In spite of the vast body of literature on the Pro-Drop Parameter, there has been no consensus on the exact grammatical or morphological feature that licenses the null realization of the subject in tensed clauses. This is due to the wide range of phenomena observed in languages that allow pro-drop. It has therefore been suggested that the Pro-Drop Parameter differs from other parameters of grammar in being non-absolute¹, relativized or even lexicalized in interpretation (Joseph, 1993). This paper highlights the necessity for a non-absolute interpretation of the Pro-Drop Parameter, and provides insights into the status of Hausa as a pro-drop language.

1. The Pro-Drop Parameter
The Pro-Drop or Null Subject Parameter (NSP) refers to the difference between languages as to whether or not the subject must be phonetically realized in finite clauses. Chomsky (1981:240) proposes that if the pro-drop parameter is fixed with a positive value, the result is the cluster of grammatical properties (1):

1a. missing subject  
b. free inversion in simple sentences  
c. “long wh-movement” of subject  
d. empty resumptive pronouns in embedded clauses  
e. apparent violations of *[that-t] filter

The grammatical features (1) have been streamlined over time, and the missing subject feature has emerged the most relevant, as evidenced by the following definition of the NSP by Joseph (1993:1):

2. The Null Subject (‘Pro-Drop’) Parameter (NSP)  
Null Subject Languages may have phonologically null subjects in tensed sentences whereas non-Null-Subject-Languages require phonologically realized subjects.

The following sentences adapted from Riemsdijk and Williams (1986:299) and Cullicover (1995:202) respectively illustrate the phenomenon of pro-drop in Italian and Spanish.

**Italian**

3. io/ Ø parlo ‘I talk’  
tu/ Ø parli ‘you talk’  
lui/ Ø parla ‘he talks’  
noi/ Ø parlamo ‘we talk’  
voi/ Ø parlate ‘you (pl.) talk’  
loro/ Ø parlano ‘they talk’
Spanish
4a. Ø llamó  ‘S/he called.’
   Call-past.3SG

b. Ø compró el libro  ‘S/he bought a book.’
   buy-past.3SG the book

In (3) above, the subject pronouns (io, tu, lui, etc.) are not always obligatory in finite clauses, that is the subjects can be dropped, but need not be. In contrast, subjects cannot be dropped in the same manner in a non-pro-drop or overt subject language, such as English, e.g. *Talk = They talk; *Called = He/she called. However, it is assumed that the subject is always present in S-structure in finite clauses and that corresponding Ø-roles are assigned in the subject position in both language types i.e., the pro subject of (4a) and (4b), represented as Ø, is the phonetically null counterpart of overt pronouns, such as he, she, etc., in English.

2. The Pro-drop Subject
The two core questions addressed in the generative syntax literature with respect to pro-drop are:

(i) the nature of the pro-drop subject, and
(ii) what property or properties a language must have in order to admit pro-drop (Harbert, 1995).

On the nature of the subject pro-drop, several proposals that have been made in the literature.

The deletion account is based on an interaction between that-trace and null subject phenomena, noted by Perlmutter (1971). He observed that null subject languages systematically lack that-trace effects as a result of a rule that optionally deletes subject pronouns and subject traces, thus proposing that the covert (pro-drop) subject results from deletion.

The Government Theory account is based on a proposal that AGR is contextually related to the subject NP by some rule of agreement (Chomsky, 1981; Van Riemsdijk and Williams, 1986). Chomsky (1981:218) identified the relation between the two as basically that of government – AGR-S governs the subject NP (but is not a binder) within the grammatical category I”. Chomsky (1981:256) further speculated that the null subject is PRO that is, the subject position in pro-drop languages may fail to be properly governed by AGR, thus accepting PRO.

Speculations on the null subject in pro-drop languages based on the principles of government, proper government and control seem to have converged on the empty category pro as the covert subject in Null Subject languages. Pro carries Case, thematic and agreement features (Joseph, 1993).

