, he realized that *I* for people in general and *we* as *people in the field* were limited only to Life/Physical Sciences. Again, *you* for anyone in the field was identified to be common to Arts and Humanities, as well as Social Sciences only.

Furthermore, Rounds (1987a), in her study on the use of PPs in Mathematics lectures, identified other referents of *I* and *we* beside their ‘prototypical uses’ (p. 16) or ‘traditional semantic mappings’ (p. 17). She noticed that semantically *I* designated lecturer,

Mathematicians (where she argues can be replaced with *they*) and anyone who studies Mathematics (which she contends can be replaced with the indefinite pronoun *one*). On *we*, Rounds (1987a) noted that it has a traditional semantic mapping inclusive *we* (*I + you*) and exclusive *we* (i.e. *I + they*) –which she identified in the corpus. She noted what she termed discourse-defined inclusive and exclusive *we* which respectively alluded to lecturer + students, and lecturer + mathematicians. Additionally, Rounds found *we* as *I* (lecturer), *we* as *you* (students) and *we* as *one* (anyone who does Mathematics). She remarked that *we* is in free variation with *I* and *you*, a realization confirmed by latter studies (e.g. Yaakob 2013; Yeo & Ting 2014; Zhihua 2011).

Furthermore, Fortanet (2004), in her study comprising lectures from education, Japanese Literature, Anthropology and Medical Anthropology, identified eight referents of *we*. She also used the traditional semantic mapping exclusive/inclusive *we* (Rounds, 1987a) as a basis. Besides, she identified *we* for a larger group of people including speaker and audience, speaker + audience, *we* for *I*, *we* for *you* (audience), speaker + other people, *we* for indefinite *you* or *one*, *we* for *they*, and then *we* for *you*. Similarly, Gomez (2006) compiled a corpus from the MICASE, totaling 54,529 words. She also realized two referents for *I* (i.e. *I* for fixed speaker, usually lecturer, and *I* for changing speaker). *You* also recorded the following as referents: audience (plural), interlocutor in dialogue (usually singular), interlocutor in reported speech (usually singular), *they*, *people*, *we*, and *I*.

The previous studies generally used corpora from the L1 context (contra Yeo & Ting, 2014). Finally, few of the studies (e.g. Akoto, 2020; Akoto et al. 2021a, b; Yeo & Ting 2014; Yaakob 2013) considered disciplinarity as a factor to the referents of the tri-PP. Moreover, they either adopted the quadripartite (e.g. Yaakob 2013), or di-partite (e.g. Yeo & Ting 2014) views to disciplinarity. This study, however, adopts the tripartite view that classifies disciplines into Natural Sciences (NS), Social Sciences (SS) and Humanities (HS) (see Hyland 2009) in order to establish how disciplinary commonalities inform the same referents across the tri-PP. Specifically, the paper examines the discourse referents common to the tri-PP across the three broad knowledge domains in academic lectures.

In the ensuing sections, we examine issues on methodology; discuss findings, and finally conclude with the implications of the findings, and recommendations for further studies.

## 2. Corpus and Analysis Procedure

There are several kinds of lectures in academia classroom lecture, inaugural lecture and

plenary lecture. The present study focused on classroom lecture which is regarded as part of classroom genres (Fortanet 2005). Consequently, we audio-recorded undergraduate academic lectures from two of the leading public universities in Ghana: Kwame Nkrumah University of Science and Technology, and University of Cape Coast as the data for the study. All the included lectures were from Ghanaian lecturers from the two English-medium universities under study, large classes, regular undergraduate students, spontaneous (not scripted) lectures, first semester introductory courses. The lectures were manually transcribed (guided by transcription conventions adapted from Jefferson 2004; Simpson et al. 2002) and processed into computer readable form. Given that the focus of the paper is the tri-PP used by lecturers, only lecturer-inputs in the lecturer-student classroom interaction were included in the corpus.

Table 1: Details on the corpus

<b>Disciplinary Supercommunities</b>	<b>Number of Lectures</b>	<b>Word Counts</b>
<b>Humanities</b>	<b>7</b>	<b>36,586</b>
English Language	3	
Philosophy	2	
Religious Studies	2	
<b>Social Sciences</b>	<b>8</b>	<b>43,916</b>
Law	2	
Communication Studies	2	
Political Science	2	
Educational Foundations	2	
<b>Natural Sciences</b>	<b>3</b>	<b>34,622</b>
Electrical Engineering	1	
Mathematics	1	
Biology	1	
<b>Total</b>		<b>115,124</b>

Table 1 shows the DSs and the individual disciplines, the sizes of the subcorpora and overall corpus size.

We used the concordance tool in *AntConc* (v. 3.5.7) Anthony, 2018) to search for the tri-PP in the corpus. Baker et al. (2008, 279) observe that “concordance analysis affords the examination of language features in co-text, while taking into account the context that the analyst is aware of and can infer from the co-text”. We then manually examined each

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‘occurrence’ to determine: a) its ‘pronounness’ as in ‘I’ in the name ‘I K Abban’ from the SS subcorpus referents in Figure 1.

