

Predication, Equation and Information Structure: Evidence from Hausa Copular Sentences

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This paper explores the syntactic and information structure properties of predicative and equative/specificational copular sentences in Hausa.¹ These sentences contain the non-verbal copular focus marker (FM). Predicative copular sentences take the canonical form DP NP/AP FM, and the non-canonical forms DP FM NP/AP and NP/AP FM DP. Equative copular sentences take the canonical form DP DP FM and the non-canonical form DP FM DP. What underlies all these permutations is the fact that copular sentences in Hausa contain a designated focus position, left-adjacent to FM. The word-order variation attested in Hausa copular sentences therefore follows from the information structure properties of the construction. Arguments are presented in favour of adopting a focus phrase (FP) analysis, wherein the constituent in focus raises to SpecFP from within the small clause complement of the head F, instantiated by FM. This analysis predicts that the subject of the canonical copular sentence is a topic. The discussion is set within a broadly Minimalist framework (Chomsky 1995; 2000; 2001a; 2001b), and makes explicit cross-linguistic comparisons along a number of parameters, focusing on (a) the categorial status of copular elements; (b) types of copular sentences; and (c) information structure.

1. Introduction

Predicative copular constructions in Hausa are non-verbal sentences, which contain subject (DP), predicate (DP or AP), and the non-verbal copular focus marker (FM). The canonical word order for the predicative copular construction is exemplified in (1) and (2), examples which illustrate the fact that the DP left-adjacent to the copula is interpreted as being in focus (indicated by boldface).²

- (1) Q: Wàṅē nè Audù?
who.m FM.m Audu
'Who is Audu?'
A: Audù **mahàuci** nè *new information focus*
Audu butcher FM.m
'Audu is a **butcher**'
- (2) Q: Audù manòmī nè, kō?
Audu farmer FM.m Q
'Audu is a farmer, isn't he?'
A: Ā' à, Audù **mahàuci** nè *exhaustive listing focus*
no Audu butcher FM.m
'No, Audu is a **butcher**'

¹ Hausa is a major world language, spoken by an estimated 30 million native speakers (Jaggar 2001). The largest native Hausa speaking population is in northern Nigeria and in the southern areas of the Republic of Niger, where Hausa represents the majority language, but Hausa figures prominently as a *lingua franca* across West Africa. With respect to its genetic lineage, Hausa belongs to the Western branch of Chadic family, which itself is a member of the Afroasiatic phylum that includes Semitic, Berber, Cushitic, Omotic and Ancient Egyptian/Coptic.

² Transcription: à / â = low tone; â = falling tone; high tone is unmarked. A macron over a vowel indicates length, e.g., ā is long, a is short. k̄ (K) = ejective; d̄ (D) = implosive; c and j = palato-alveolar affricates. Abbreviations: DD = definite determiner; FM = focus marker; IMPF = neutral imperfective; FOC.IMPF = focus imperfective; INF = infinitive; NEG = negation; PF = neutral perfective; FOC.PF = focus perfective; PRO = pronoun; *pro* = null pronoun; Q = question particle; TOP = topic; VN = verbal noun.

Example (1) shows that in response to the *wh*-question ‘*Who is Audu?*’ the constituent *mahàucī* is interpreted as new information focus. In response to an utterance asserting that Audu has some other profession, however, the constituent *mahàucī* in (2) is interpreted as a particular type of exhaustive listing focus (corrective focus). Exhaustive listing focus (in the sense of Szabolcsi 1981) implies the exclusion of all other relevant possibilities. These examples illustrate that the type of focus is contextually determined. We return below (§ 3.1.) to a detailed description of predicative and equative copular sentences in Hausa, noting for the time being that copular sentences such as (1) and (2) are not the only context in which the Hausa copula appears. Example (3) shows a focus fronting construction and a *wh*-fronting construction in Hausa:

- (3) a. **Abinci**_i (nè) yârā sukà sàyā t_i *focus fronting*
 food FM.m children 3pl.FOC.PF buy
 ‘The children bought **food**’
 b. Su-wàñē_i (nè) t_i sukà tàfì Amīrkà *wh-fronting*
 3pl-who FM.pl 3pl.REL.PERF go America
 ‘Who went to America?’

Observe that in both cases the non-verbal copular focus marker occurs (optionally) right-adjacent to the fronted constituent.

Returning to the focus properties of Hausa copular sentences like (1) and (2), note that copular sentences in English display similar properties; English relies on sentential stress as well as inversion to create a focus interpretation:

- (4) a. Q: Who is Bill?
 A: Bill is my **best friend** *new information focus*
 b. Q: Bill is your worst enemy, isn’t he?
 A: No, Bill is my **best friend** *exhaustive listing focus*
 c. Q: Who is your best friend?
 A: **Ted** is my best friend *new information focus*
 d. Q: Bill is your best friend, isn’t he?
 A: No, **Ted** is my best friend. *exhaustive listing focus*

In response to a *wh*-question such as ‘*Who is Bill?*’ the post-copular DP in (4a) is interpreted as new information focus. As (4b) shows, however, the same construction can result in exhaustive listing focus, given an appropriate context. Examples (4c-d) illustrate the same possibilities for intonationally marked pre-copular DPs. Cleft constructions in English, however, tend to be limited to exhaustive listing focus:

- (5) It’s **Bill** who is my best friend (not Ted)

The purpose of this paper is to present a descriptive account of copular sentences in Hausa, and to propose a broadly Minimalist analysis (Chomsky 1995; 2000; 2001a; 2001b), with a view to clarifying the syntax of these constructions and accounting for their focus properties. Although the discussion will centre mainly upon Hausa, data from other languages will also be drawn into the discussion.

Section 2 provides a descriptive typology of copular constructions, introduces and illustrates some key terms, and presents examples of verbal and non-verbal copular elements from a range of languages. Section 3 provides an in-depth description of predicative and equative copular sentences in Hausa, and explores an analysis wherein the various word-

order permutations attested in these constructions are argued to follow from the information structure properties of the construction, a feature that is built into the syntax by means of a focus phrase projection (Brody 1990). Section 4 concludes the paper by outlining descriptive and theoretical conclusions.

2. Copular sentences: a cross-linguistic perspective

In this section we examine some of the literature on copular sentences: structures which typically lack a substantive lexical verb, wherein subject and predicate are linked by a copular element. Section 2.1. provides a typological perspective in the form of an overview of a recent cross-linguistic study by Pustet (2003). Section 2.2. provides a review of the descriptive terminology applied to different sub-types of copular sentence, focusing mainly on the study by Declerck (1988). In sections 2.3. and 2.4. we will examine more closely the syntactic structure of copular sentences in languages exemplifying copulas of different categorial types: while in some languages (including English) the copula is a verb, in other languages (including Hausa, Arabic and Hebrew) non-verbal elements can perform the linking function of a copula. In addition to providing some necessary background to a complex topic, one aim of this section is to show that although languages may vary with respect to the syntactic category and distribution of copular elements, there is something which all these constructions have in common which is frequently overlooked in the literature: there is often a designated focus position in copular sentences, which may have consequences for how we view the syntactic structure of this sentence type.

