From NP to DP

4.0. Introduction

The aim of this chapter is to present the most important issues concerning the generative study of the nominal domain and to provide an outline of frameworks and ideas that will be evaluated in the following chapters based on the empirical data encountered in Afro-Bolivian Spanish (ABS). The internal structure of the Noun Phrase (NP) became a central issue in syntactic investigation from Chomsky’s (1970) remarks on nominalization, and especially after Abney’s (1987) Ph.D. dissertation, which provided theoretical and empirical bases for the idea that the Determiner Phrase (DP) is the maximal phrase projected by the class determiner, which takes NPs as complements. This idea came to be known as the DP Hypothesis, and during the last four decades much research has been carried out with the aim to understand the configuration of the syntactic structure contained between D and N.

The rest of this chapter is organized as follows: Section 4.1 describes Abney’s (1987) and Szabolcsi’s (1983, 1987, 1989, 1994) works, which provided the first theoretical and empirical evidence for the study of DP. Section 4.2 presents an analysis of some of the key articles that have argued in favor of additional functional projections between D and N and N-movement to its surrounding layers; in particular, we will focus on the studies that appear
to be the most pertinent to our analysis of the ABS DP. For this reason, we will concentrate on Num(ber)P (Ritter 1991), Gen(der)P (Picallo 1991; Ritter 1993), A(djective)Ps (Cinque 1990, 1993), thematic layers (Valois 1991), and nP shells (Carstens 2000). Section 4.3 illustrates Longobardi’s (1994) analysis of DPs headed by empty Ds, and Chierchia’s (1998) hypothesis concerning the status of bare nouns and full DPs across languages (Nominal Mapping Parameter). These last two proposals will provide us with a framework on which to test the nature of ABS ‘bare’ nominals.

4.1. The Determiner Phrase Hypothesis

4.1.1. ABNEY (1987)

In his Ph.D. dissertation, Abney (1987) develops the idea that a nucleus D, containing agreement features, precedes the nominal head, mirroring in this way the structure of the sentence, where Infl precedes V. He analyzes several languages in which the noun agrees with its possessor and suggests that NP is the complement of an element similar to Infl (D), which provides a position for agreement (AGR).

In order to show this parallelism between NP and VP (now DP and CP), Abney presents data from several languages like Yup’ik (a Central Alaskan Eskimo language), Tzutujil (a Mayan language), and Hungarian, among others. In Yup’ik, for example, all nouns agree with their possessors (8) and share with the verbs the same morphological AGR markers (9) (see Abney 1987: 28). Moreover, both the subject of the NP and the subject of transitive verbs take ergative (ERG) case.

(8)

a. angute-m kiputa-a-Ø
   man-ERG buy-OM-SM
   “the man bought it”
b. angute-t kiputa-a-t
   man-PL buy-SG-PL
   “the men bought it”
c. angute-k kiputa-a-k
   man-DU buy-SG-DU
   “the men bought it”

1. SM stands for ‘subject agreement marker’; OM stands for ‘object agreement marker.’
(9)  
a. angute-m kuiga-Ø  
man-ERG river-SM  
“the man’s river”  
b. angute-t kuiga-t  
man-ERG river-SM  
“the man’s river”  
c. angute-k kuiga-k  
man-ERG river-SM  
“the man’s river”  

Abney (1987) accounts for the parallelism between case-marking and agreement by providing parallel IP and DP structures.

(10)  
\[
\begin{array}{c}
\text{IP} \\
\text{DP} \\
g\text{angutet} \\
g\text{I} \\
\text{VP} \\
\text{AGR} \\
\text{V} \\
\text{-t} \\
\text{kiputaa-}
\end{array}
\]

(11)  
\[
\begin{array}{c}
\text{DP} \\
\text{DP} \\
g\text{angutet} \\
g\text{D} \\
\text{NP} \\
\text{AGR} \\
\text{N} \\
\text{-t} \\
\text{kiputaa-}
\end{array}
\]

Additional support for the parallelism between the nominal domain and the sentence domain is provided by Szabolcsi, who suggests that both the complementizer and the article are elements responsible for turning their complements into arguments. In fact, in Szabolcsi’s view, differently from Abney’s, DP does not equal IP, but rather CP (1994: 189). C and D are assumed to act as subordinators capable of receiving a Θ-role assignment. The case is illustrated in (12), where C (12a) may introduce an argument, while, conversely, C is not allowed in clauses unable to take on such a function (12b).