Concordance Hits 542		File
Hit	KWIC	
198	Of course somebody like David and other people I can tell them because I just want to kill their voice. When I do that I do that as a joke. The point is	psscsciknu
199	president in consultation with the council of state appointed a new justice I. K. Abban who was then a supreme court judge as a chief justice and it w	edufnsocsci
200	and set against the Attorney General as the first defendant and the Justice I K Abban as the second defendant. And this was the release it was seeking	edufnsocsci
201	institution. The president should not have abrogated and appointed justice I K Abban as he was not a person of high moral character and proven integ	edufnsocsci
202	er and proven integrity. Thus a declaration that the appointment of justice I K Abban as Chief Justice by the president as well as the advice from the c	edufnsocsci
203	uld declare his appointment as null and void. An injunction issuing justice I K Abban for acting or for wanting to act in the office of chief justice. What	edufnsocsci
204	nothing. And also a declaration that the warrant of appointment of Justice I K Abban was null and void and therefore he should be delivered for Supr	edufnsocsci
205	the case was application. The court stated that the appointment of Justice I K Abban a non-justiciable political question and that it was a duty that wa	edufnsocsci
206	ority whatsoever to restrain the second defendant who is the chief justice I K Abban erh to erh be appointed as the chief justice, let alone cancelling r	edufnsocsci
207	president in consultation with the council of state appointed a new justice I. K. Abban who was then a supreme court judge as a chief justice and it w	lawsocsciucc
208	and set against the Attorney General as the first defendant and the Justice I K Abban as the second defendant. And this was the release it was seeking	lawsocsciucc
209	institution. The president should not have abrogated and appointed justice I K Abban as he was not a person of high moral character and proven integ	lawsocsciucc
210	er and proven integrity. Thus a declaration that the appointment of justice I K Abban as Chief Justice by the president as well as the advice from the c	lawsocsciucc
211	uld declare his appointment as null and void. An injunction issuing justice I K Abban for acting or for wanting to act in the office of chief justice. What	lawsocsciucc
212	nothing. And also a declaration that the warrant of appointment of Justice I K Abban was null and void and therefore he should be delivered for Supr	lawsocsciucc
213	the case was application. The court stated that the appointment of Justice I K Abban a non-justiciable political question and that it was a duty that wa	lawsocsciucc
214	ority whatsoever to restrain the second defendant who is the chief justice I K Abban erh to erh be appointed as the chief justice, let alone cancelling r	lawsocsciucc

Figure 1: Concordance shot of pseudo-I from SSC

Concordance Hits 720		File
Hit	KWIC	
1	free body diagram to consider. I think in class I also said this is for, you use it per	ergnatsciknu
2	also going to be one one one one. So I am concentrating on this. Are you following?	matnatsciknu
3	on. Alright. And when that happens, what is that I am doing? Am I not changing the space between	ergnatsciknu
4	this with your calculator and not go through what I am doing. Now! Having understood the factorial a	matnatsciknu
5	rial two factorial are you all following all that I am doing? The n factorial can be written like	matnatsciknu
6	equal to zero y is equal to zero and I am done. And I know are going to ask	ergnatsciknu
7	remaining will be theta. Right? Once I have, if I am done. At this point, I know where n	ergnatsciknu
8	there must be a difference. That is all. so I am done. So one one, two two. I am	ergnatsciknu
9	force. Alright so I am done. The friction so I am done so I am not going to talk	ergnatsciknu
10	e, the sense of the frictional force. Alright so I am done. The friction so I am done so	ergnatsciknu
11	, this then will be equal to n one. So I am done with this. No contribution. I get here	ergnatsciknu
12	these things to answer the question. Alright, so I am done with that. We are going to do,	ergnatsciknu
13	want y raised to the power four. That means I am expecting six combination four times x raised	matnatsciknu
14	. so I am done. So one one, two two. I am finished with the free body diagrams for this	ergnatsciknu
15	it, and they will all move to where? So, I am going to the fifty, so, to the fifty,	ergnatsciknu
16	, this is my x and y because for equilibrium, I am going to talk about x is equal to	ergnatsciknu
17	two is also ninety degrees and that is what I am going to do. Alright. Now, I know this	ergnatsciknu
18	have. N two do I have it? no, so, I am going to take my time, between this line	ergnatsciknu

Figure 2: Sample concordance lines of I for lecturer from NSC

All cases of *I*, *you* and *we*, and their corresponding variants were searched and examined to determine their referents. The discourse referents were mainly identified based on the

contextual and co-textual information surrounding the tri-PP. In Figure 2, I + be + main verb pattern reveals that the lecturer is using *I* to refer to himself.

We closely examined the concordance lines of each of the tri-PP, guided by “the collocating verbs associated with the pronouns ... to obtain contextual and linguistic cues” (Yeo & Ting, 2014, 29). Ädel (2010, 79) observes: “there are oftentimes contextual clues present in the data which reveal something about the scope of a pronoun”. After we identified the referents of each of the tri-PP across the subcorpora, we identified those common to the tri-PP across the disciplinary supercommunities (DS). The steps for the analysis can therefore be summarized as follows:

- Step 1: Use the concordance tool in AntConc to search for the occurrences of a PP across the subcorpora.
- Step 2: Examine the concordance lines to determine the referent of the PP by drawing on the co-text and the context.
- Step 3: Determine whether the referent is common to the PPs across the subcorpora.

Thereafter, we counted the occurrences of the referents of the tri-PP, and these were normalized to occurrences per 1,000 words (ptw), given that the subcorpora, as shown in Table 1, had unequal sizes. Normed frequency (NF), according to McEnery and Hardie (2012), is obtained by dividing raw frequency (RF) by the total corpus size (CS), and then multiply by the normalization base (NB). The formula can be stated as:

$$NF = \frac{RF}{CS} * NB$$

The base is determined by the size of the corpus. The NB for this study is 10, 000 as the sizes of the subcorpora were between 30, 000 and 45, 000. Finally, we conducted a log-likelihood analysis, using Rayson’s (n.d.) Log-likelihood Calculator to determine whether the observed differences were statistically significant. We used 95<sup>th</sup> percentile; 5%;  $p < 0.05$ , with log-likelihood value =3.84 as the “cut-off point of statistical significance” (Baker et al., 2008: 277), implying that any value equal or above 3.84 was deemed statistically significant.