2.1. A typological perspective

In a recent empirical study of copulas within a functional-typological framework, Pustet (2003) sampled over 150 languages in order to establish what patterns of copularization exist. With respect to the category and historical origins of copular elements, Pustet points out that while speakers of Indo-European languages will be familiar with verbal copulas, copular elements belonging to other categories are prevalent. She cites Stassen (1997) as identifying three distinct categories: VERBAL, PRONOMINAL and PARTICLE copulas. Whilst copulas most frequently originate from verbs and pronouns, Pustet (2003, p. 54) also cites Frajzyngier (1986) as arguing that adpositions may also be a diachronic source of copulas.³ Furthermore, Pustet cites (Stassen 1997, p. 85) as suggesting that particle copulas may originate as ‘markers of discourse-oriented categories such as topicalization, backgrounding, or contrastive focus for subjects or predicates’. Pustet (2003, p. 59) places Japanese, Mandarin (citing Li & Thompson 1981) and Turkish (citing Kornfilt 1997) in this category, and as will become clear in this paper, the Hausa copula also falls into this category, at least synchronically. Pustet urges caution, however, in drawing conclusions about the historical origins of particle copulas:

‘ ... copulas which are homonymous with markers of pragmatic categories do not have to be regarded as historically derived from these markers of pragmatic function ... this issue is in need of some systematic cross-linguistic research.’ (Pustet 2003, p.61)

The starting point of Pustet’s empirical study is a survey of the types of predicates that can be combined with copulas, as she observes that this is not restricted to nominal or adjectival predicates. Pustet finds that the most common patterns are (a) AN languages: those that treat nominals and adjectivals in a parallel fashion with respect to copularization; (b) AV languages: those that treat adjectivals and verbals in a parallel fashion with respect to

³ Pustet (2003, p. 54) lists the following among languages having copulas derived from pronouns: Tok Pisin; Mandarin Chinese; Hebrew; Palestinian Arabic; Kenya Luo; Lango; Logbara; Maltese; Nuer.

copularization; and (c) languages of the non-copularizing type.⁴ This leads Pustet to propose the following implicational hierarchy:

(6) NOMINALS > ADJECTIVALS > VERBALS

In other words, if a language licenses any category to occur with a copula, it will be the category of nominals. If a language licenses a second category apart from nominals to occur with the copula, it will be the category of adjectivals.⁵ Finally, if a language licenses a third category to occur with copulas, it will be the category of verbals.⁶

In keeping with the justified caution within typological approaches towards viewing syntactic categories as universal primitives, Pustet takes a semantic approach in exploring the basis for these typological patterns. Drawing on work by Croft (1991), Givón (1979) and Stassen (1997), Pustet proposes that the explanation lies in the semantic parameters DYNAMICITY (state vs. process), TRANSIENCE (permanence vs. non-permanence), TRANSITIVITY (requiring two or more arguments) and DEPENDENCY (autonomous vs. dependent).

For example, nominal and adjectival concepts tend to be [- dynamic], whereas verbal concepts tend to be [+ dynamic]. Nominal concepts tend to be [- transient], while adjectival concepts are [+/- transient] and verbal concepts are [+ transient]. Nominals are categorised as [- transitive], while adjectivals are occasionally [+ transitive] and verbals are frequently [+ transitive]. Finally, nominals also tend to be [- dependent], while adjectivals and verbals tend to be [+ dependent].

Pustet's methodology rests on the existence of 'lexical minimal pairs': pairs of lexemes like *happy* and *rejoice* in English, which are near synonyms belonging to different parts of speech, where one of the pair is licensed to occur with a copula and one is not. The patterns observed give rise to the following typological principle (Pustet 2003, p. 131):

(7) PRINCIPLE OF UNIDIRECTIONALITY of semantic distinctions within lexical minimal pairs: Within a given lexical minimal pair, the feature value of the copularizing member with respect to any one of the four semantic dimensions dynamicity, transience, transitivity and dependency never exceeds the feature value of the non-copularizing member.

In other words, the [+] values of the relevant semantic parameters correlate highly with the absence of the copula, whereas the [-] values correlate highly with the presence of the copula. It follows that in there is a strong tendency for either nominals and adjectivals to pattern together with respect to copularization, or for adjectivals and verbals to pattern together, but not for nominals and verbals to pattern together. Indeed, Pustet (2003, p. 153) states that 'AN and AV languages constitute 90.1 per cent of the sampled languages which have copulas.' Pustet is careful to point out, though, that these statements reflect tendencies rather than absolutes.⁷

⁴ Pustet also identifies the following 'equally marginal' categories: split-A; split-N; split-V and fully copularizing. See Pustet (2003, p. 72) for details.

⁵ Observe that Pustet does not recognise the adpositional phrase as predicate, presumably excluding adposition from the category of substantive lexemes.

⁶ Pustet cites Bambara, a Niger-Congo language, as an example of the third, fully copularizing, type.

⁷ Pustet suggests that the distribution of copulas in the world's languages is fully consistent with markedness theory, which is in turn one instantiation of cognitive economy. See Pustet (2003, pp. 186-190) for discussion.

2.2. Types of copular sentence

In this section we review the terminology applied to copular sentences in the literature. Declerck (1988) provides a useful historical overview of the relevant terminology and divides that [NP *be* NP] sentences into two main categories: *specificational* and *predicational*.⁸ Declerck points out that the term *specificational* corresponds roughly to the terms *identifying/identificational* and *equative/equational* in the literature, whereas an even broader set of terms has been applied to sentences of the predicational type, including *attributive*; *ascriptive*; *property-assigning*; *qualifying*; *characterizational*; *classifying*; *intensive* and *non-equational*.⁹

According to Declerck, specificational and predicational sentences can be distinguished on the basis of their semantics, discourse function and grammatical features, although it is possible for a single sentence to be ambiguous between a predicational and a specificational reading, depending on context (see below).¹⁰ The defining semantic function of a specificational sentence is that it specifies a value for a variable:¹¹

- (8) Q: Who is the bank robber?
A: The bank robber is John Thomas *specificational*

Declerck argues that a specificational sentence like *The bank robber is John Thomas* is felt to provide an answer to a question of the form: *Who is NP?* In this sense the specificational sentence is discourse-linked, and brings with it a presupposition, or old information: *the bank robber*. This old information introduces a variable for which the post-copular NP provides a value: *John Thomas*. The value NP therefore introduces new information, and for this reason is described by Declerck as the focus of the sentence. Indeed, Declerck argues that affirmative specificational sentences are characterised by a contrastive/exhaustive interpretation of the value NP. Specificational sentences can be paraphrased as follows, which accounts for their ‘list-like’ reading, a feature which also explains why sentences of this type are frequently called *identifying/identificational*:

- (9) The following person is the bank robber: John Thomas

In terms of syntactic diagnostics, specificational sentences have two main characteristic properties. Firstly, a specificational sentence can be paraphrased by an *it*-cleft, where the value NP is the clefted constituent:

- (10) It’s John Thomas who’s the bank robber

Secondly, a specificational sentence is reversible (cf. example (8)):

- (11) Q: Who is the bank robber?
A: John Thomas is the bank robber *specificational*

⁸ Declerck traces these terms back to Akmajian (1970 [1979]). For the purposes of this paper, the terms *predicational* and *predicative* are not distinct.

⁹ See Declerck (1988) chapter 1 for further details and references.

¹⁰ Declerck’s typology is not restricted to simple copular sentences of the type discussed here, but is also applied to clefts and pseudoclefts.

¹¹ Examples in this section are from (or adapted from) Declerck (1988) chapter 1.

It follows from this that there is no fixed relative order between the NP that introduces the variable and the value NP, since in the context given in (11), *John Thomas* remains the value NP despite its pre-copular position. Declerck points out that the value NP, as the focus of the sentence, carries nuclear stress.¹² In example (8) the nuclear stress on *John Thomas* corresponds to the default, since nuclear stress in English is marked on the most deeply embedded constituent. Example (11), therefore, shows a marked assignment of nuclear stress on the subject NP.

The fact that specificational [NP *be* NP] sentences are reversible means that it is not a straightforward matter to determine which NP is the underlying subject, an issue that has received much attention in the literature. We return to this matter in the next section, noting for the time being that Declerck favours the value NP as the underlying subject, on the basis of the fact that it provides a value corresponding to the focus (*wh*-phrase) which is the subject in the corresponding question:

- (12) Q: Who is the thief?
A: Bill is the thief

A predicational sentence, rather than specifying a value for a variable, simply predicates some property of the subject NP:

- (13) John is a good student *predicational*

Declerck suggests that, unlike a specificational sentence, a predicational sentence is not felt to be an answer to a question. Predicational sentences are therefore not necessarily discourse-linked; it follows that they are licensed in out-of-the-blue contexts. In response to the question in (14), however, the example in (13) becomes specificational:

- (14) Q: What is it that John is?
A: John is a good student *specificational*

This illustrates the extent to which the distinction between specificational and predicational is context dependent.

A further important semantic characteristic of a predicational sentence is that, while the subject NP is a referring expression, the post-copular (property) NP does not refer. A diagnostic syntactic characteristic follows: predicational copular sentences are not reversible:¹³

- (15) *A good student is John

Neither can the property NP be clefted (in Standard English):

- (16) *It is a good student that John is

In these respects, the property NP patterns with predicate APs, which can also appear in post-copular position in predicational copular sentences. Indeed, Declerck observes that the property NP shows a number of adjectival characteristics. Among others, the property NP

¹² See Cinque (1993) and references cited there.