(12)

a. I think [CP (that) you are nice]
b. *[CP That you are nice]  

Szabolcsi (1983: 89–92) claims that the structure of DPs in Hungarian mirrors the one of CPs. In fact, the possessive marker on Ns takes the place of the tense/mood morpheme on Vs (13), thus suggesting the existence of an Infl-like category in the nominal domain, as Abney (1987) will indicate a few years later.

(13)

a. Mari-Ø alud-t-Ø  
  Mary-NOM sleep-PAST-3SG  
  ‘Mary slept’
b. (A) Mari-Ø vendég-e-Ø  
  The Mary-NOM guest-POSS-3SG  
  ‘Mary’s guest’

She hypothesizes the existence of two functional categories in the extended nominal projection. According to Szabolcsi, there are two nominal nuclei (14): a lower nucleus, (N), which assigns nominative case to its specifier, and a higher nucleus, (D), assigning dative case to its specifier; its lexical realization is the article, which turns nouns into arguments, mirroring in this way the function of CP in the extended verbal projection (15) (see Szabolcsi 1989: 2; 1994: 189).
The reason for proposing this specific architecture is based on Hungarian data. In Hungarian, in fact, there are two different ways of expressing possession. In the first case, the possessor is marked with nominative case (16a), and extraction out of a DP is not possible (16d); in the other case, the possessor is assigned dative case (16b) and it can be extracted (16c). Szabolcsi (1994: 196) adopts the structure suggested in (16) to compare the process of possessor extraction to that of subject extraction.

(14) 
\[
\begin{array}{c}
\text{SPEC} \\
\text{DP} \\
D' \\
D \\
(N+I) P \\
\text{DP} \\
(N+I)' \\
\text{DetP} \\
N+I \\
N \\
N+I \\
I \\
\end{array}
\]

(15) 
\[
\begin{array}{c}
\text{SPEC} \\
\text{CP} \\
C' \\
C \\
\text{IP} \\
NP \\
I' \\
\text{I} \\
\text{VP} \\
N \\
N+I \\
I \\
\end{array}
\]

(16) 
\[
\begin{array}{c}
\text{SPEC} \\
\text{DP} \\
D' \\
D \\
(N+I) P \\
\text{DP} \\
(N+I)' \\
\text{DP} \\
(N+I)' \\
\text{DetP} \\
N+I \\
N+I \\
I \\
\end{array}
\]

a. (a) Mari kalap-ja
b. Mari-nak a t kalap-ja
c. Mari-nak \ldots\ i' a t kalap-ja
d. *Mari \ldots\ i' (a) t kalap-ja
In (16a) the possessor Mari takes the nominative case, the noun denoting the possessed object kalap carries the morpheme ja, which indicates agreement in number and person with Mari, a phenomenon parallel to subject-verb agreement in CP. N+I assigns nominative case to Mari, while the article a is located in D (but it is not compulsory). In (16b), the possessor Mari precedes the article a and receives dative case nak, while kalap presents the same morphological marking. As schematically shown in (16c, d), the possessor can be extracted when it is dative-marked, but it cannot when it is assigned the nominal case. SPEC-DP in (16b) parallels in this way SPEC-CP, from which subjects can be extracted too. The parallelism pointed out by Abney (1987) and Szabolcsi (1994) between nominal and verbal domains will be further investigated in following works (Cinque 1993; Longobardi 1994; Picallo 1991; Ritter 1991; among others) aimed at showing that the movement of N in DP mirrors the one of V in CP.

