Reference No:

Revision History:

Name	Change Date	Version	Description of Changes
Shanza Nayyer	3rd Nov, 04	0.1	Created
Kiran Khurshid	9th Dec, 04	0.2	Added negative determiner
Zunaira Malik	9th Aug, 05	0.3	New Release- removal of DETP

Rule ID: EGR258

Rule Syntax: Following is the constituent description of the rule.
DET -> [neg_det | art | gen_pro | dem | NPgen]

Rule Functional Description: Following are the functional specifications of the rule:

DET -> [neg_det:^=!, ^DTYPE = neg_det, ^DEF = NEG, ^NNUM = {SG, PL}; | art:^ =!, ^DTYPE = art, ^NNUM = !NUM; | gen_pro:^ GEN_PRO =!, ^NNUM = {SG,PL}, ^DTYPE= gen_pro, ^DEF = POS;| dem:^ DEM =!, ^DTYPE = dem, ^NNUM = ! NUM;| NPgen:^ GENITIVE = !, ^DTYPE= genitive, ^DEF = POS, ^NNUM = {SG, PL};].

Frequency: -

Description: This rule shows the functional and constituent structure of determiner phrase. The intuition for keeping the determiner as specifier is that they serve to "specify" the head noun rather than simply modify it like adj. [1, p. 101]. The determiner goes as DET feature structure in the f-structure which becomes the member of SPEC.

c-structure: These productions show that DETP (determiner phrase) can have DET (determiner).
DET can be article (art), genitive pronoun (gen_pro), demonstrative (dem) or a possessive NP (NPgen).

f-structure: Everything in DET goes as a SPEC to the mother node i.e. DETP. DETP on the whole also becomes SPEC of NP. The feature DEF is set for each determiner, so that it can be unified to the DEF feature coming from the PREDET rule. This helps in allowing only definite determiners with pre-determiners (like quantifiers, multipliers and fractions).

Examples:
In the following examples the underlined part is the determiner phrase:
1) I have no book (negative determiner)
2) She earns three times my salary. (genitive pronoun)
3) Many of the books are missing. (article)
4) This room is rather a mess, isn't it? (demonstrative)
5) The girl's books are torn. (NPgen)

Rule Status: Active
Reference:
[1] Miriam Butt, Tracy Holloway King, "A Grammar Writer's Cookbook"
[2] "A Lexicalized Tree Adjoining Grammar for English", Institute for Research in Cognitive Science, University of Pennsylvania
[3] http://webster.commnet.edu/grammar/determiners/determiners.htm
[4] B. A. Hockey and Heather Mateyak, "Determining Determiner Sequencing: A Syntactic Analysis for English" University of Pennsylvania.
Related Rules: EGR138
Related POS: EPOS108**,** EPOS107**,** EPOS115, EPOS121
Replaces: EGR130
Reason: New Release- removal of DETP
Replaced by: -
Reason: -

Analysis: Following is the in-depth analysis of the rule.

Analysis 1:
The determiner phrase is expected to come in the pre-nominal part of NPcommon in English. It can be split into two parts: the pre-determiner and the determiner.

As is obvious from their name, the pre-determiners occur prior to other determiners. They may contain a multiplier, a fraction, an adverb, a pre-determiner quantifier [3] or a pre-determiner number. For each of these, separate rules apply.

Analysis 2:
According to another analysis [2, p. 178] [4], determiner should be placed as the head of a phrase, whereas the noun should occur as its compliment. This alternative DP-hypothesis considers the specifier as the head of the constituents NP, and that is in keeping with the requirements of X-bar theory [1, p. 101]. This theory states that sequences of determiners, as in the NPs *all her dogs* or *those five dogs,* are derived by multiple adjunctions of the determiner tree, with each tree anchored by one of the determiners in the sequence. The order in which the determiner trees can adjoin is controlled by the *features.* This analysis has identified nine features which are sufficient to order the determiners [4]. These features determine the ordering of multiple determiners in a phrase and their well-formedness (number etc.) with respect to each other.

Result: Analysis 2 was rejected because it does not give any hierarchy to the sub categories of the determiners. They may be placed in order according to this analysis, but the levels in which they can be subdivided according to intuition are not considered. Reason for this inflexible use of determiners is that the whole analysis is based on X-bar theory. This analysis also ignores the pre-determiners, hence making the determiners limited. Extending this analysis is a tedious task as all the nine features for well-formedness need to be understood fully and then have to be mapped for pre-determiners.

Finally, intuitively speaking, determiner should not be placed as the head of the noun phrase because it is "specifying" the head noun.

All the modern theories also negate the DP hypothesis [1, 101]. Therefore, Analysis 1 was finalized.

Future Work: Following issues need to be addressed, and constraints to be included respectively, after further analysis:

1) The list of intensifiers which can occur before determiners need to be analyzed.
2) The analysis of WH pronoun as pre-determiner is yet to be done
   o *Example:*
     ▪ <u>What an</u> idiot he is.