¹³ As Declerck points out, reversibility should not be confused with preposing. In a reversible copular sentence, the pre-copular NP is interpreted as the superficial subject; this is not the case for preposed NPs.

may be gradable (17a); it may be used without the indefinite article (17b); it licenses the same anaphoric pro-form as an AP (17c); it may occur in small clauses (17d):

- (17) a. John is a better teacher than you
 b. Tom is captain of the cricket team
 c. They all say Bill is tall/a fool, and that he is
 d. I consider John intelligent/a good student

Finally, in addition to the major classification into specificational and predicational sentences, Declerck identifies some further types of [NP *be* NP] sentence. The third type is *descriptively identifying*:

- (18) Q: Who is that man?
 A: That man is John's brother *descriptively identifying*

According to Declerck, sentences of this type are not specificational because the subject NP is already fully referential. Indeed, subjects of these sentences are typically either deictics, names or descriptions, which ensure full reference. Although this type of sentence introduces new information, the constituent corresponding to the new information cannot be clefted unlike in specificational sentences.¹⁴ Note that this is true regardless of the underlying order, not that the underlying order for (19b) would be licensed in the context of (18) in any case.

- (19) a. *It is John's brother that that man is
 b. *It is John's brother that is that man

Declerck's fourth type is the *identity statement*, which as he points out, tends to be subsumed within the specificational type. Declerck argues, however, that the semantics of specification are not the same as identity ('is the same entity as'):

- (20) The Morning Star is the Evening Star *identity statement*

Finally, Declerck identifies a fifth type: *definitions*:

- (21) A pyramid is what the Egyptians built to bury their pharaohs in *definition*

These differ from specificational sentences semantically and in that they cannot be clefted, but also differ from predicational sentences in that their main semantic function is to provide a definition, which cannot be argued to be the case for predicational sentences, even if these provide characteristics or attributes of the subject.

For the purposes of this paper, then, Declerck's terminology will be adopted. We turn next to review some approaches to the underlying syntactic structure of copular sentences, as well as to a consideration of some cross-linguistic properties of copular elements.

¹⁴ The descriptively identifying sentence also differs from the predicational type. For example, it is licensed in response to a *who* rather than a *what* question.

2.3. Verbal copulas

2.3.1. English

In this section, we briefly review a number of proposals concerning the underlying structure of copular sentences in English.

In her well-known unpublished PhD dissertation, Heggie (1988) adopts Stowell's (1978) proposal that the English copula *be* is a raising verb that takes a small clause complement. Heggie (1992) summarises the analysis, stating that copular sentences have the following structure:

(22) [IP [SPEC] [VP [V] [NP [NP1] [NP2]]]]

Heggie (1992, p. 106) states that the 'subject-predicate configuration' represented by the small clause adjunction structure underlies both 'identity' and 'equative' copular sentences (both specificational, in Declerck's terms), in addition to predicational copular sentences. In order to derive the [NP *be* NP] order, NP1 raises to SpecIP.

As Heggie points out, this view is uncontroversial for predicational copular sentences, but requires justification for equative (specificational) copular sentences. Heggie provides a number of arguments in support of the view that NP2 is also a predicate in equative sentences, for example the fact that it cannot be clefted and is therefore not an argument (Heggie 1992, p. 110).¹⁵

- (23) a. That man over there is Ronald Reagan
 b. It's that man over there that is Ronald Reagan
 c. *It's Ronald Reagan that that man over there is

Heggie (1992, p. 110) further observes that in inverse equatives neither NP can be clefted:

- (24) a. Ronald Reagan is that man over there
 b. *It's Ronald Reagan that is that man over there
 c. *It's that man over there that Ronald Reagan is

Heggie accounts for the ungrammaticality of (23c) and (24b) by assuming a null operator in cleft constructions, which relies on the clefted NP for identification. If the null operator is in a predicate position at deep structure (hence a theta role assigner rather than a theta-role receiver) this gives rise to an ungrammatical sentence.¹⁶

Heycock (1992) also discusses the structure and derivation of copular sentences in English, and also adopts the view that copula verb *be* heads a VP that takes a small clause complement. Heycock's discussion is centred upon the question of how canonical and inverse (referred to in the paper as 'reverse') copular sentences are derived.¹⁷ Example (25) shows a canonical copular sentence, in which *nationalism* has raised to matrix subject position (Heycock 1992, p. 96):

(25) Nationalism_i is [DP t_i the problem] *canonical*

¹⁵ Observe, though, that Heggie's 'equative' sentence in (23a) would be classified as *descriptively identifying* in Declerck's typology (cf. example (18) above).

¹⁶ It seems that example (24c) is argued to be ungrammatical because the syntactic operations that give rise to the equative structure (including raising of NP2 to specCP and I-to-C movement, in Heggie's analysis) mean that there is no landing site for the clefted constituent. However, the details are rather unclear.

¹⁷ No clear distinction is drawn here between predicational and specificational/equational copular sentences, although as we have seen from the review of Declerck (1998) only sentences of the latter type are reversible.

Heycock adopts the ‘predicate raising’ analysis proposed by Moro (1990) and argues that in inverse copular constructions the small clause subject remains in situ and the small clause predicate raises. According to this view, both (26a) and (26b) are derived from (26c) (Heycock 1992, p.99 (9)):

- (26) a. The prime minister is the real problem *canonical*
 b. The real problem is the prime minister *inverse*
 c. [IP e is [SC the prime minister [DP the real problem]]]

Heycock (1992, p. 99) suggests (27) as the structure for an inverse sentence like (26b):

- (27) [IP [the real problem]_i [IP is [VP t'_i [VP t_v [DP [DP the prime minister] t_i]]]]]]

Note that this analysis assumes that *the prime minister* is the underlying subject. Here, the small clause predicate raises to matrix SpecIP via SpecVP. Heycock argues that the fact that the predicate raises first to SpecVP means that this is an instance of A-movement, since SpecVP is always an A-position. This is supported by the fact that this movement can feed further A-movement, for example if it then goes on to raise to subject position of a raising verb as in (28) (Heycock 1992, p.99):

- (28) The real problem seems to be the prime minister

In a later paper, Heycock (1994, p. 224-5) argues that ‘the inverse copular construction is characterised by the occurrence of an initial DP being used attributively, and a postcopular DP used referentially’. Here, she also mentions briefly the focus properties of copular constructions, observing that while in canonical constructions either DP can be focused (29), in inverse constructions only the postcopular DP can be focused (30):

- (29) a. A: Was the culprit John or Bill?
 B: **John** was the culprit *canonical*
 b. A: Was John the culprit or the victim?
 B: John was the **culprit** *canonical*
- (30) a. A: Was the culprit John or Bill?
 B: The culprit was **John** *inverse*
 b. A: Was John the culprit or the victim?
 B: *The **culprit** was John *inverse*

More recently, while Moro (1997; 2000) maintains the predicate raising analysis, Heycock and Kroch (1999) posit distinct underlying structures for predicational and equative sentences. They argue that inverse copular sentences are a sub-type of equatives, since they pattern with equatives in relation to patterns of extraction, and that predicational and equative sentences might therefore distinguished in syntactic structure by distinct types of small clause. The equative small clause is argued to involve the projection of a null functional head, which the predicational small clause lacks.

