Pronominal Epithets, Non-Restrictiveness, and DOP

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Sixth Language and Computation Day, Oct 2007

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Pronominal Epithets

Definite descriptions: *the (little) bastards*, *the (poor) sod*, *the twerp*, *the greedy swine*, etc:

(1) The assassin$_i$was fast, despite the hurt done him$_i$, but Gentle was determined not to let *the bastard* $_i$slip. [CRE/1812]

(2) The competition is just a lottery, but every winner$_i$'s relatives will tell you that the guy$_i$has earned it.

(3) No capitalist$_i$'s acquisitions will every satisfy the greedy swine$_i$'s thirst for money.

- How are they different from (a)‘normal’ definite and indefinite NPs, and (b) normal pronouns?
- How can the differences be captured formally (e.g. in HPSG) and explained?

(4) The last Ango-Saxon king of England is buried in the Sanctury of Westminster Abbey.

(5) We met a boy and a girl, and talked to the GIRL.

(6) When a painter lives in a village, the village is usually pretty.

This can give rise to minimal pairs for ‘referential’ vs epithet uses:

(7) I met all the applicants, and sent the FOOLS home. [‘referential’]

(8) I met all the applicants, and sent the fools HOME. [epithet]

Dubinsky and Hamilton (1998) claim they are ‘anti-logophoric’:

(9) *According to John$_i$, the idiot$_i$ is married to a genius.
(10) Speaking of John$_i$, the idiot$_i$ is married to a genius.

- In what sense?
- How can we formalize this?
- *Why*?

Pronominal epithets are in some sense ‘non-restrictive’ . . .

E.g.

(11) I met all the applicants, and sent the bloody fools home. [epithet]

Non-Restrictiveness

(12) Some applicants you should interview are outside. (Restrictive)

(13) Some applicants, who you should interview, are outside. (Nonrestrictive)

(14) The blonde Swedes have little use for hair bleaching products.

(15) I regret every stupid word.

- How can we define this (and operationalize it)?

It is not trivial:

- with indefinites, outside 'modal' contexts, there is no difference in truth conditions;
- 'Universal' modifiers (e.g. exhaustive disjunctions): *every tall or short person*, *every expected and/or unexpected situation*

  (16) A person for us to talk to, shout at, or simply ignore. . .

- trivial modifiers:

  (17) The white unicorns at London zoo. . .

- non-restrictive restrictives:

  (18) Mary's lovely eyes that had become so dear to me. . .

- Emphasisers:

  (19) Every true Cornishman. . .

  (20) Every conceivable angle. . .

How far do we need to relativize it to syntactic configurations, and to situations (speakers' intentions, etc)?

- "In syntactic configuration [$_{XP}$ H XP], XP is interpreted *non-restrictively*, if. . ."
- "In situation S, a modifier M is interpreted *non-restrictively*, if. . ."

- Modifiers of idiom parts:

  (21) Keep close tabs on them.
  (22) Make political hay while the economic sun shines.

- Frequency adjectives.

  (23) An occasional sailor strolled by.

- Cardinal adjectives (with definites):

  (24) The numerous/many/several/few/three employees of the company will need to be informed.
  (25) The company's numerous/many/several/few/three employees will need to be informed.

Why do we care?

- Because other bits of analysis depend on it:
  - English restrictive vs non-restrictive relative clauses;
  - In Romance Languages, non-restrictive readings are only available prenominally (?):

    (26) J'ai vu un éléphant énorme . . . cet énorme éléphant . . .

    (27) J'ai vu un éléphant énorme . . . (?) cet éléphant énorme . . .

  - Correlates with focus (e.g. stress);
- Because non-restrictive modification is *non-compositional*.

DOP

- New utterances are processed on the basis of previous experience;
- Modeled as a derivation process involving composition of *fragments*;
- Very *elegant* way of combining linguistic and statistical approaches;
- 'Exemplar' based. . .

- DOP models for CFGs are fairly straightforward;
- Can we develop DOP models for richer formalisms?
  - LFG-DOP
  - HPSG-DOP

- Probability models (probability leak);
- Overgeneration (fragment generality).