3. The Pro-drop Property
While there seems to be a consensus on the fact that the Pro-Drop parameter involves some abstract property of the (subject-verb) agreement element AGR (or more specifically, AGR-S), there is no consensus concerning the exact morphological feature of AGR-S that correlates with the availability of pro-drop.
The “rich agreement” account reduces the Pro-Drop Parameter to a variation between “rich” and “poor” AGR-S, i.e. a nominal AGR-S with features of person, number and gender, and a non-nominal AGR-S (Rizzi, 1986). Shlonsky (2007) has pointed out the “crosslinguistic correlation between the degree to which person and number features are discretely represented in a verbal conjugation paradigm and the occurrence and distribution of covert pronominal subjects.” However, this assumption finds several counterexamples in languages like German with rich agreement but no referential pro and languages like Japanese and Chinese which lack rich agreement but allow null subjects (Jaeggli and Safir, 1989; Speas, 1995).

The “strong agreement” account distinguishes languages on the basis of a categorial feature [+D] (Chomsky, 1995). Alexiadou and Anagnostopoulou (1998), following and modifying Rohrbacher (1994), have proposed that in languages with strong agreement, each agreement affix is listed separately in the lexicon and is available to the computational system. In languages with weak agreement, on the other hand, verbal agreement affixes do not have independent lexical entries, and are inserted into derivations already attached to their host. Thus, strong agreement affixes are independent clitic-like pronominal elements having a categorial feature [+D], with [+interpretable] phi-features such as are usually associated with pronouns in languages with weak agreement. Strong agreement affixes are also potentially [+Case]). In Alexiadou and Anagnostopoulou’s proposal, the verbal agreement affixes in the Greek paradigm (5) below have exactly the same status as the pronouns in the English paradigm (6):

5. agapo
   agapas
   agapa

6. I love
   you love
   he loves
   we love
   you love
   they love

The verbal affixes in the Greek examples in (5): (-o, -as, -a, -ame, -ate, -ane), in their view, are strong agreement affixes with phi-features similar to those of the English pronouns I, you (sg.), he, we, you (pl.) and they respectively. Thus, pro-drop is licensed in (5) but not in (6).

4. Typology of pro-drop

Canonical pro-drop languages contain thematic pro, i.e. in such languages, it is possible to drop the thematic subject of a finite clause. Spanish is an example of such a language: (4a) and (4b) contain a thematic pro subject. However, in certain languages like German and Icelandic, pro-drop is not fully general: referential pro-drop is disallowed, but expletive pro-drop is allowed.

It has been observed that the Null Subject phenomenon is a property of most natural languages, and that languages with no covert subjects at all constitute a small minority of the world’s languages (Joseph, 1993; Dryer). For example, a canonical non-null-subject language like English allows null subjects in restricted contexts like imperative constructions and ‘diary drop’, a written style used in letters and diaries, as in (7):

The typology of null subject languages is thus very extensive, such that between the classical null subject languages and the classical non-null-subject languages, there is a lot of variation, including the following:

(i) Icelandic and Yiddish, like German, restrict null subjects to non-referential uses, but unlike German, they also allow dropping of meteorological *it*. However, expletive pro is not assumed under the Pro-Drop Parameter.

(ii) Languages like Hebrew and Finnish are assumed to be partial (or semi-) pro-drop languages. In Hebrew, according to Arstein (1999), null subjects are possible in first and second persons, but not in third person. Arstein also notes that in Italian, as in Hebrew, null subjects are licensed in certain discourse configurations, but not in others.

There thus seem to be degrees of pro-drop, and the need to sub-parameterize pro-drop to account for the wide range of phenomena observed cross-linguistically has been suggested (Joseph, 1993; Kato and Duarte). Joseph (1993) has suggested, in line with Morin (1985) that unlike other parameters of grammar, which are binary in nature and absolute in application, the interpretation of the Pro-Drop Parameter should be relativized or even lexicalized, such that it does not apply absolutely across all the constructions in a language. Based on this proposal, we assume that all the grammatical features taken to be diagnostic of pro-drop would not apply uniformly across pro-drop languages.

5. The Subject Clitic Feature and Pro-drop

Based on a proposal that pro-drop involves an abstract subject clitic (Safir, 1985), Spyropoulos (2002) has suggested that all null subject languages involve subject clitics, which may be null (as in Greek) or overt (as in subject clitic languages). Alexiadou and Anagnostopoulou (1998) have also suggested that cross-linguistically there are two options for the [+D] agreement affix to enter into syntactic derivations. It may be merged with the verbal root in the internal domain or merged directly on an AGR head. They propose that the difference between the two options accounts for the difference between agreement affixes as in Greek, and subject clitics as in the Northern Italian dialects Trentino and Fiorentino. Greek and the Northern Italian dialects have [+D] agreement, but whereas in Greek it is realized as verbal endings, in Trentino and Fiorentino, it is realized as a preverbal subject clitic. Similarly, Speas (1995) has classified languages into Type A, B and C on the basis of the lexical properties of the subject agreement morpheme. In Type A languages, the agreement morpheme heads AGRP, and Spec, AGRP may be empty. The verb may move to pick up the AGR morpheme (as in Spanish) or the agreement morpheme may stand alone (as in Walpiri).