2.3.2. Scottish Gaelic

Copular verbs are also found in Scottish Gaelic, the topic of a recent paper by Adger and Ramchand (2001). Scottish Gaelic is a VSO language, where the VSO order is commonly viewed within Minimalist approaches as derived from underlying SVO order by raising of the verb to the head of TP:¹⁸

- (31) Dh'òl_i Calum t_i an t-uisge beatha
 drink-PAST Calum the whiskey
 'Calum drank the whiskey'

An alternative to raising the main verb is to insert the verb *bith* 'be', which is known as the 'substantive auxiliary' and gives rise to a 'substantive auxiliary construction':

- (32) Bha Calum ah òl uisge beatha *substantive auxiliary construction*
 be-PAST Calum ASP drinking the whiskey
 'Calum was drinking the whiskey'

This type of construction can also take AP and PP in predicate positions:

- (33) a. Tha Calum faiceallach *substantive auxiliary construction*
 be-PRES Calum careful
 'Calum is (being) careful'
 b. Tha Calum anns a'bhuth *substantive auxiliary construction*
 be-PRES Calum in the shop
 'Calum is in the shop'

However, a simple NP predicate is not licensed, but has to be accompanied by a form of the preposition *ann* 'in':

- (34) a. *Tha Calum thidsear
 be-PRES Calum teacher
 'Calum is a teacher'
 b. Tha Calum 'na thidsear *substantive auxiliary construction*
 be-PRES Calum in.3s teacher
 'Calum is a teacher'

A DP (noun phrase with overt definite determiner) is not licensed in predicate position either, with or without the preposition inserted:

- (35) a. *Tha Calum an thidsear
 be-PRES Calum the teacher
 'Calum is the teacher'
 b. *Tha Calum anns an thidsear
 be-PRES Calum in the teacher
 'Calum is the teacher'

A second (marginal) type of copular sentence in Scottish Gaelic is the 'inverted copular construction'. These involve the order COP-predicate-DP, and are formed with the

¹⁸ All examples in this section are taken from Adger and Ramchand (2001).

(39) [TP [T' [T] [PREDP[PRED' [PRED] [XP]]]]]

In Scottish Gaelic, the head of PredP may be instantiated by a null ‘light verb’, by the ‘defective’ copular verb, or by a pronominal element, depending on the type of copular construction.

Central to Adger and Ramchand’s analysis is the claim that Pred is restricted to taking lexical projections as its complement. This raises the question of equative copular sentences, which consist of two DPs (DP a functional category). DP clearly has a dual function: referential or predicational. Crucially, an indefinite NP in Scottish Gaelic has no determiner, and is treated by Adger and Ramchand as NP. Definite NPs, on the other hand, are preceded by a definite determiner, and are therefore DPs.

Adger and Ramchand present a range of data to demonstrate the restriction on DP occurring as a complement of Pred, and develop an analysis based on Zamparelli’s (2000) claim that there are three distinct ‘layers’ within the DP: the Strong DP (SDP), which includes determiners and results in a referential expression (40a); the Predicative DP (PDP), which results in an expression that can occur in the same position as a predicative AP (40b); and the Kind DP (KIP), which denotes an ‘intrinsic property’ (40c) (Adger and Ramchand 2001, p. 17):

- (40) a. The dog is barking
 b. Fido is a dog
 c. Fido is a friendly kind of dog

According to Adger and Ramchand, then, Scottish Gaelic DPs headed by the definite determiner can only be SDPs, and are therefore restricted to appearing in non-predicative positions. Bare NPs, on the other hand, are KIPs (property denoting), and can occur as the complement of Pred. Adger and Ramchand’s analysis therefore holds that there is a single underlying syntactic structure for copular sentences, and that the range of variation found in Scottish Gaelic copular sentences can be explained by the semantic properties of the constituents.²⁰

2.4. Pronominal copulas

2.4.1. Hebrew

Hebrew copular sentences are formed in the past or future tense with the verb *h-y-y*, but this verb has no present tense form. Present tense copular sentences are formed with a pronominal copula, identical to third person pronouns, and having masculine and feminine forms, both singular and plural. This type of construction licenses AP, NP and PP predicates,

²⁰ For English, Adger and Ramchand claim that the copula *be* is lexical, and can select either a property denoting XP (AP, PP or KIP), or a referential SDP. Furthermore, they claim that only SDPs (referential expressions) can be raised in English (raising to TP for case reasons). This claim is based on the observation that only an identificational reading is possible in English inverse copular sentences (Adger and Ramchand 2001, p.30):

- (i) a. [_{SDP} What you are talking about] is [_{SDP/KIP} garbage]
 b. [_{SDP/*KIP} garbage] is [_{SDP} what you are talking about]

Since *garbage* in example (ib) can only be interpreted as referential, Adger and Ramchand conclude that raising in English copular sentences is restricted to SDPs, thereby rejecting the predicate raising analysis and assuming a null Pred head.

and the pronominal copula, which usually agrees in number and gender with the subject, is optional unless the postcopular NP is a referring expression:²¹

- (41) a. Dani (hu) nexmad *predicational*
 Dani PRO.3ms nice
 ‘Dani is nice’
 b. Dani (hu) rofe *predicational*
 Dani PRO.3ms doctor
 ‘Dani is a doctor’
 c. Dani (hu) al ha-gag *predicational*
 Dani PRO.3ms on the-roof
 ‘Dani is on the roof’
 d. Dani *(hu) mar yosef *identity*
 Dani PRO.3ms Mr Yosef
 ‘Dani is Mr Yosef’

Doron (1986) rejects an analysis in which the pronominal copula is analysed as having the same syntactic role as the verb *h-y-y* ‘be’, because the pronominal copula and the verb display different behaviour with respect to properties such as sentential negation and adverbial placement. Doron argues that this pronominal element is not an independent NP, but the phonological realisation of INFL features.²² Doron (1983) argues that the explanation for the obligatory presence of the pronominal copula in identity sentences like (41d) lies in the fact that referring NPs are arguments and must have theta-roles assigned to them, whereas predicational NPs are themselves theta-role assigners. Essentially, then, Doron proposes an analysis wherein the pronominal copula may, but need not be, a theta role assigner.

Rothstein (1995) adopts Doron’s view that the pronominal copula is the spellout of agreement features in INFL, but argues that it is thematically vacuous, pointing out that the pronominal copula is not in fact obligatory in identity sentences containing either negation (42a-b) or a pronominal subject (42c):

- (42) a. Dani (hu) lo mar yosef *identity*
 Dani PRO.3ms not Mr Yosef
 ‘Dani is not Mr Yosef’
 b. Dani (*hu) eyno mar yosef
 Dani PRO.3ms not.ms Mr Yosef
 ‘Dani is not Mr Yosef’
 c. Ani (hu) mar yosef *identity*
 I PRO.3ms Mr Yosef
 ‘I am Mr Yosef’

Rothstein proposes instead that the pronominal copula projects an I-bar constituent, which is a ‘syntactic predicate node’. In other words, the pronominal copula is obligatory in identity sentences because no syntactic predication relation holds between the two NPs; this relation is introduced by the pronominal copula, which nevertheless does not assign thematic roles. Crucial to this analysis, then, is the view that ‘predication is not thematically defined, but is a

²¹ Data in this section are from Rothstein (1995), some of which are attributed to Doron (1983).

²² Adger and Ramchand (2001, p.28) suggest that the pronominal copula in Hebrew is ‘a spellout of agreement features on the null copular Pred head.’

primitive saturation relation between an open syntactic constituent (which, crucially, does not necessarily assign a theta-role), and a closed constituent.’ (Rothstein 1995, p. 36).

Rothstein therefore assumes the structure in (43a) for predicational copular sentences like (41a), and the structure in (43b) for identity sentences like (41d):

- (43) a. [_{IP} Dani_i [_{I'} [_I hu] [_{SC} [_{NP} t_i] [_{AP} nexmad]]]] *predicational*
 b. [_{IP} Dani [_{I'} [_I hu] [_{NP} mar yosef]]] *identity*

Rothstein justifies these distinct syntactic structures on the basis of the fact that the pronominal copula may agree with the following element, but only in identity sentences (see Rothstein (1995, p. 38-39) for further details).