Extracts from the subcorpora were then coded as HSC, SSC and NSC for Humanities, Social Sciences, and Natural Sciences respectively. Thus, an extract from NS subcorpus was, therefore, numbered as NSC 0001, 0002, 0003.... More so, in the analysis,

speakers from HS, SS and NS were labelled as HSL (Humanities Lecturer), SSL (Social Sciences Lecturer) and NSL (Natural Sciences Lecturer). All instances of the tri-PP in the extracts in the discussion section are **bolded** and underlined for purposes of visibility.

### 3. Results and Discussion

This section discusses the results, by focusing on the three identified tri-PP across the three disciplinary supercommunities (DSs). In all, three referents were identified from the corpus to be common to *I*, *we*, and *you* (tri-PP) across the DSs. Arguably, these three referents can be said to be “core to the register and can reflect the register nature as well” (Liu & Chen, 2020: 125). The discussion is organized around the three referents common to the tri-PP: lecturer, students, and lecturer + students.

#### 3.1 Tri-PP for Lecturer

Across the three DSs –Humanities (HS), Social Sciences (SS), and Natural Sciences (NS)—, we found that *I*, *we*, and *you* all designated lecturer, hence, *trip-PP for lecturer*. Table 2 provides details on the distribution of *I*, *we* and *you* as lecturer.

Table 2: Tri-PP for lecturer across DSs

Tri-PP	HS: RF(NF)	SS: RF(NF)	NS: RF(NF)	HS vs SS LL	HS vs NS LL	SS: NS LL
<i>I</i>	309(84.46)	433(98.60)	319(92.14)	4.35	1.19	0.85
<i>We</i>	51(13.94)	69(15.7)	79(22.8)	0.42	7.72	5.14
<i>You</i>	3(0.82)	13(2.96)	5(1.44)	5.05	0.62	2.03

\*A log-likelihood greater than 3.84 indicates a p-value less than 0.05.

It can be observed from Table 1 that *I* was used to designate lecturer more than *we* and *you* across all the DS. This was followed by *we* and then *you*. The order is consistent with the proximal and distal principles on the use of the tri-PP (Kamio 2001).

##### 3.1.1 *I* as lecturer

Lecturers mostly engage in self-mentioning in their classroom talks. This is reflected by the use of the first-person pronoun to designate themselves across the subcorpora.

Concordance analysis reveals that *I* for lecturer frequently co-occurs with the verb ‘to be’. The context and co-text of the *I*-type show that it designates the speaker (i.e. the lecturer). Similarly, Yeo and Ting (2014), and Yaakob (2013) also discovered that *I* as lecturer was common to Arts and Science; and all the four broad knowledge domains (Arts and Humanities, Social Sciences, Life Sciences, and Physical Sciences) respectively. The use of *I* for lecturer is not surprising as it is consistent with the grammar, semantics and pragmatics of the first-person pronoun. The use of *I* as lecturer reflects lecturers’ desire to project their independent selves in order to enhance their authorial visibility in the ongoing classroom discourse. It, thus, highlights the centrality of the lecturer as a discourse participant in classroom lectures (Biber & Conrad 2009; Crawford Camiciottoli, 2007). The instances below illustrate the use of *I* for lecturer.

HSL: **I** am sure in Egypt there were intermarriages and so definitely people with that kind of colour might have been produced. [HSC 0001]

SSL: Good! **I** agree with that but the constitution itself said it. [SSC 0001]

NSL: But **I** said you will have to draw lines that are parallel to your x and y, isn’t it? [NSC 0001]

All the marked *I*-forms in the above extracts explicitly make reference to the lecturer. This discursive strategy thus helps lecturers to make their voices pronounced in their lectures. It also demonstrates how lecturers construct their individualities, and ‘extract’ themselves from the collectivity of lecturers in the discourse communities (Lerner & Kitzinger, 2007). Lecturer’s emphasis on their personhood reveals their authority in their relationship with the students in the classroom. They, therefore, make obvious their agency that arguably presents them as being responsible and accountable for their knowledge claims (Lerner & Kitzinger, 2007). It is, thus, a rhetorical means of “claiming authority and exhibiting some form of ownership for the claims stated...” (Martín-Martín, 2003: 8). Yaakob (2013, 217) notes that *I for lecturer*:

confirms the nature of the relationship between the lecturer and student whereby the lecturer is in a position of giving knowledge or delivering information to the students and exerting this authority figure by owning the lecture and explicitly imparting information to students and leading the lecture.

### 3.1.2 *We for lecturer*

All the three broad knowledge domains recorded instances of *we* for lecturer. *We* for lecturer corroborates the concept of intrapersonal pronoun shift, whereby a speaker uses different pronouns for self-designation (Whitman 1999) –which can be contrasted with *interpersonal pronoun shift*. This rhetorical use of *we* has been referred as nosism (that is, the situation where the referent of *we* is a single speaker) (Maxey 2016). Quirk et al. (1985) and Wales (1996) described this nosistic type of *we* (used not for collective speakers but individuals) as editorial *we*. It should be noted that the speaker-*we* (exclusive *we*) found in the subcorpora is the editorial type. In fact, collective *we* indicating several speakers was completely absent since all the courses recorded were taught by individual lecturers.