The distinctions made in the above proposals find relevance in Hausa, in which the clausal structure reveals a pre-verbal pronominal element with features of person, number and gender, which is obligatory in most tense-aspects, and may be doubled by a lexical subject. In the following example the element under consideration is in boldface.

8. Yaaròò yaa härbii giwaa
   boy 3.masc.sg-ASP shoot elephant
   ‘The boy shot an elephant.’
The element ya in (8) has the phi-features third person, singular and masculine, and is doubled by the lexical subject yaarò. The element ya is thus an agreement marker. However, it exhibits clitic properties such as the impossibility of being used in co-coordinated NP structures and certain other constructions (Koopman, 1983; Austin, 2004). In relation to this, Hendrick (1995) has noted the difficulty in distinguishing agreement markers from clitic pronouns cross-linguistically. Our proposal is that Hausa is a subject clitic language. Full referential agreement achieved by the AGR-S morpheme may co-occur with NPs and pronouns, or the AGR-S element may stand alone. In Alexiadou and Anagnostopoulou’s (1998) analysis of patterns of clitic doubling, Hausa qualifies as a full clitic-doubling language.

6. Pro-drop in Hausa
Hausa exhibits certain features which have been attested to in well-established null subject languages as evidence of pro-drop. In the following relevant respects, Hausa qualifies as a null subject language:

i) Optionality of Subject DPs in Tensed Clauses
Hausa shares with null subject languages the (apparent) optionality of subject NPs, that is the subjects of tensed clauses may be phonologically null, in line with the definition of pro-drop in (2). Tuller (1982) regards Hausa as a pro-drop language with null or unexpressed subjects and objects, and Amfani (2004) has noted that in Hausa, the subject agreement marker “carries strong agreement features (gender and number) capable of identifying the subject to a point of licensing a null realization of the subject.” The following examples from Amfani (2004) further illustrate this position:

9a. Tankò yaa såyi àkuyàà.  
Tanko 3.masc.sg.TNS-ASP buy goat  
‘Tanko bought a goat.’

b. Ø yaa såyi àkuyàà.  
3.masc.sg.TNS-ASP buy goat  
‘He bought a goat.’

10a. Bintà tanaà karàntaa jàriidaà  
Binta 3.fem.sg.TNS-ASP read newspaper  
‘Binta is reading a newspaper.’

b. Tanaà karàntaa jàriidaà  
3.fem.sg.TNS-ASP read newspaper  
‘She is reading a newspaper.’

11a. Soojoojìi sukàn hau dawaakìi  
Soldiers 3.pl-TNS-ASP mount horses  
‘Soldiers often mount horses.’

b. Sukàn hau dawaakìi  
3.pl-TNS-ASP mount horses  
‘They often mount horses.’
The elements *ya, ta* and *ka* in the above examples have been referred to in earlier literature as ‘pronoun subjects’ (Alexandre, 1972), ‘preverbal pronouns’ (Galadanci, 1976), or ‘person markers’ (Skinner, 1977). They are, in actual fact, phonetic realizations of the nominal features of AGR-S, i.e. the functional head AGR-S is realized with phonological content in Hausa – its phi-features are overtly realized as a pronoun, such as *ya, ta* and *su*. In (9a), (10a) and (11a) above there are lexical subjects that double the person, gender and number features of the AGR-S element, but in (9b), (10b) and (11b) the pro-drop feature of missing subject in tensed clauses has been realized.

There are two pertinent facts to note about null subject licensing in Hausa:

a) phonetically null AGR-S morphemes (in tense-aspects in which AGR-S may have a null realization) do not license pro-drop (Amfani, 2004), and

b) licensing of null subjects in Hausa depends on pragmatic recoverability. For instance, a null subject is more likely if the referent is present in the immediate context, if it is the immediate topic of conversation or if the topic of conversation is well-understood or agreed upon by the participants. It is only under the right pragmatic conditions that pro-drop is licensed. This exactly the situation in Izon (Ndimele 2000).

ii) *Obligatory Subject Agreement Element*

It has been observed in subject clitic languages like Firenze, Trentino and Fiorentino that the agreement clitic is obligatory, even when doubled by a lexical NP (Manzini and Savoia, 1997; Alexiadou and Anagnostopoulou, 1998). The following example is from the Northern Italian dialect Firenze.