2.4.2. Arabic

Like Hebrew, Arabic is a Semitic language that can use a pronominal element to perform the copular function. Eid (1983) argues that such elements are used in Egyptian Arabic as an anti-ambiguity device to prevent a construction from being ambiguous between a phrasal and a sentential interpretation. Egyptian Arabic has a copular verb in past and future tenses (44a) and (44b), and also for the ‘habitual present’ (44c), but not for the ‘continuous present’ tense (44d):²³

- (44) a. Il-mudarris kaan latiif
 the-teacher was-(he) nice
 ‘The teacher was nice’
 b. Il-mudarris ha-y-kuun latiif
 the-teacher FUT-he-be nice
 ‘The teacher will be nice’
 c. Il-mudarris ʕadatan bi-y-kuun latiif lamma ʔa-kallim-u
 the-teacher usually PRES-he-be nice when I-talk-him
 ‘The teacher is usually nice when I talk to him’
 d. Il-mudarris latiif *predicational*
 the-teacher nice
 ‘The teacher is nice’

Example (45) shows that when the predicate of a present tense copular sentence is a definite NP, the pronominal copula (as in Hebrew, a third person pronoun agreeing in gender and number with the subject) is obligatory:

- (45) Il-mudarris huwwa il-latiif *specificational*
 the-teacher PRO.3ms the-nice
 ‘The teacher is nice / the nice one’

Eid argues that the pronominal copula is used here to prevent ambiguity in interpretation. In the absence of the pronominal copula, only a phrasal interpretation is possible:

- (46) Il-mudarris il-latiif
 the-teacher the-nice
 ‘The nice teacher’

²³ Data in this section are from Eid (1983).

The distribution of the pronominal copula is due to the fact that, in Arabic, adjectives must agree in definiteness (as well as gender and number) with the NP they modify. The absence of the definite article on the adjective in (44d) rules out the possibility of a phrasal interpretation, so that the presence of the pronominal here is not necessary to force a sentential interpretation.

Eid suggests that the reason why pronominals carry out the copular function in present-tense nominal sentences, rather than any other constituent, lies the fact that pronominals in Arabic show such rich morphological agreement; in the same way that verbs agree in person, number and gender with the subject, so do pronominals.²⁴

Edwards and Ouhalla (1996) argue that there is a designated focus position in those Arabic pronominal copular sentences, which equate two definite NPs (specificational sentences, in Declerck's terminology), and that these sentences are therefore reversible. In such sentences, where the pronominal copula is obligatory, the NP in subject position receives a contrastive or corrective focus interpretation. For example, (47a) would be licensed in response to an utterance asserting that someone other than Said is the teacher, and (47b) in response to an utterance identifying some other individual as Said:²⁵

- (47) a. **Said** *(huwwa) l-mudrris *specificational*
 Said PRO.3ms the-teacher
 ‘**Said** is the teacher’
- b. **l-mudrris** *(huwwa) Said *specificational*
 the teacher PRO.3ms Said
 ‘**The teacher** is Said’

Where the post-copular constituent is an AP, so that the sentence is predicational rather than specificational, the pronominal copula is optional, and there is no contrastive focus (48a). In order to place the subject NP in contrastive focus, clefting is necessary (48b):

- (48) a. Saida (hiyya) zwina *predicational*
 Saida PRO.3fs pretty
 ‘Saida is pretty’
- b. **Saida** (hiyya) lli zwina
 Saida she COMP pretty
 ‘**Saida** is pretty’

Edwards and Ouhalla present an analysis of specificational sentences which involves covert movement of *huwwa*, base generated in SpecIP, to SpecFP, the focus-scope marking position:

²⁴ Eid (1992) extends this analysis of copular pronouns to include cases where these are also argued to carry out a question marking function. In a number of dialects, such as Egyptian, Iraqi, Palestinian and Makkan Arabic, the pronoun we are familiar with as the copular pronoun appears to be used as a question marker (Eid 1992, p.108):

- (i) a. ʔali katab il-gawaab b. (huwwa) ʔali katab il-gawaab?
 Ali wrote.3ms the-letter PRO.3ms Ali wrote.3ms the-letter
 ‘Ali wrote the letter’ ‘Did Ali write the letter?’

Eid therefore argues that the pronoun *huwwa* may have either a copular function or a Q marking function; depending on which is the case, it originates in a different position, but always as a predicational nominal head (see Eid [1992] for details).

²⁵ Examples (47)-(48) were provided by Jamal Ouhalla (p.c.) and are Moroccan Arabic.

(49) [FP [TOP Said] [FP huwwa_i [F' [F]] [IP t_i [I' [I]] [DP il mudarris]]]]] *specificational*

This movement is argued to take place covertly because this dialect of Arabic does not allow focus fronting; hence there would not be a strong case for focus movement of this element in the syntax. This analysis enables *huwwa*, a pronominal element, to be generated in an A-position, and gives the NP *Said* (coreferential with *huwwa*) the status of topic. An IP complement of F is proposed as the structure for the small clause, so that there is some functional projection for the checking of case on the DPs within the small clause.²⁶

2.5. Interim Summary

This section has provided a cross-linguistic perspective on various aspects of copular sentences, in particular (a) the categorial status of the copular element, (b) the different types of copular sentences, and (c) a range of analyses that have been proposed within a Principles and Parameters or Minimalist framework. In the case of copular verbs, these analyses have tended to focus on the properties of *be* as a raising verb, the properties of the small clause complement, and the identification of underlying subject and predicate. In the case of pronominal copulas, the analyses have tended to focus on the categorial status and syntactic function of the copula. We have also seen a more recent analysis, where Adger and Ramchand (2001) attempt to account for the properties of both verbal and pronominal copular constructions by means of a universal analysis that rests on the presence on a functional projection, the Predicate Phrase. Below, we explore an alternative perspective that might allow a universal syntactic analysis, focusing on the information structure properties of copular sentences.

3. Copular sentences in Hausa

The argumentation in the remainder of the paper proceeds along the following lines: if the word order properties of copular sentences in some languages can be shown to be determined by information structure, such that copular sentences can be shown to involve a designated focus position, then there is motivation for an analysis of these constructions as involving a designated focus projection.²⁷ With this in mind, we turn to the central part of the paper: a discussion of Hausa copular sentences.

3.1. Description

Copular sentences in Hausa fall into two main categories: those with a verbal copula and those with a non-verbal copula. Jaggar (2001, p. 428) describes Hausa as having a number of copular verbs, such as *kōmà* ‘become’, defined as those verbs that take a subject complement:

(50) Ruwā zâi kōmà kànkārā
 water FUT.3ms become ice
 ‘The water will turn into ice’

Jaggar lists further examples including *zama* ‘become’, *kasànce* ‘become, turn out’, *rikidē* ‘change into’, and *zaunà* ‘remain’. These copular verbs are distinct from the non-verbal copula in Hausa in a number of ways. Firstly, these verbs have semantic content, and as such

²⁶ Edwards and Ouhalla suggest that in yes-no questions (contra Eid 1992), *huwwa* does not perform a question-marking function but rather a focus function, given that yes-no questions specify an alternative and are, in this sense, focus constructions (see also Ouhalla 1996).

²⁷ A perspective not without motivation, given the widespread contribution of copular elements to the derivation of focus structures such as clefts or focus fronting constructions.

may be described as quasi-copulas. Furthermore, like all verbs in Hausa, these quasi-copular verbs co-occur with person and tense aspect mood (TAM) markers, such as *zâi* in example (50). As this example shows, this bundle of inflectional features occurs as a free morpheme in Hausa, which precedes the verb but does not show clitic-like behaviour.

Non-verbal copular sentences in Hausa are formed with the non-verbal copula *nē* (m/pl) / *cē* (f), sometimes referred to as the ‘stabilizer’. This element is glossed here as focus marker (FM). The non-verbal copula is marked for gender and number, but not for tense or aspect, which is determined by context (Newman 2000, p.160):²⁸

- (51) a. Audū bāwà nē
 Audu slave FM.m
 ‘Audu is a slave’
 b. Dâ mā Mūsā dà Shēhù àbòkan gàske nē
 already Musa and Shehu friends.of truly FM.pl
 ‘Musa and Shehu were already true friends’

As the examples in (51) demonstrate, the copula shows polar tone. These examples also exemplify the canonical or unmarked word order for a predicative non-verbal copular sentence, a point to which we return below.

As indicated at the outset, the non-verbal copula also appears in verbal sentences in Hausa, where it performs the function of focus marker. This type of construction is exemplified in (3a), repeated here as (52b), with (52a) a ‘neutral’ construction:²⁹

- (52) a. Yârā sun sàyi àbinci
 children 3pl.PF buy food
 ‘The children bought food’
 b. **Abinci**_i (nè) yârā sukà sàyā t_i
 food FM.m children 3pl.FOC.PF buy
 ‘The children bought **food**’

Although (52b) resembles a cleft construction in English in that the focused constituent is fronted and marked by the copula ‘be’, constructions like (52b) in Hausa are not syntactic clefts but monoclausal focus fronting structures; the copula is optional in these constructions.