Across the subcorpora, this *we*-type generally collocates with the verb *said*. Using the editorial *we*, the lecturers sought to project their DS-specific ethos (Afful 2010; Hyland 1999) and also enhance their visibility in the discourse. DS (disciplinary)-specific ethos indicates how lecturers portray themselves in their speeches as having a good moral character, practical wisdom, and a concern for the audience in order to achieve credibility and thereby secure persuasion (Cherry 1988). This also projects the individual lecturer as a representative for all the scholars in the discipline. This is apt because the lecturer is the immediate authority the students have access to in the classroom. Students, therefore, consider their lecturers as all-in-one in their relatively short-lived classroom interaction. More so, the editorial *we* is used as an *I* substitute to avoid being egoistic (Quirk et al., 1985), thereby projecting themselves as humble servants in the scholarly community (Hyland, 2001a).

- HSL: But one key thing we said about the derivational morpheme is that it helps us arrive at what? New words. [HSC 0002]
- SSL: But we are saying that to remove the ambiguity in the text, this is the way we are going to capture it. [SSC 0002]
- NSL: But the only one as at now but not completely explain the erh the function of the membrane relating to the structure as we have described is what we call the fluid mosaic model. [NSC 0002]

The use of *we* for *I*, as exemplified in extracts HSC 0002, SSC 0002 and NSC 0002, supports findings in the previous studies (e.g. Rounds 1987a; Yaakob 2013; Yeo & Ting 2014; Zhihua 2011). This *we* for *I* is adopted across the disciplinary supercommunities as a politeness strategy thereby projecting the lecturers as unauthoritative (Quirk et al. 1985). Aside from the cross-DS employment of *we* for *I* (lecturer), there are variations statistically.

### 3.1.3 *You for lecturer*

This type of *you*, self-referential or exclusive *you*, is employed by lecturers to de-personalize their stance. Fairclough (1989, 180) argues that this enables speakers to lower themselves to the status of common experience. This largely enables them to present “perceptions as shared, not merely individual” (Myers & Lampropoulou 2012, 1206). This is clearly seen in HSC 0011. Although it is used to refer to the individual speaker, it evokes a sense of shared practice by all lecturers in the discourse community. Again, this *you* is used when lecturers shift footings or perspectives (Brunye, Ditman, Mahoney, Augustyn, & Taylor 2009) in their discourse. In SSC0015 and NSC 0010, the lecturer and students exchange position (Goffman 1981).

HSL: And it’s true, because some of the things we mark, especially level hundred, two hundred, there are some papers we mark every line **you** have problems. [HSC 0003]

SSL: Many of you went there and call me and say ANON thank **you** because I miss **you**. [SSC 0003]

NSL: Then I say expand  $x$  plus  $y$  raised to the power thousand and fifty and you say ooo sir what time are **you** going to give us, I can give you three hours, five hours. [NSC 0003]

The exchange enables lecturers to speak with the voice of the students, thereby using *you* for themselves. This practice is akin to Bakhtin’s (1981) concept of ventriloquation which is “a specialized type of voicing ...when a speaker speaks through the voice of another for the purpose of social or interactional positioning...” (p. 52).

Aside from the qualitative commonalities across the subcorpora, there are some quantitative differences. First, it is shown in Table 2 that SS (2. 96) is rated first in terms

of *you* for lecturer (=I); and followed by NS (1.44) and then HS (0.82). Social Scientists' comparatively more use of this type of *you* suggests that it engages in lecturer-student rhetorical interchange more than their HS and NS lecturers. This can be supported by the fact that SS is situated in the middle of the objective/interpretive paradigm (Hyland, 2009) and, thus, appears not to be completely subjective (by using *I*) or objective (by using *we*). Instead, it resorts to using *you* to provide a neutral ground, or construct an identity inspired by the ideologies of both positivism and social constructivism.

### 3.2 Tri-PP for students across DSs

Another common referential trajectory realized regarding the tri-PP across the DSs is that they pointed to, and represented students. Quantitative details on this are shown in Table 3.

Table 3: Tri-PP for students across DSs

Tri-PP	HS: RF(NF)	SS: RF(NF)	NS: RF(NF)	HS vs SS LL	HS vs NS LL	SS: NS LL
I	7(1.91)	10(2.28)	120(34.66)	0.13	128.21	137.70
We	48(13.12)	24(5.5)	39(11.2)	13.14	0.50	8.06
You	494(135.02)	495(112.72)	597(172.43)	8.05	16.25	49.20

\*A log-likelihood greater than 3.84 indicates a p-value less than .05.

Table 3 indicates that there are cross-DS variations in tri-PP for students. We observe that NS has the highest NFs for both *I* and *you* for students, while HS recorded the highest NF for *we* for students. *You* was greatly used to refer to students than *I*, and *we* across all the DS.

#### 3.2.1 *I* for students

Pronoun switch is common in academic speech for the positioning of selves (speaker, audience, and others) (Yates & Hiles 2010). There are, therefore, instances where different pronouns are used for the same referent (Ädel 2010; Yaakob 2013; Zhihua 2011), and situations when a pronoun conjures different referents (Ädel, 2010; Fortanet 2004; Rounds 1987; Yaakob, 2013; Yeo & Ting 2014; Zhihua 2011) – what Anderson (2007) termed

referent shift. A usage found in this study, affirming the former, is the use of *I* for students, which corresponds with the notion of interpersonal pronoun shift, where the speaker uses a particular pronoun to designate the audience (Whitman 1999).