4.2. In between N and D

Several works argued for N to D movement in support of the DP Hypothesis. In this section, we will go through those that appear to be the most relevant to the study of the Afro-Bolivian Spanish Determiner Phrase. We will examine Ritter (1991, 1993), proposing the existence of the functional category Number (NumP). We will then summarize Picallo (1991), who postulates the presence of a Gender Phrase (GenP) in Romance; Cinque (1990, 1993), who provides a layered structure to account for adjectival projections; and finally, Valois (1991) and Carstens (2000), for an account of nominal Θ-role assignments and nP shells.

4.2.1. RITTER (1991, 1993)

Ritter (1991) was the first to suggest the presence of a functional projection corresponding to numeral marking. She argued that Num(ber)P is the complement of D in Modern Hebrew and in Romance languages. The argumentation in favor of a DP-internal functional projection Num(ber)P is based on two types of genitive constructions in Modern Hebrew. The first construction analyzed is the construct state (17), which shows a surface order derived by N-movement. In fact, she shows that the subject must asymmetrically c-command the object, and proposes that the noun raises from N to D, crossing over the possessor (18).
(17) Ahavat Dan et ift- o
love Dan ACC wife-his
'Dan’s love of his wife'

(18) 
```
(\( \text{DP} \))
SPEC
\( \text{D'} \)
D
NP
\( \text{DP} \)
N
\( \text{DP} \)
```

Ahavat ti et ift- o
(subject) (object)

The reason for the proposal of an intermediate functional projection between D and N becomes clearer when we analyze the free genitive constructions in (19). In fact, example (19) cannot be accounted for by the structure adopted in (18). Assuming the validity of the head movement constraint (Travis 1984),\(^2\) and that the definite article ha is located in D, an intermediate position between D and N, acting as a landing site for N, must be postulated. This category is called Num and projects a NumP, it contains the number specification of the NP. Ritter (1991: 43) claims that NumP is not only specific to free genitive constructions; rather, all nouns in Hebrew have it.

(19) Ha-axila šel Dan et tapuax
The-eating of Dan ACC the-apple
'Dan’s eating of the apple’

---

\(^2\) THE HEAD MOVEMENT CONSTRAINT (Travis 1984, in Ritter 1991: 39): A head (X°) can move only to the position of the head (Y°) that properly governs it.
In a following analysis, Ritter (1993) elaborates also on the syntactic location of the feature ‘gender’. She suggests that in Hebrew, nouns come from the lexicon with a specification for gender features, while in Romance languages the feature gender is located in Num and appears on N only as a result of N raising.

(21) Hebrew

[DP Det [NumP Num [NP N]]]

... X-[gender] ...

Romance

[DP Det [NumP Num [NP N]]]

... Y-[gender] ...

The claim exemplified in (21) is supported by the fact that a switch in gender feature derives a new noun in Hebrew (22), while in Romance languages such a phenomenon is not as productive; rather, it is limited for the most part to Ns with human or animate reference (see Harris 1991).

(22)

<table>
<thead>
<tr>
<th>Masculine nouns</th>
<th>Feminine nouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>magav ‘wiper’</td>
<td>magev-et ‘towel’</td>
</tr>
<tr>
<td>magav-im ‘wipers’</td>
<td>magav-ot ‘towels’</td>
</tr>
<tr>
<td>maxsan ‘warehouse’</td>
<td>maxsan-it ‘magazine’</td>
</tr>
<tr>
<td>maxsan-im ‘warehouses’</td>
<td>maxsani-ot ‘magazines’</td>
</tr>
<tr>
<td>amud ‘page’</td>
<td>amud-a ‘column’</td>
</tr>
<tr>
<td>amud-im ‘pages’</td>
<td>amud-ot ‘columns’</td>
</tr>
</tbody>
</table>
Additional support for the gender feature distinction between Hebrew and Romance languages is provided by the analysis of irregular plurals in these two varieties. While Hebrew plural affixes appear to be specified exclusively for number, Romance plural affixes seem to be specified for both number and gender. This last point is backed by the fact that a large number of irregular nouns in Romanian are masculine in the singular and feminine in the plural, as shown in (23).