In Green (1997; to appear) focus fronting constructions in Hausa are analysed as projections involving a Focus Phrase or FP (in the sense of Brody 1990), where the non-verbal copula instantiates the head of FP and the focused constituent occupies SpecFP. This analysis has a number of benefits in explaining the properties of focus fronting structures in Hausa, the details of which are beyond the scope of this paper. What is claimed here is that the most economical approach is to extend the same analysis to the categorial status and function of the copula in non-verbal sentences (hence the gloss ‘FM’). With this in mind, we turn first to a descriptive overview of the word order patterns in Hausa non-verbal sentences and their semantic and pragmatic properties.

²⁸ Newman (2000, p. 545) points out that the consonant pattern here marking number and gender is identical to that found in the Hausa genitive linker *na/ta/na* (m/f/pl), where the /c/ is ‘a palatalized manifestation of /t/ ... presumably a retention of an old Afroasiatic pattern of gender and number’.

²⁹ Note the ‘focus’ perfective form of INFL in (52b). This special inflection is traditionally termed the ‘relative’ form due to its occurrence in relative clauses, and is a marker of operator-variable constructions in Hausa. See Green & Reintges (2003a,b), Jaggar (2001); Newman (2000); Tuller (1986).

Predicative copular constructions in Hausa may only occur with a NP or AP predicates.³⁰ The non-verbal copula *nē/cē* agrees in gender and number with the subject, as does the predicate.³¹ Unlike the majority of the Chadic languages, where subject and predicate may simply be juxtaposed in order to form a predicative construction, in Hausa, the presence of the copular element *nē/cē* is usually obligatory in this type of construction.³² As the examples in (53) show, the canonical structure for a predicative copular sentence is DP NP FM (53a) or DP AP FM (53b):

- (53) a. Audù **dālibī** nē *predicative*
 Audu student.m FM.m
 ‘Audu is a **student**’
- b. Audù dōgō nē *predicative*
 Audu tall.m FM.m
 ‘Audu is **tall**’

In these canonical examples, the focus of the sentence (indicated by boldface) falls on the predicate. Example (54) shows that the subject of a predicative copular sentence must be definite (hence DP rather than NP).³³

- (54) *Mùtùm **dālibī** nē
 Man student.m FM.m
 ‘A man is a **student**’

Although the canonical word order for predicative copular sentences is DP NP/AP FM, a number of other word order possibilities are also permitted, where these reflect distinct information packaging options. The non-canonical structure of a predicative copular sentence may be either NP/AP FM DP (focus on the predicate), as shown by example (55a), or DP FM NP/AP (focus on the subject), as shown by example (55b):

- (55) a. **Dālibī** nē Audù (bà **likità** ba nē) *predicative*
 student.m FM.m Audu NEG doctor NEG FM.m
 ‘Audu is a **student**’ (not a **doctor**)

³⁰ Non-verbal sentences with PP predicates are possible in Hausa, but these are formed with the imperfective TAM rather than the copula (Jaggar 2001, p. 472):

- (i) kāyā sunà cikin mōtā
 goods 3pl.IMPF inside car
 ‘The stuff is in the car’

Pustet (2003, p. 51) suggests that in languages like Spanish with more than one copula, the permanence vs. non-permanence distinction conditions the choice of copula. Although Hausa does not show copula alternation, the fact that predicates in non-verbal copular sentences are restricted to NP/AP could plausibly be related to this semantic parameter. See also § 3.2.1.

³¹ See Jaggar (2001, pp. 457-459) for further details.

³² There are some common exceptions to this generalisation. See Jaggar (2001, pp. 460-461) for examples.

³³ An indefinite subject is licensed only with a generic reading (Phil Jaggar, p.c.), e.g.:

- (i) Yārò dai yārò nē
 boy TOP boy FM.m
 ‘boys will be boys’ (Lit: ‘as for a boy, (he) is a boy’)

- b. **Audù** nē dālībī (bà Bālā ba) *predicative*
 Audu FM.m student.m NEG Bala NEG
 ‘**Audu** is a student’ (not Bala)

Example (56) shows that the subject DP can be topicalised (56a) but the predicative NP cannot (56b):

- (56) a. Audù, **dālībī** nē *predicative*
 Audu student.m FM.m
 ‘As for Audu, (he) is a **student**’
 b. ***Dālībī**, **Audù** nē
 student.m Audu FM.m
 ‘As for a student, (he) is **Audu**’

Finally, example (57) shows that, context permitting, either the subject (57a) or the predicate (57b) may be null in a predicative copular sentence:

- (57) a. Q: Wānē nē Audù?
 who.m FM.m Audu
 ‘Who is Audu?’
 A: **Dālībī** nē *predicative*
 student.m FM.m
 ‘(He) is a **student**’
 b. Q: Wānē nē dāraktà à nân?
 who.m FM.m director at here
 ‘Who is director here?’
 A: **Audù** nē *predicative*
 Audu FM.m
 ‘**Audu** is’

We turn now to copular sentences that contain two definite DPs, such as the specificational copular sentence in (58).³⁴ In keeping with Declerck’s typology of English copular sentences, what distinguishes this type of copular sentence from the predicative copular sentence is that the DPs may occur in either order:

- (58) a. Audù **bàrāwòn** nē *specificational*
 Audu thief.DD FM.m
 ‘Audu is **the thief**’
 b. **Bàrāwòn** **Audù** nē *specificational*
 thief.DD Audu FM.m
 ‘The thief is **Audu**’

³⁴ In Hausa, a bare NP can be interpreted as definite or indefinite, depending on context. The definite determiner (dd) *-n* (m/pl) or *-r̃* (f) can therefore be described as optional in some contexts. See Jaggar (2001, pp. 316-321) for further details. However, two DPs (such as NP plus DD, or proper name) are required to form an equative copular sentence.

However, in Hausa, unlike in English, descriptively identifying sentences (such as examples (59)-(62) below) pattern together with specificational sentences in their syntactic behaviour. For this reason the term ‘equative’ is used here as a cover-term for both types of copular sentence in Hausa. The examples in (59) show the canonical structure of an equative copular sentence (DP DP FM), where the DP left-adjacent to the copula is in focus.

- (59) a. Mùtumìn cân likità-n-ā nè *equative*
 man.of there doctor-of-1s FM.m
 ‘That man over there is my **doctor**’
 b. Likità-n-ā mùtumìn cân nē *equative*
 doctor-of-1s man.of there FM.m
 ‘My doctor is **that man over there**’

The non-canonical structure of an equative copular sentence is DP FM DP, as shown by the examples in (60), where the pre-copular DP is in focus:

- (60) a. Mùtumìn cân nē likità-n-ā (bà mùtumìn nân ba) *equative*
 man.of there FM.m doctor-of-1s NEG man.DD here NEG
 ‘**That man over there** is my doctor’ (not this man over here)
 b. Likità-n-ā nè mùtumìn cân (bà àbōkī-n-ā ba) *equative*
 doctor-of-1s FM.m man.of there NEG friend-of-1s NEG
 ‘**My doctor** is that man over there’ (not my friend)

Example (61) shows that either DP can be topicalised in an equative copular sentence:

- (61) a. Mùtumìn cân, likità-n-ā nè (bà àbōkī-n-ā ba nè) *equative*
 man.of there doctor-of-1s FM.m NEG friend-of-1s NEG FM.m
 ‘That man over there, (he) is my **doctor**’ (not my friend)
 b. Likità-n-ā, mùtumìn cân nē (bà mùtumìn nân ba) *equative*
 doctor-of-1s man.of there FM.m NEG man.DD here NEG
 ‘My doctor, (he) is **that man over there**’ (not this man over here)

Finally, example (62) shows that either DP can be null in an equative copular sentence:

- (62) a. Mùtumìn cân nē *equative*
 man.of there FM.m
 ‘(He) is **that man over there**’
 b. Likità-n-ā nè *equative*
 doctor-of-1s FM.m
 ‘(He) is **my doctor**’

As the data in this section show, there is a designated focus position in Hausa non-verbal copular constructions, such that the constituent left-adjacent to *nē/cē* is always in focus. It seems clear, then, that the Hausa copula falls into Stassen’s (1997) category of focus marking PARTICLE copulas (§ 2.1). As indicated in section 1, the type of focus associated with the constituent left-adjacent to *nē/cē* is contextually determined.³⁵ Examples (53a) and (59a) may result in new information focus, for example in the context of wh-questions such as

³⁵ See Green & Jaggar (2003) for a detailed discussion of types of focus in Hausa.