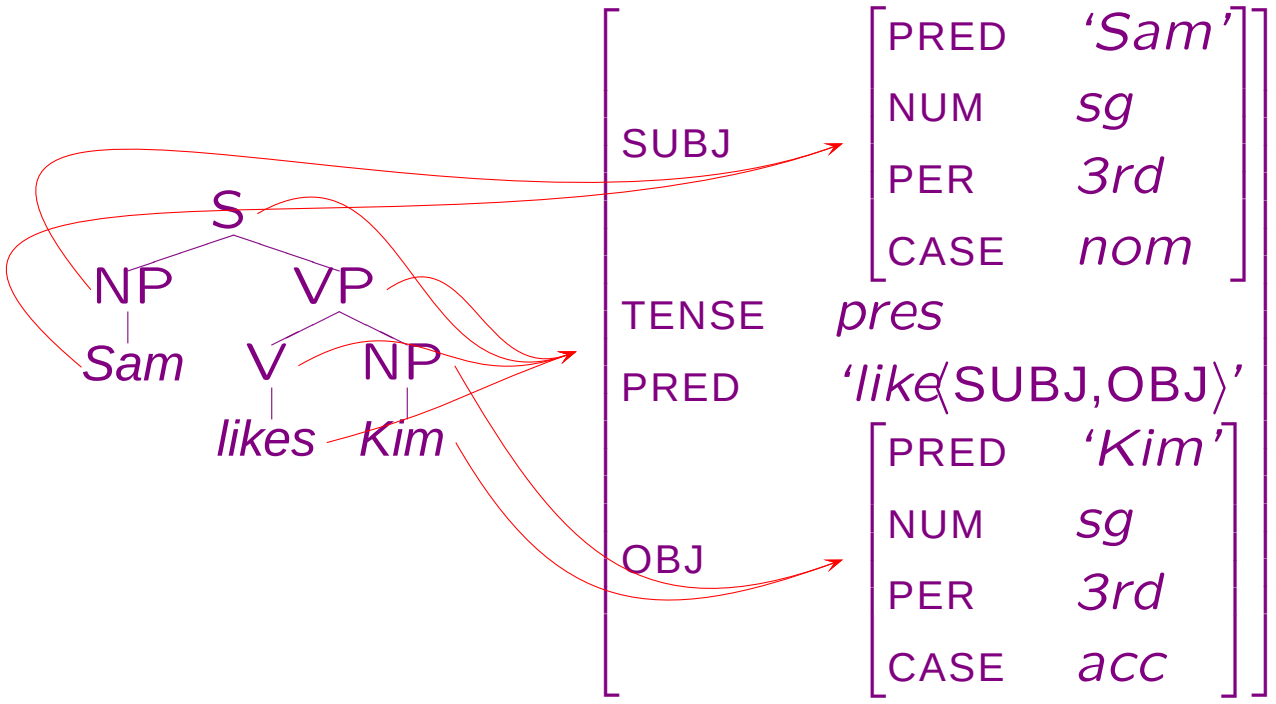

S
NP
VP
Sam
V
NP
likes
Kim
SUBJ
PRED 'Sam'
NUM sg
PER 3rd
CASE nom
TENSE pres
PRED 'like⟨SUBJ,OBJ⟩'
OBJ
PRED 'Kim'
NUM sg
PER 3rd
CASE acc