12. La Maria *(la) vienne* (Manzini and Savoia, 1997:5)
   The Mary she comes
   ‘Mary comes.’

13. *(La) vienne
   ‘She comes.’

   In Firenze the agreement clitic *la* is obligatory in the clause, whether doubled by a lexical NP, as in (12) or not, as in (13). A similar situation obtains in Hausa. The subject agreement clitic is phonetically realized in tense-aspects other than non-future continuative (NF CONT) and non-future habitual (NF HAB), in which a null realization is possible (Amfani, 2004). The following example is in the non-future habitual.

   Soldiers 3.pl-NF HAB mount horses
   ‘Soldiers often mount horses.’

   Null realization of the agreement morpheme *su* in (14) is possible, to give the following:

15. Soojoojii Ø kàn hau dawaakii
   Soldiers NF HAB mount horses
   ‘Soldiers often mount horses.’
However, a null realization of AGR-S is not possible in tense-aspects other than the two mentioned above. In the other tense-aspects the AGR-S element is obligatory and cannot have a null realization. For example, null realization of the AGR-S element in (8) and (9a) above would yield the following ungrammatical sequences:

16. *Yaaròò Ø hàrbìi giwaa
   boy shoot elephant
   ‘The boy shot an elephant.’

17. *Tankò sàyi àkuyaà.
   Tanko buy goat
   ‘Tanko bought a goat.’

The ungrammaticality of (16) and (17) illustrates the fact that AGR-S element is obligatory in the non-future perfective (as well as most other tense-aspects) in Hausa.

iii) **Apparent Violation of the That-Trace Filter**

It is possible in Hausa to extract an element next to an overt complementizer. This is one of the grammatical features of pro-drop languages, known as apparent violation of the *[that]-t* (or *That*/COMP-trace) filter, i.e. a gap can occur at the extraction site of a wh-operator next to an overt complementizer without violating ECP. The following are examples:

18. Wàànee, nèè kakèè tsàmmanin [cèwa ti ya ga Làmi]
   who FOC you.REL think that 3.masc.sg see Lami
   ‘Who do you think saw Lami?’

19. Gàà [CP yaarinyà [CP wàdì dà bà tà san [CP àbin dà tì ta taakàà ba]]]
   see girl who that NEG 3.fem.sg know thing that 3.fem.sg step on NEG
   ‘See the girl that doesn’t know what she stepped on.’

In (18) and (19), a wh-phrase (wàànee, wà) has been extracted from subject position next to an overt complementizer, and the effect of the AGR-S element prevents a That-Trace Filter violation.

7. **Conclusion**

The paper has provided some insight into the nature of the Pro-Drop Parameter: its interpretation must be non-absolute or relativized in order to accommodate the wide spectrum of its typology. Certain facts about the status of Hausa as a pro-drop language have also been brought to light. Hausa falls into the class of pro-drop languages known as subject clitic languages, with the subject agreement clitic obligatory in most tense-aspects. Hausa is also a full clitic-doubling language in which the subject agreement clitics may co-occur with NPs and pronouns, or stand on their own. Hausa has been shown to have strong subject agreement affixes which are independent clitic-like pronominal elements with a categorial feature [+D]. The strong AGR-S element in Hausa has the status of an overt subject or a theta-bearing argument and licenses a null realization of the subject.
Notes

1. Ndimele (2003) has, however, observed that the wh-parameter is not absolute. There are languages that exhibit both values of the wh-parameter, even though a particular value may be dominant for a particular language.

2. Ndimele (2000) has also made a similar observation in Izon. In some conservation style in Izon, the first and second person pronouns can be dropped.

3. The presence of subject clitics which can license pro-drop have been reported in some Nigerian languages: Efik/Ibibio (Ndimele and Oliveira 2002) and Degema (Ndimele and Kari 2003). In fact, Ibibio has both subject and object clitics. The object clitics can license pro-drop in the object position as well.

References