(23)

a. Un scaun confortabil e folositor.
   a(M.SG) chair comfortable(M.SG) is useful(M.SG)
   ‘a comfortable chair’

b. Nişte scaune confortabile sînt folositoare.
   Some chairs comfortable(F.PL) are useful(F.PL)
   ‘Some comfortable chairs are useful.’

4.2.2. PICALLO (1991)

The idea that both gender and number features are checked under NumP in Romance is not shared by Picallo (1991), who suggests, based on Catalan data, the existence of an additional intermediate Gender Phrase (GenP) within the DP. This functional phrase would be located between NP and NumP (24), reflecting in this way the linear order of the morphemes attached to the noun stem. GenP would be justified because in Catalan (and in the rest of Romance languages) adjectives and determiners agree not only in number with N, but also in gender. Gender and number morpheme affixations would be the result of cyclical N-movement to the gender and number heads (24–25) (see Picallo 1991: 282–283).

(24) Catalan: les gates ‘the cats’(F-PL)
   [DP les [NumP [[[gat-]t]+F]+Pl][GenP tj [NP ti]]]
4.2.3. CINQUE (1990, 1993)

The parallelism between DP and CP seems to be further supported by the distribution of adjectives with respect to NP, which presents striking similarities with the distribution of adverbs with respect to VP. In fact, subj(ect)-oriented APs are followed by manner or thematic APs and preceded by sp(eaker)-oriented APs (26–27) (Cinque 1993: 24, see also Crisma 1990, 1993).

(26) . . . [XP APsp-or _ [YP APsubj-or _ [ZP APmanner/themat _ [NP N . . .

(27) a. La probabile goffa reazione immediata alla tua lettura.
   ‘The probable clumsy reaction immediate to your letter.’

b. Probabilmente avranno goffamente reagito subito alla tua lettera.
   ‘They probably have clumsily reacted immediately to your letter.’

In line with this view, Cinque (1990, 1993) proposes that APs are universally generated to the left of N, in the SPEC of a limited set (six or seven) of functional projections between D and N. This is called the SPEC-hypothesis.
Cinquè (1993: 26). For this reason, the different surface positions that As take across human languages are explained as the result of N-movement. To illustrate the differences between pre-nominal and post-nominal adjective location in Germanic and Romance languages, Cinquè argues in favor of N raising to a functional head in Romance (but not in Germanic) (see Cinquè 1993: 21).

\[(28) \quad [D \ldots [AP Y [AP N]]] \quad \text{(Romance)}\]

\[(29) \quad [D \ldots [AP Y [AP N]]] \quad \text{(Germanic)}\]

Cinquè (1993: 25–30) shows that there are theoretical and empirical reasons to favor the SPEC-hypothesis over the hypothesis that analyzes APs as adjuncts (e.g., Picallo 1991; Valois 1991; Bernstein 1993). In fact, there is a specific ordering of APs that appear in the unmarked case, while adjuncts can appear more freely; thus the presence of adjectives on the left of N depends on the position of the specifiers in which they are base-generated. Another point in favor of the SPEC-hypothesis is that the number of adjective is limited, while there is no limit to the number of adjuncts.

4.2.4. Valois (1991)

In his Ph.D. dissertation, Valois (1991) argues in favor of a layered DP hosting functional projections capable of licensing Θ-role assignments, mirroring in this way the sentence structure (see Sportiche 1990). He claims a syntactic architecture in line with Giorgi & Longobardi’s (1991: ch.3) Thematic Hierarchy, where the possessor is located in a higher projection, dominating the external thematic argument, which, in turn, is higher than the internal argument (30) (see Giorgi & Longobardi 1991: 117).