‘What does Audu do?’ (53a), or ‘Who is that man over there?’ (59a). As shown by several of the above examples, however, an exhaustive listing interpretation is licensed by an appropriate context wherein alternatives are ruled out.³⁶

3.2. Analysis

In this section, we first review analyses in which the Hausa copula *nē/cē* has been classified either as a form of inflection or as a verb (§ 3.2.1). An alternative analysis is then elaborated, wherein *nē/cē* is argued to be a focus marker, instantiating the head of the Focus Phrase (§ 3.2.2). This approach is shown to have a number of empirical and theoretical advantages.

3.2.1. The Hausa copula is not INFL or V

In her comprehensive GB survey of Hausa, Tuller (1986) presents an analysis of focus fronting in Hausa which entails movement of the focused constituent to SpecCP. Tuller does not, however, link *nē/cē* in copular constructions to those in focus fronting constructions, beyond stating that they are ‘isomorphic’ and historically may have been focus markers. In an analysis similar in spirit to Doron’s (1986) analysis of the Hebrew pronominal copula, Tuller treats *nē/cē* in copular constructions as a ‘defective’ form of INFL, drawing support for this analysis from the fact that *nē/cē* and imperfective TAM (INFL) are in complementary distribution in non-verbal sentences with respect to the category of the complement (Tuller 1986, p.184):

- | | | |
|------|---|----------------------|
| (63) | a. \bar{A} ’ishā tanà kař’antà Kùř’ānī
Aisha 3fs.IMP read.INF Koran
‘Aisha is reading the Koran’ | <i>VP complement</i> |
| | b. Yārā sunà cikin kàntī
children 3pl.IMP inside.of shop
‘The children are inside the shop’ | <i>PP complement</i> |
| (64) | a. \bar{A} ’ishā mālāmā cè
Aisha teacher.f FM.f
‘Aisha is a teacher’ | <i>NP complement</i> |
| | b. Littāfin sābō nè
book.DD new.m FM.m
‘The book is new’ | <i>AP complement</i> |

Tuller attributes the distinct linear position of *nē/cē* to its clitic status, of which polar tone is indicative. Tuller describes *nē/cē* as a ‘defective’ INFL’ because it has gender marking but no tense/aspect or person features, and suggests that it is generated under INFL, where it assigns a theta-role to the complement predicative AP/NP, and undergoes affix-hopping to cliticise to this element. The proposed structure is shown in (65) (Tuller 1986, p.385):

³⁶ There is a distinct alternative to copular constructions: the ‘emphatic’ construction that is formed with DP followed by the expression *kè nan*. This expression contains the focus imperfective TAM marker *kè* (unmarked for person/number/gender) and the deictic *nan* ‘there’. Jaggar (2001, p. 463) describes this strategy as having a ‘conclusive force ... pragmatically stronger than the copula *nē*’:

- (i) halinsà kè nan
character.of.3ms FOC.IMP there
‘That’s just his character’

(65) $[_{IP} [_{NP}] [_{I'} [_{I} t_i] [_{NP/AP} n\bar{e}/c\bar{e}_i]]]$

Although Tuller's analysis is persuasive in the way it accounts for the data presented, it overlooks a crucial fact, namely that there is a designated focus position underlying the syntax of Hausa copular constructions. Tuller therefore overlooks the possibility that *nē/cē* in both focus and copular constructions are one and the same item: the focus marker.

Unlike Tuller, McConvell (1973) proposes an analysis in which both copular constructions and focus fronting constructions in Hausa receive a parallel treatment. Although the details of his pre-GB analysis are not discussed here, it is relevant to note his terms (listed below) for the following examples (McConvell 1973, p.17):

- (66) a. Kwai nē àbincinsù *'emphatic copular sentence'*
 egg FM.m food.of.3pl
 'Eggs are their food'
- b. Àbincinsù kwai nē *'non-emphatic copular sentence'*
 Food.of.3pl egg FM.m
 'Their food is eggs'
- c. Sun sàyi kwai nē *'sentential focus'*
 3pl.pf buy egg FM.m
 'They bought eggs'
- d. Kwai nē sukà sàyā *'verbal focus emphatic sentence'*
 egg FM.m 3pl.FOC-PF buy
 'They bought eggs'

McConvell (1973, p.45) states 'in this thesis I take the position that only predicate NPs are emphasised in copular sentences. It is possible that in some dialects either the predicate or the subject NP can become the focus', hence the distinction between (66a,b). McConvell's analysis, wherein focus fronting constructions are analysed as clefts, rests on the categorisation of *nē/cē* as a copular verb, a position that cannot be maintained. As Tuller (1986) points out, unlike Hausa verbs, the copula inflects for gender and number; unlike Hausa verbs, the copula has no verbal noun form; and unlike Hausa verbs, the copula cannot co-occur with a TAM marker (INFL). Furthermore, given that Hausa is an SVO language, the canonical position of *nē/cē* at the end of copular sentences such as (67) is not consistent with the usual linear position of verbs:

- (67) Audù dōgôn nē
 Audu tall.DD FM.m
 'Audu is the tall one'

The copula also behaves differently from verbs with respect to negation. Example (68a) shows a negated (equative) copular sentence, and (68b) a negated verbal sentence:

- (68) a. Audù bà dōgôn ba nē
 Audu NEG tall.DD NEG FM.m
 'Audu is not the tall one'
- b. Kànde bà tà ci àbinci ba
 Kande NEG 2fs.PF eat food NEG
 'Kande didn't eat any food'

The negative particles *ba...ba* enclose the whole verbal-inflectional complex in (67a), whereas example (67b) shows that *nē* can occur outside the scope of negation. However, despite the fact that McConvell's analysis of *nē/cē* as a copular verb is untenable, his recognition of both types of construction as involving focus remains an important one.³⁷

3.2.2. The Hausa copula is the head of FP

In this section I outline an FP analysis for copular constructions. As indicated above, there is a designated focus position in these constructions, and it is therefore desirable both on empirical and theoretical grounds to explore a unified analysis for both focus fronting and copular constructions. Recall example (52b), repeated here as (69):

- (69) **Abinci_i nē yârā sukà sàyā t_i**
 food FM.m children 3pl.FOC.PF buy
 'The children bought **food**'

The analysis shown in (70) was developed in Green (1997; to appear) to account for focus fronting in Hausa:

- (70) [_{FP} àbinci_i [_{F'} [_F nē] [_{IP} yârā [_{I'} [_I sukà] [_{VP} sàyā t_i]]]]]

In Minimalist terms, F has a focus-EPP feature; this feature is not an inherent lexical feature, but is introduced into the derivation because it is the mechanism responsible for reaching an otherwise unavailable interface goal, or interpretation. As far as the syntactic computation is concerned, this feature is uninterpretable, and must therefore be eliminated as a consequence of the operation Agree. If Agree takes place by means of Move and internal Merge before Transfer, the result is overt displacement (*ex-situ* focus). The Agree operation takes place when the goal (moved XP) and the probe (head of the left-peripheral functional projection CP/FP) have a matching feature.

In Hausa focus fronting constructions, the optional FM occupies the head of the left-peripheral functional projection FP. For independent reasons this projection must be distinct from CP in Hausa.³⁸ Both the phrase XP and the head F that has the uninterpretable focus-EPP feature are active with respect to the same focus feature, which is eliminated by Move, internal Merge and Agree prior to Spell-Out, resulting in overt movement. I do not go into further detail about focus fronting constructions here, but the analysis outlined above can be straightforwardly extended to copular constructions in Hausa.