The concordance analysis indicated that several *I*-forms (e.g. subjective, objective, and reflexive) were used to designate students. We can observe from extract SSC 0003 how the lecturer shifts footing and uses *myself* as though it was a student talking. We refer to this as empathetic *I*, following the notion of empathetic identification (Whitman 1999). It is important to note that this realization is not new in the literature. Yeo and Ting (2014) identified *I* for students (=you) in the corpora from both Arts and Sciences. Additionally, Fortanet (2004) and Zhihua (2011) also noted this in their studies, but Yaakob (2013) did not. Fortanet (2004) posits that the use of first and second person pronouns is an important indicator of how audiences are conceptualized by speakers and writers in academic discourse. The similarity between the present study and Yeo and Ting (2014), on one hand, and the differences between them and Yaakob (2013) borders on native-nonnative variability. Both the present and Yeo and Ting's (2014) studies used corpora L2 context (i.e. Ghana and Malaysia respectively) while Yaakob (2013) used MICASE, which is from a native context. See corpus instances of *I* for students below:

HSL: You say, for this essay, **I** choose to discuss the scholar called Herbert Spencer. [HSC 0004]

SSL: I was even expecting that some of you who are standing would actually take the pain and write ...After all **I** did not get a chair so why bother **myself**? Let **me** just fan **myself** or take my phone. [SSC 0004]

NSL: This is what I will do, I will expand that and then I am going to pick where I have the xs and that is where **I** have to be wise to rewrite this one like this. [NSC 0004]

The use of this *I* can be described as a rhetorical transfer of the students from the status of lower power (novices) to the position of high power (experts), corresponding to the concept of osmosis in Physics. Thus, the students are psycho-rhetorically rankshifted to a near-expert (lecturer) position on "power ranks" (Brown & Gilman, 1960: 256) as depicted on the disciplinary membership cline (Afful, 2010). This practice is expressed by Goffman (1981):

we represent ourselves through the offices of a personal pronoun, typically ‘I,’ and it is thus a figure—a figure in a statement—that serves as the agent, a protagonist in a described scene, a ‘character’ in an anecdote, someone, after all, who belongs to the world that is spoken about, not the world in which the speaking occurs. And once this format is employed, an astonishing flexibility is created. (p. 147)

More so, it bridges the *I-they* gap which is created by the physical environment in the lecture hall where the lecturer stands, while the student sits. *Standing* and *sitting* in the lecture hall alone evoke the asymmetric power relation between an expert (lecturer) and novice (student) (Csomay 2002; Brown & Gilman 1960). Therefore, lecturers attempt to create a rhetorical equality to facilitate teaching and learning in a “collegial atmosphere” (Csomay 2002, 220) through the use of this type of *I* is apt. The “equalitarian” (Goffman, 1981, 126) rhetorical strategy helps lecturers to minimize the threat to the students’ positive face since “talking in front of a big lecture hall can be intimidating for some students” (Yaakob, 2013, 217). Unsurprisingly, Brown and Gilman (1960, 258) described pronouns in this context as “the pronoun of condescension and intimacy”. *I* for students helps students to manage the unequal power relations (Csomay 2002) which “increase students’ conceptions of isolation and alienation” (Archer & Leathwood 2003, 261) in the classroom. Thus, their sense of belongingness is enhanced and deepened since lecturers strive “to establish common ground” (Dafouz, Nunez & Sancho 2007, 647).

### 3.2.2 *We for students*

We discovered that lecturers in HS, SS and NS used *we* to designate students in their lectures. Ädel (2006) refers to *we* for students as the audience type. This *we* type is metadiscursive as it is limited to the audience in the discourse internal world (Ädel 2006, 2010; Hyland 2005). This type of *we* has a -speaker feature + current audience feature, as exemplified in extracts HSC 0007, SSC 0010, and NSC 0006. The lecturer used *we* in the interrogative structures to refer to the students. It, thus, shows the lecturers’ awareness and recognition of the students in the ongoing discourse.

HSL: Are we ready for the lecture?...Everything we are learning here and even those we are not learning are not for here and now. [HSC 0005]

- SSL: Then you are lost. Find yourself. I think that is clear now. Are **we** getting the argument? We said we made a statement which we said was ambiguous. [SSC 0005]
- NSL: So I pick that part and then I extract wherever the I see x, and where do I see x? I see x raised to the power six minus r times one over x all raised to the power r. Can **we** all see that? [NSC 0005]

This *we* explicitly recognizes the presence of the audience who are co-participants in the lecture discourse. So, in SSC 0010, *we* is synonymous to *you* (students) such that the question can be recast ‘Are you getting the argument?’ The empathetic *we* is employed by the lecturers to rhetorically relate with students to share their (students’) responsibilities. This type of pronoun reveals the speakers’ self-lowering strategy to studentship (Csomay 2002; Brown & Gilman 1960). It is akin to the concept of diffusion (in Physics), where lecturers move from the region of higher power (experts) to the region of lower power (novice), as presented in the “hierarchical power structures among the community members” (Chang 2012, 113). Brown and Gilman (1960) appropriately described this rhetorical diffusion as “a shift from power to solidarity” (p. 260) realized through the ‘pronoun of solidarity’ (p. 260). This may inspire the students and allay their fears for lecturers (Navaz 2013), as they may psycho-emotionally perceive lecturers as partners in learning. Eventually, the presence of this type of pronoun will push the lecture genre forward on the monologic-dialogic cline (Navaz 2013), thereby increasing the level of interactivity (Csomay 2002).

This finding is congruent with previous studies such as Fortanet (2004), Rounds (1987a & b), Yaakob (2013), Yeo and Ting (2014), and Zhihua (2011) who also discovered that *we* was used to designate the students. It has been pointed out that several factors determine pronominal choices in discourse (Rounds 1987b): user’s role, perceived relationship to hearers, speaker’s idiosyncrasies, disciplinary ideology, norms, cultures and practices, institutional ideology, etc. Rounds (1987b, 650) further argued that “the use of inclusive pronoun is a positive factor in terms of interactivity”. This has implication for the disciplinary discourse community’s view on the role of power in lecturer-student interaction (Csomay 2002; Csomay & Wu 2020).

