

# Production Rules Example (10/03/2007)

# Example illustrating "dumb heuristic" for S0 order

# We assume that the actor-undergoer pattern implies active voice

# (since there is no mention of focus)

```
(rule (variables ()
      (sentences (A (actor) (undergoer))
        (if      (in-order(target-lex(fnode(A (actor)) target-lex(fnode(A
(undergoer))))
        (then    (WALS "S0"))))
```

# Example using an array of possible matches

# Example of using a variable for an array match

# X can be either the actor or undergoer

```
(rule (variables (X (actor undergoer))
      (sentences (A (X ((np-number num-sg))))
                  (B (X ((np-number num-pl))))
        (if      (different(target-lex(fnode(A)) target-lex(fnode(B))))
        (then    (WALS "Marks Plural"))))
```

# This rule fires "Marks Plural Suffix" if any target language lexical items associated

# with the actor or undergoer has a different suffix

```
(rule (variables (X (actor undergoer))
      (sentences (A ((X ((np-number num-sg))))
                  (B ((X ((np-number num-pl))))
        (if      (different-suffix(target-lex(fnode(A (X))) target-
lex(fnode(B (X))))
        (then    (WALS "Marks Plural Suffix"))))
```

# This rule fires "Marks Plural Suffix" if any target language lexical items associated

# with the actor or undergoer has a different suffix ON ITS HEAD

```
(rule (variables (X (actor undergoer))
      (sentences (A ((X ((np-number num-sg))))
                  (B ((X ((np-number num-pl))))
        (if      (different-suffix(target-lex-uhead(fnode(A (X))) target-
lex-uhead(fnode(B (X))))
        (then    (WALS "Marks Plural Suffix"))))
```