Example (53a), representing the canonical word-order for predicative copular sentences, is repeated here as (71a) and the proposed structure given in (71b):

- (71) a. Audù **d'ālibī** nē *predicative*
 Audu student.m FM.m
 'Audu is a **student**'
 b. [_{FP} [_{TOP} Audù]_k [_{FP} **d'ālibī**_i [_{F'} [_F nē] [_{NP} [_{DP} *pro*_k] [_{NP} t_i]]]]]]

The analysis in (71b) holds that copular sentences consist of a predicative/equative lexical core dominated by the functional projection FP. When, as in (71a), it is the predicate that is focused, having moved up from complement of F, this occupies SpecFP. This predicts that

³⁷ See Green (1997; to appear) for arguments against focus constructions in Hausa as clefts, and Jaggar (2001, pp.459-460) for further examples of negation in copular sentences.

³⁸ Overt comp may precede focus-fronted XP in embedded sentences; see Green (1997; to appear).

the subject must occupy topic position (co-referential with a null pronominal in the complement of F), which in turn predicts that only a definite DP can occur as ‘subject’ of a canonical copular sentence. This prediction is borne out by the ungrammaticality of example (54), repeated here as (72):

- (72) *Mùtûm **d’ālibī** nĕ
 man student.m FM.m
 ‘A man is a **student**’

Further evidence for the subject as topic is provided by the fact that it is not possible to negate it while the focus remains on the predicate:

- (73) *Bà mùtumìn ba **d’ālibī** nĕ
 NEG man.DD NEG student.m FM.m
 ‘Not the man is a **student**’

Neither is it possible to focus the subject of canonical copular sentences:

- (74) *Mùtumìn nĕ d’ālibī nĕ
 man.DD FM.m student.m FM.m
 ‘**The man** is a **student**’

The ungrammaticality of (74) reflects the restriction on multiple foci in Hausa, in accordance with the analysis that there is already one focus phrase in the sentence: the NP *d’ālibī*. The subject in topic-adjoined position is not in the correct configuration to enter into the Agree relation. There is only one such position: SpecFP.

The arguments for FP as the phrasal projection underlying copular constructions become clearer when we consider the various possible word-order permutations for these constructions, along with their focus properties. Consider next the non-canonical predicative copular sentences shown in (55), repeated here as (75):

- (75) a. **Dālibī** nĕ Audù (bà **likità** ba nĕ) *predicative*
 student.m FM.m Audù NEG doctor NEG FM.m
 ‘Audù is a **student**’ (not a **doctor**)
 b. **Audù** nĕ d’ālibī (bà Bālā ba) *predicative*
 Audù FM.m student.m NEG Bala NEG
 ‘**Audù** is a student’ (not Bala)

The proposed structures for (75a) and (75b) are shown in (76a) and (76b) respectively:

- (76) a. [_{FP} **Dālibī**_i [_{F'} [_F nĕ] [_{NP} [_{DP} Audù] [_{NP} t_i]]]]
 b. [_{FP} **Audù**_i [_{F'} [_F nĕ] [_{NP} [_{DP} t_i] [_{NP} d’ālibī]]]]

As indicated by the proposed structure, the predicate in (76a) has focus properties, as indicated by its clause-initial position left-adjacent to *nĕ*. In this case the predicate has raised from its base position in the small clause complement of F, and the subject remains in situ in the small clause subject position. This reveals that the subject must be case-licensed in situ, in the same configuration in which it is theta-licensed by the predicate. In (76b), it is the subject that is in focus, having raised from its base position as small clause subject.

The structure of example (56a) also follows straightforwardly from this analysis. Predicative copular sentences in which the topic-subject is followed by a topic pause involve the same structure as canonical predicative copular sentences; the word order is the same, and the same restrictions on definiteness and negation also apply. Finally, the structure of the sentences in example (57) also follows from this analysis. In (57a), assuming the canonical sentence as the underlying structure, the subject is null and the predicate is in focus. Examples like (57b) are licensed in contexts where the predicate is contextually determined; consider the following example (Jaggar 2001, p.505), where upper case A and B indicate a dialogue pair:

- (77) A: **Audù** nē dā̃r aktà *predicative*
 Audu FM.m director
 ‘**Audu** is director’
 B: Ā’ā, **ita** cè *predicative*
 no PRO.3fs FM.f
 ‘No, **she** is’

Assuming that (77B) mirrors the non-canonical (DP FM NP) structure in (77A), the null predicate is in its base position.

We turn next to the equative copular sentences shown in examples (59)-(62). The challenge here is not to motivate the FP analysis; as the examples show, the focus properties of equative copular sentences in Hausa mirror those of predicative copular sentences. The challenge is to determine whether the structure of the small clause is the same in predicative and equative copular sentences. Recall that the canonical predicative copular sentence was argued to involve a topic subject and predicate raising (71b). There are two options for the analysis of canonical equative sentences (DP DP FM). The first is to assume that one DP is ‘subject’ and the other is ‘syntactic predicate’ (that is, the ‘head’ of the small clause adjunction structure). On this analysis, the structure of (59a), repeated here as (78a) mirrors that of the canonical predicative sentence; the ‘syntactic predicate’ raises:

- (78) a. Mùtumìn cân **likità-n-ā** nē *equative*
 man.of there doctor-of-1s FM.m
 ‘That man over there is my **doctor**’
 b. [_{FP} [_{TOP} mùtumìn cân]_k [_{FP} **likità-n-ā**_i [_F [_F nē] [_{DP} [_{DP} *pro*_k] [_{NP} t_i]]]]]]

Observe that if we assume the same underlying structure for (59b), repeated here as (79a) – that is, we continue to treat the DP *likità-n-ā* as the underlying ‘syntactic predicate’ – this results in the structure shown in (79b):

- (79) a. Likità-n-ā **mùtumìn cân** nē *equative*
 doctor-of-1s man.of there FM.m
 ‘My doctor is **that man over there**’
 b. [_{FP} [_{TOP} likità-n-ā]_k [_{FP} **mùtumìn cân**_i [_F [_F nē] [_{DP} [_{DP} t_i] [_{pro}_k]]]]]]

As indicated by (79b), in this case the ‘syntactic predicate’ has topic status. This analysis therefore requires a null ‘syntactic predicate’ in the small clause. Clearly what enables the underlying ‘syntactic predicate’ to be null in this context is its referential status; it is licensed at the interpretive interface by coreference with the topic.

The second option is to assume that (79a) has a different underlying structure, wherein the positions of the DPs in the small clause are reversed. On this analysis, (79a) involves a topic

4. Conclusions

A number of conclusions, both descriptive and theoretical, can be drawn from this study. In terms of descriptive conclusions, firstly, the Hausa copula *nē/cē* is neither a verbal nor an inflectional element, but a focus marker. Secondly, both predicative and equative copular sentences in Hausa permit a range of word order permutations unified by the fact that focus falls on the constituent left-adjacent to the copula: these constructions contain a dedicated focus position.

In terms of theoretical conclusions, an analysis wherein *nē/cē* is treated as the head of FP predicts the attested word order permutations in these constructions. The FP analysis also predicts that the subject of canonical copular sentences shows properties consistent with topic. Furthermore, the FP analysis accurately captures the categorial status and function of *nē/cē* as focus marker in all the contexts in which it occurs. With respect to the underlying structure of the Hausa copular sentence, this analysis is also consistent with a predicate raising view of copular constructions.

In summary, the present findings indicate that despite the cross-linguistic variation in the syntactic category of copular elements, a pattern emerges in relation to the information structure properties of copular sentences. An FP analysis enables a link to be made between copular elements and focus, given that many languages make use of the copular element either for focus fronting or for clefting; this study therefore indicates that an FP analysis embedded within a Minimalist approach enables a straightforward characterisation of a range of different syntactic manifestations of focus, and predicts cross-linguistic patterns in the relationship between copular elements and focus structures. Evidence from a number of languages points in this direction.³⁹ This approach is supported by empirical evidence as well as indicating conclusions that are desirable on theoretical grounds: namely that if we can find support for the hypothesis that focus in its many syntactic manifestations is rooted within a structure of the type explored here, then we move closer to explanatory adequacy in the theory of focus.

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³⁹ Evidence from English (Heycock 1994; 1997), Irish (Stenson 1981; Cottell 1997), and Chinese (Chiu 1993) – among others – could be argued to lend support to an analysis of this nature, although clearly for languages having a verbal copula, some tense/aspect projection in addition to FP is also motivated. See Green (1997; to appear) for arguments that the syntax of copular constructions in English involves movement operations that are motivated ultimately by focus.

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