### 3.2.3 *You for students*

Grammatically, *you* is always regarded addressee-oriented. *You*-for students is the central pronominal address term for students in classroom lectures to create a student-friendly classroom (Parkinson 2020); to enhance lecturer-student interaction (Crawford Camiciottoli 2007), and to increase students' involvement (Hyland 2009). Kamio (2001, 1118) maintains that it "is located in the distal domain of the conversational space, which corresponds to the hearer's territory".

This *you*-type has +students –lecturer feature, hence, audience-oriented. Guided by Lerner and Kitzinger's (2007) concepts of extraction and aggregation, and individual self-reference, and collective self-reference, we observed six student-oriented metadiscursive *you*-referents: students, one student, a cross-section of students, two students, male students, and female students. The identification was based on the "local reference context" (Schegloff 1996: 450, cited in Lerner & Kitzinger, 2007: 534) bounded by "'locally initial' and 'locally subsequent'" signals/information (Lerner & Kitzinger, 2007: 534). The rhetorical strategies of extraction, and aggregation regarding *you* showcases the semantico-rhetorical *membership* of student-oriented explicit recognitional *you*-types (Lerner & Kitzinger, 2007).

To some extent, *you* for students corresponds with Yeo and Ting's (2014) *you*-generalized used to aggregate the students into a collectivity (Lerner & Kitzinger 2007); and quantified referents (i.e. one student, and two students) to "enumerated reference" (Lerner & Kitzinger, 2007, 534). Thus, we can talk about *you* that generalizes, and *you* that particularizes an individual, selected individuals (e.g. two), unspecified individuals (a cross-section of students), male, and female students. As Lerner and Kitzinger (2007) explained, the *you*-type that particularizes is used "to extract an individual [or a group of individuals] from a collectivity" (p. 533). *You* in this regard individually performs the functions of 'mate' and 'guys', which according to Parkinson (2020) are used as address terms in classroom discourse to address one person, and many people respectively. This reinforces lecturers' discursive *micro* and *macro* student-referencing strategies for some targeted 'interactional accomplishment' (Sprain & Black 2017). The corpus extracts below exemplify *you* for students in the subcorpora.

HSL: So **you** have all these theories erh last week I ask **you** to do er erh small research, and the a few did. [HSC 0006]

SSL: So **you** are not just learning to pass the examination and after that **you** discard all that **you** have learnt. No. No [SSC 0006]

NSL: We have all the other materials that we can think about, the microtome, and then **you** solve the problem by **yourself**. [NSC 0006]

The marked *you*-types in extracts HSC 0006, SSC 0006 and NSC 0006 above are metadiscursive (i.e. they explicitly refer to the students in the ongoing discourse). In HSC 0012, for instance, the lecturer reminds them of the theories (in religion) that he had exposed them to, and continues to remind them of the task he has assigned them in their previous lectures. The *you*-types here meet Ädel's (2010, 75) audience qua audience criterion. This realization affirms the fact that students are principally the recipients in classroom lectures (Biber & Conrad 2009; Crawford Camiciottoli 2007). Thus, more use of the metadiscursive *you* may "facilitate students' understanding of subject content" (Sadeghi & Heidaryan 2012, 168) since direct recognition of their presence will cause them to be attentive during lectures. Essentially, the use of *you* for students makes lectures more interactive (conversational), and contributes to students' attentiveness and responsiveness (Crawford Camiciottoli 2007).

### 3.3 Tri-PP for Lecturer + Students across DSs

In this section, we turn to lecturer + students, which was noted to be common to *I*, *we* and *you* across the disciplinary supercommunities (see Table 4 for quantitative information on this).

Table 4: Tri-PP for lecturer + students across DSs

Tri-PP	HS: RF(NF)	SS: RF(NF)	NS: RF(NF)	HS vs SS LL	HS vs NS LL	SS: NS LL
I	6(1.64)	5(1.14)	150(43.33)	0.37	173.46	207.36
We	86(23.51)	128(29.1)	312(90.1)	2.41	149.08	129.32
You	30(8.20)	20(4.55)	120(34.66)	4.26	62.90	105.0

\*A log-likelihood greater than 3.84 indicates a p-value less than .05.

In classroom interaction, lecturer(s) and student(s) arguably constitute the central discursual participants. We found that the tri-PP are used to enact identities that merge.

Unsurprisingly, Table 4 shows that *we* markedly leads *I* and *you* in designating lecturer + students across the DSs.

### 3.3.1 *I* for Lecturer + Students

Kamio (2001) argues that there are two extreme levels of information territory: the speaker and audience territories. In classroom discourse, the speaker and the audience are experts and novices respectively (Adel 2010; Hyland 2005). The first-person pronoun is grammatically said to be speaker-oriented, what is considered its prototypical use which is informed by “traditional semantic mappings” (Rounds 1987a, 17). However, it has been established that pragmatically it can perform polyreferential functions across genres (e.g. Yaakob 2013, Rounds, 1987a & b; Yeo and Ting, 2014). In this study, we found that *I* designated lecturer (speaker) + students (audience). This *speaker + audience I* has socio-rhetorical implication. Through this, lecturers move students away from the receiving end, less powerful position, the realm of reception, or epistemic consumption to the level of knowledge production. The lecturers bring the students closer to themselves by entering the first-person pronoun with them to establish a more collegial relationship with the students, as demonstrated in extracts HSC 0007, SSC 0007, and NSC 0007.