\[(30) \quad \text{Thematic Hierarchy: possessor > agent > theme}\]

\[\text{\begin{figure}[h]
\centering
\begin{tikzpicture}
\node (N) {N'''};
\node (N') [below of=N] {N''};
\node (N) [below of=N'] {N'};
\node (N) [below of=N] {N};
\draw (N) -- (N');
\draw (N') -- (N);\end{tikzpicture}}\end{figure}\]
In particular, Valois adapts Sportiche’s (1990) proposal on the layered structure of VP to the nominal domain. He indicates that direct objects are sisters to their Θ-marking head and that Head-movement of X to X* is required to license the external Θ-role (31) (see Valois 1991: 7). XP* is projected only if the external Θ-role is assigned. In the presence of a possessor, an additional PossP is projected, thus resulting in the more articulated structure provided in (32) (see Valois 1991: 16).

The structure in (32) reflects the Thematic Hierarchy in (30). Valois supports this architecture by showing how “higher arguments may bind lower ones but not vice-versa” (1991: 17) and how extraction operations out of Noun Phrases are conditioned by this argument linearization, where an agent cannot be extracted when co-occurring with a possessor, and a theme
cannot be extracted if it co-occurs with either a possessor or an agent (1991: 19). He shows these contrasts on extraction by presenting three sets of examples (33–35). As it can be observed, only the higher constituent (which appears underlined) can be extracted yielding grammatical constructions (see Valois 1991: 20).

(33) Possessor higher than agent
   a. La photo de ce photographe de ce collectionneur.
      \begin{tabular}{l l}
      \textsc{agent} & \textsc{possessor} \\
      \end{tabular}
   \hspace{12pt} ‘This photographer’s picture of this collector.’
   b. *Le photographe dont je connais la photo de ce
      collectionneur.
      \hspace{12pt} ‘The photographer of-whom I know this collector’s picture.’
   c. Le collectionneur dont je connais la photo de ce
      photographe.
      \hspace{12pt} ‘The collector of whom I know this photographer’s picture.’

(34) Agent higher than theme
   a. La photo de ce photographe de du Louvre.
      \begin{tabular}{l l}
      \textsc{agent} & \textsc{theme} \\
      \end{tabular}
   \hspace{12pt} ‘This photographer’s picture of the Louvre.’
   b. *Le musée dont je connais la photo de ce photographe.
      \hspace{12pt} ‘The museum of-whom I know this photographer’s picture.’
   c. Le photographe dont je connais la photo du Louvre.
      \hspace{12pt} ‘The photographer of-whom I know the picture of the Louvre.’

(35) Possessor higher than theme
   a. La photo du Louvre de ce collectionneur.
      \begin{tabular}{l l}
      \textsc{theme} & \textsc{possessor} \\
      \end{tabular}
   \hspace{12pt} ‘This collector’s picture of the Louvre.’
   b. *Le musée dont je connais la photo de ce collectionneur.
      \hspace{12pt} ‘The museum of-whom I know this photographer’s picture.’
   c. Le collectionneur dont je connais la photo du Louvre.
      \hspace{12pt} ‘The photographer of-whom I know the picture of the Louvre.’
4.2.5. CARSTENS (2000)

Carstens (2000) builds on the Thematic Hierarchy proposed by Giorgi and Longobardi (1991), and adopted by Valois (1991), and suggests that NPs are surrounded by several thematic layers headed by a light noun ‘n,’ which projects its corresponding nP shell. In this way, the nominal domain would parallel the verbal one, where the VP is dominated by a vP shell headed by a light ‘v’ (Larson 1988; Hale & Keyser 1993). In Carstens’ model, thematic roles are assigned to nominal arguments under nP. In line with Chomsky’s (1995) analysis of external verbal arguments, Carstens (2000: 320–321) argues that nominal agents are base-generated in the SPEC-nP of a shell above the NP core; moreover, agents are asymmetrically c-commanded by possessors and both asymmetrically c-command themes (36).