- HSL: That is, they uhm important lesson that I want all of us to learn from this okay? Not to do follow follow I learnt that you can copy something good about somebody but try to make it your own.  
HSC 0007
- SSL: Now, we can say that assuming that the second version so this is the second version... Now this is what I can easily use to depict what he what he said during the content, isn't something that is worth listening to. SSC 0007
- NSL: First of all if I understood what we all just did, then I'll say that four x minus five should be less than minus nine or four x minus five should be greater than nine. NSC 0007

From extracts HSC 0007, SSC 0007 and NSC 0007, the lecturer uses *I* to designate himself and the students. This usage is equivalent to the inclusive *we* (I + you) employed to demonstrate to the students that they are both partners in teaching and/or learning as they jointly solved the mathematical problem and therefore have a common understanding. It

demonstrates the lecturer's willingness to share his defined territory with the students through enacting a common self through the more perceived lecturer-oriented. This bridges the power play gap between the lecturer and the students, as the students may consider themselves as having been rankshifted upwards. Two forms of ranking shifting are at play in this paper: lecturer and students rankshifting, which involves the lecturer lowering to the students' level, and the students raised to the lecturer's level respectively. The former is realized through *you* for lecturer, and *you* for lecturer + students, and the latter, *I* for students, and *I* for lecturer + students.

A number of researchers have explored the referents of *I* (e.g. Rounds 1987a & b; Yeo and Ting 2014; Gomez 2006) but this type was identified by Yaakob (2013) and Zhihua (2011). Yaakob (2013) noted that *I* for lecturer + students was common across DSs (arts and humanities, social, life, and physical sciences). The present finding, therefore, confirms Yaakob (2013).

### 3.3.2 *We* for lecturer + students

The commonality among the three disciplinary discourse communities is further conveyed in the lecturer/student-oriented *we*. Inclusive *we* is used in this case to reveal the interpersonal relationship between the lecturer and the students in the discourse communities, as conceptualized by Crawford Camiciottoli (2007). The immediate collocational context and co-text of the *we*-type shows that it has a + lecturer + students feature. Although lecturers and students have asymmetric power relations (Afful, 2010; Crawford Camiciottoli 2007; Csomay 2002), the use of *we* to enact solidarity and interaction is a positive rhetorical strategy of recognizing students as legitimate members in the discourse communities. Milne (2006) thus posits that the lecturer-student *we* suggests the lecturers' twofold intention: to shorten the distance with students and to establish common ground. As seen in extract NSC 0008, the lecturer explicitly recognized and addressed the students as members not just in the physical setting but as members in the discourse community.

HSL: In the second word what we have is *play* plus /s/. Right? So the morpheme is /s/. [HSC 0008]

SSL: So here **we** are looking at that contribution of education the contribution of education to economic growth as well as economic development. [SSC 0008]

NSL: Now **we** are two in this class, me and my students. [NSC 0008]

*We* for lecturer + students is somewhat consistent with grammar, semantics and pragmatics (see Wales 1996). It is naturally construed as designating discourse participants. It is, therefore, not surprising that it is shown in Table 4 as having the highest NFs across the DSs. This finding is consistent with Rounds (1987a, b), Yaakob (2013), Yeo and Ting (2014), and Zhihua (2011). Biber (1995) proposed involvement/detachment continuum; the finding, therefore, shows the degree of involvement rather than detachment in classroom lectures, which is akin to conversation and thus shares a lot of its features (Biber, 2006a & b; Biber & Conrad, 2009; Csomay, 2002).

### 3.3.3 *You for lecturer + students*

Lecturer + students-oriented *you* occurred with a certain collocational co-text, as shown in the extracts below. This *you*-type is metadiscursive, given that it designates the lecturer and students in the ongoing lectures.

HSL: But this afternoon I want **you** to proceed from where I left off yesterday and I remember stopping at where Nkrumah and his CPP supporters were so much unhappy about the Cossey report and this unhappiness with the Cossey report was evident in how he described the Cossey report. [HSC 0009]

SSL: Now **you** see that the, this tells **you, you** the number of minutes, the duration of this news is three point what? [SSC 0009]

NSL: That's what **you** have just shaded, the shaded portion **you** can read the results there three is less than x and x is less than four. [NSC 0009]

From HSC 0009, the lecturer desired that *you* proceed from where the previous lecture ended. It is evident from the context of use that this *you*-type conjures a collective lecturer

+ students referencing (Lerner and Kitzinger, 2007). This finding coincides with Gomez (2006), Rounds (1987a) and Zhihua (2011) who also identified lecturer + students *you*-type. Gomez (2006) reveals that this *you*-type is used to approximate the distance between lecturers and students in classroom encounters. Thus, lecturers rhetorically rankshift from their experthood rank and cooperate with students in this asymmetric power relational genre (Crawford Camiciottoli, 2007; Csomay, 2002).

#### 4. Conclusion

The paper explored the effect of disciplinary shared knowledge on the discourse referents on *I*, *we* and *you* (tri-PP). Although studies on the referents on personal pronouns generally adopt a pragmatic approach, most of them adopted a relatively predetermined approach that can be said to be more grammatical than pragmatic (e.g. Friginal et al. 2017; Yeo & Ting 2014). Such studies generally adopted *I* for the addresser, *we* for either the addresser plus audience, or addressers, and *you* for the addressee. For instance, in relation to *I*, Friginal et al. (2017) noted that our attention shifts to the first-person singular pronoun. Obviously, this pronoun refers to the speaker only, and it marks a clear distinction between the speaker and the hearer. On the other hand, there are some studies that allow the context to reveal the pragmatic import of personal pronouns. Such studies, like this one, explore pronoun in context to establish their referents (Yaakob 2013).

Using an academic lecture corpus from the L2 context, this paper found three discourse referents (i.e. lecturer, students and lecturer + students) shared by the tri-PP across the disciplinary supercommunities (DSs): Humanities (HS), Social (SS) and Natural (NS) Sciences. The present paper reaffirms the assertion that the referents of the tri-PP are “not ‘fixed’, but is[are] multi-faceted, adapting to and being shaped by particular contexts and types of interaction” (Hyland, 2012, vii). This has implication for both language and content lecturers. Language teachers, particularly, those in English for Academic Purposes (EAP) are expected to draw students’ attention to the effect of the tri-PP on understanding propositions made by content lecturers in their respective disciplinary context. More so, content lecturers must be able to draw on their pronominal competence informed by their respective disciplinary norms and conventions in employing the tri-PP in their interaction with their students in the classroom.

The study provides some theoretical insights into pronoun reference in academic speech. It has been established that *I*, *we*, and *you* can designate common referents (e.g. students), resulting in multireferentiality conceptualized in Figure 3.

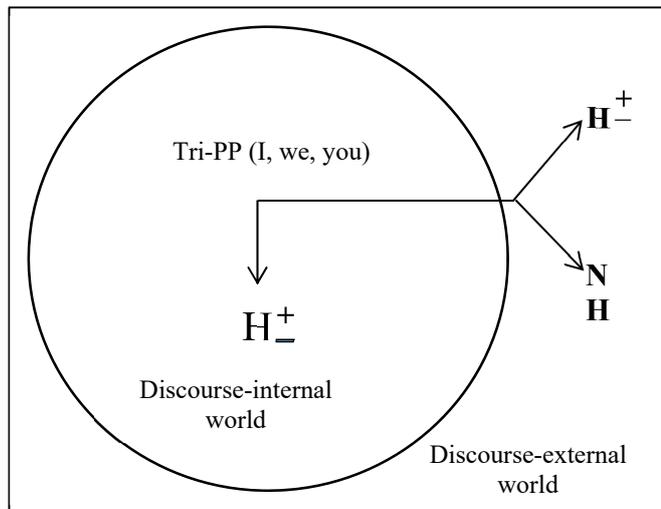


Figure 3: Multireferentiality I, we and you

Multireferentiality concerns the use of different pronouns to designate a common referent. Thus, the arrow representing the tri-PP simultaneously or unidirectionally points to **H**, which could mean a monoreferent (e.g. lecturer + students). EAP teachers must, therefore, emphasize this and help students to appreciate the socio-rhetorical effects of the use multireferential use of the tri-PP in lecturer talks. Furthermore, the diagram shows the metadiscursive-non/metadiscourse paradigm of tri-PP reference. We observe that *I*, *we* and *you* are used to designate participants inside the discourse. The down-pointing arrow thus demonstrates this. As can be seen, **H<sub>-</sub><sup>+</sup>** shows that the tri-PP could be lecturer-oriented (+lecturer-students), and student-oriented (+ students-lecturer), and lecturer/student-oriented (+ lecturer + students). These referents are metadiscursive (See Ädel 2006, 2010). One the other hand, the tri-PP as a discursive strategy points to non-discourse participants in the real world. It could be either human or non-human referents. The + and – denotes that the human agents could be with or without the other selves (see Brooke 1987) of the lecturer and the students.

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**VARIATION IN BOUNDARY CONSONANT DELETION AMONG SELECTED  
MALE AND FEMALE UNDERGRADUATES OF UNIVERSITY OF NIGERIA**

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### THE POLITICS OF QUESTIONING: ASPECTS OF UK AND GHANAIAN PARLIAMENTARY QUESTION TYPES

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### DIFFERENT PRONOUNS, SAME REFERENTS: A CORPUS-BASED STUDY OF I, WE AND YOU IN L2 LECTURES ACROSS DISCIPLINES

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References made in the notes or in the text should, for the most part, conform to the American Sociological Association (ASA) Style Guide, 5th edition, including the author's last name, the date of publication and the relevant page number(s), e.g. (Bodomo 2004:18-9).

There should be a separate list of references at the end of the paper, but before any appendices, in which all and only items referred to in the text and the notes are listed in alphabetical order according to the surname of the first author. When the item is a book by a single author or a collection of articles with a single editor, give full bibliographical details in this order: name of author or editor, date of publication, title of the work, place of publication and publisher. Be absolutely sure that all names and titles are spelled correctly. Examples:

Obeng, Samuel Gyasi. 2001. *African Anthroponymy: An Ethnopragmatic and Morphophonological Study of Personal Names in Akan and Some African Societies*. München: Lincom Europa.

Ameka, Felix K., and Mary Esther Kropp Dakubu, eds. 2008. *Aspect and Modality in Kwa Languages, Studies in Language Comparison Series*. Amsterdam & Philadelphia: John Benjamins.

If the book has more than one author or editor, they should all be given, the first appearing as above, the others with their first name or initial placed before the surname:

Heine, Bernd and Derek Nurse, eds. 2000. *African Languages, an Introduction*. Cambridge: Cambridge University Press.

An article appearing in an edited book should be referenced under the author's name, with the editor(s) and full details of the book and page numbers of the particular article. For example:

Osam, E. Kweku. 1997. "Serial Verbs and Grammatical Relations in Akan." In *Grammatical Relations: A Functionalist Perspective*, edited by T. Givón, 253-280. Amsterdam: John Benjamins.

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