(36) DP
  SPEC D' FP
    D SPEC F' nP1
      SPEC F POSS n' n1 nP2
        AGENT n'2 n2 NP
          SPEC N' N THEME

4.3. The Status of NPs and DPs

In this section, I analyze two proposals concerning the nature of DPs and NPs across languages (i.e., Longobardi 1994; Chierchia 1998). These studies will provide us with a theoretical framework on which to test the status of ‘bare’ argumental nouns in Afro-Bolivian Spanish.
4.3.1. LONGOBARDI (1994)

Longobardi claims that “a ‘nominal expression’ is an argument only if it is introduced by a category D” (1994: 620) and therefore that a “DP can be an argument, [an] NP cannot” (1994: 628). This is because nominal expressions are essentially predicates, they provide a description of a certain nominal entity, but they do not refer; determiners do. In fact, Ds act as operators selecting (or binding) a specific variable out of the given NP set (see also Contreras 1986).

The author builds his hypothesis on Germanic and Romance language data; Longobardi (1994: 609–610) points out that pronouns, proper names, generic nouns, and common nouns show different syntactic behaviors and thus occupy different syntactic positions. Pronouns are base-generated in D, and therefore can act as arguments. Generic and proper nouns are base-generated in N and may rise to D via N-to-D movement in the syntax (for Romance) or at LF (for Germanic). Common nouns cannot occupy a D position; they are essentially predicates, which need to co-occur with either a pronounced or a null D category in order to yield a semantically interpretable argument. This implies that a bare common noun in argument position is not actually ‘bare’; rather, if the noun is not accompanied by a pronounced D, then there must be a silent determiner in the structure.

An empty D is subject to lexical government; the noun co-occurring with it receives an indefinite/existential interpretation with a generic reading (Longobardi 1994: 617–618). What has just been suggested may be exemplified by the Italian examples given in (37–38), where argumental common nouns can appear ‘bare’ (with an empty D) only when they are morphologically plural (marocchini ‘Moroccans’) or mass (acqua ‘water’) and when they are lexically governed (in this case by a verb). Under these conditions, they receive an indefinite/generic interpretation unspecified for number (Longobardi 1994: 615).

(37)

a. *Acqua viene giù dalle colline.
   water comes down from the hills
b. Viene giù acqua dalle colline.
   comes down water from-the hills
   ‘Water comes down from the hills.’
c. Ho preso acqua dalla sorgente.
   have taken water from the spring
   ‘I took water from the spring.’
From np to Dp

(38)

a. *In questo ufficio marocchini telefonano sempre.
in this office Moroccans call always
b. In questo ufficio telefonano sempre marocchini.
in this office call always Moroccans
   'In this office Moroccans are always calling.'
c. In questo ufficio incontro sempre marocchini.
   In this office I meet always Moroccans
   'In this office I always meet Moroccans.'

4.3.2. CHIERCHIA (1998)

The idea that only DPs can act as arguments is not shared by Chierchia (1998), who proposes a semantic parameter, the Nominal Mapping Parameter, to account for the distribution of bare NPs and DPs across languages.

Chierchia (1998: 400) divides human languages into three main groups. In languages of group 1 (e.g., Chinese/Japanese), NPs are, by default, arguments and do not act as predicates [+arg, –pred]. As a result, they cannot be counted without the insertion of a specific operator, Ω. In group 1, languages show no definite articles; nouns are deprived of number morphology and their default interpretation is ‘mass.’ NPs in group 2 languages (e.g., Romance Languages) show the opposite values [–arg, +pred], meaning that they are essentially predicates and can act as arguments only if a D element is inserted. Nouns in these languages inflect for number and the count/mass distinction is specified at the lexical level. In the last possible language group (e.g., Slavic/Germanic languages), NPs are [+arg, +pred]. This means that they both can be arguments and predicates. Mass and plural count nouns can appear in the argument position and the application of a “down” operator (Ω) shifts them to a predicate position. Conversely, predicates can be shifted to the argument position by recurring to the “cap” operator (∩), which turns them into kind terms. In addition, Chierchia suggests that languages lacking definite articles recur to the null “iota” operator (i), which essentially acts as a functional item of this kind. On the other hand, if a language has an overt determiner capable of performing such an operation, iota should not be available since it would be more natural to use the overt element.