Figure 1

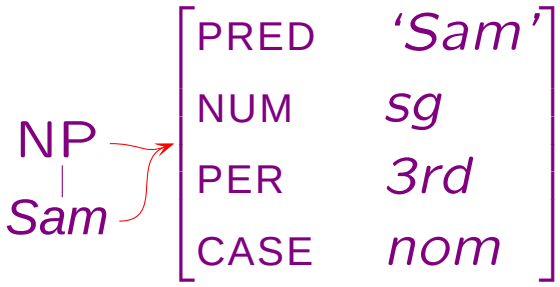


Figure 2

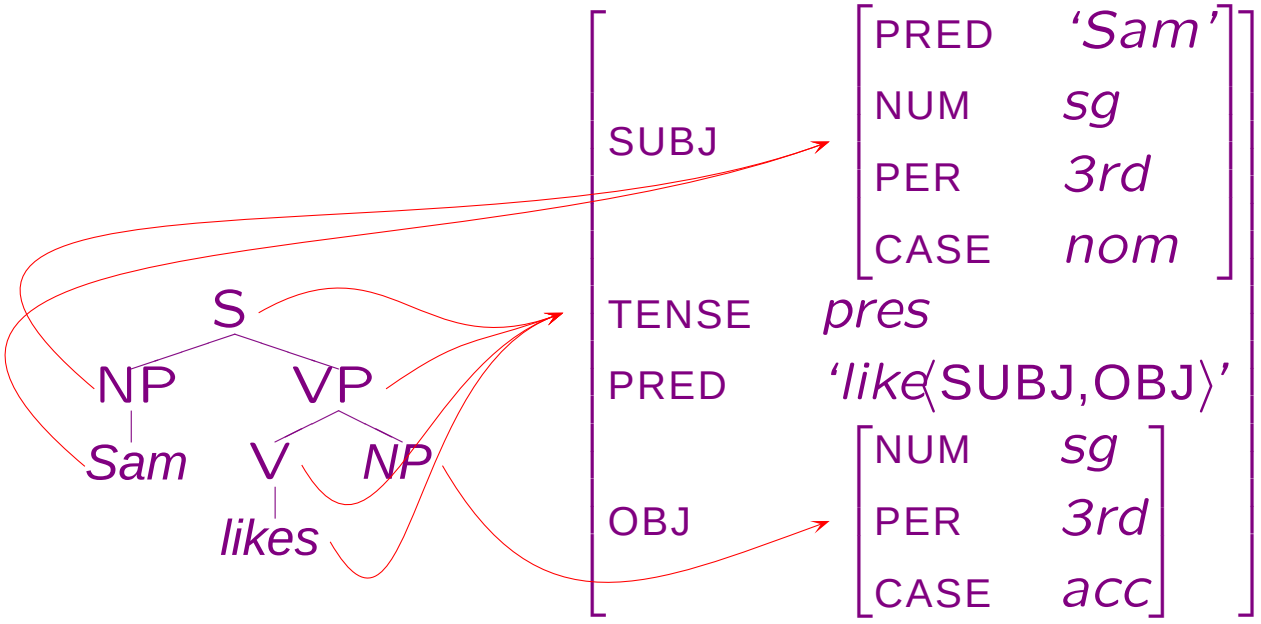

S
NP
VP
Sam
V
NP
likes
SUBJ
PRED
'Sam'
NUM
sg
PER
3rd
CASE
nom
TENSE
pres
PRED
'like⟨SUBJ,OBJ⟩'
OBJ
NUM
sg
PER
3rd
CASE
acc

Figure 3

We get very *under* general fragments:

(28) Sam$_{3.sg.nom}$ ($\not\Rightarrow$ *They like Sam*)

(29) Sam likes NP$_{3.sg}$ ($\not\Rightarrow$ *Sam likes them*)

Solutions:

- Smoothing (hypothesize unseen events);
- Discard (freely delete features)

But now we get *overgeneral* fragments:

(30) *Sam run. (e.g. by $Discard$-ing *3rd sg* on *Sam*)

(31) *They likes Kim. (e.g. by $Discard$-ing *3rd sg* on the $subj$ of *likes*)

Solution:

- abstract fragments, which place limits on how general fragments can become;
- abstract fragments are generated using normal LFG grammar notation;

HPSG-DOP

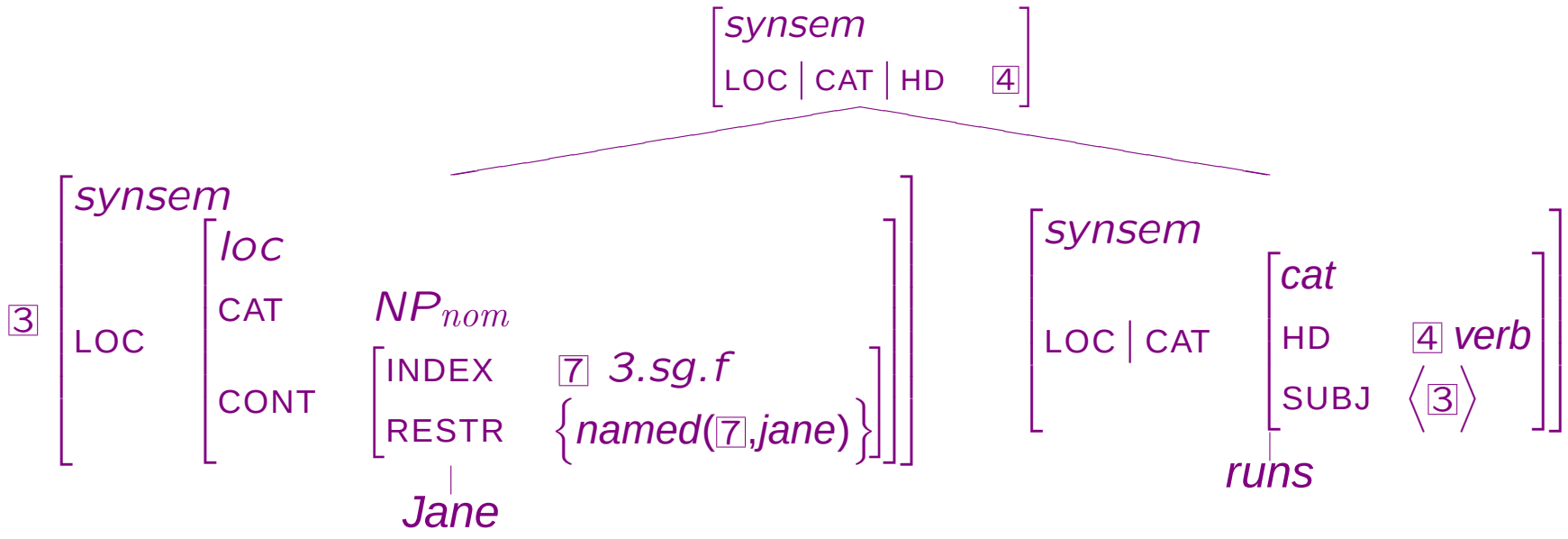


Figure 4

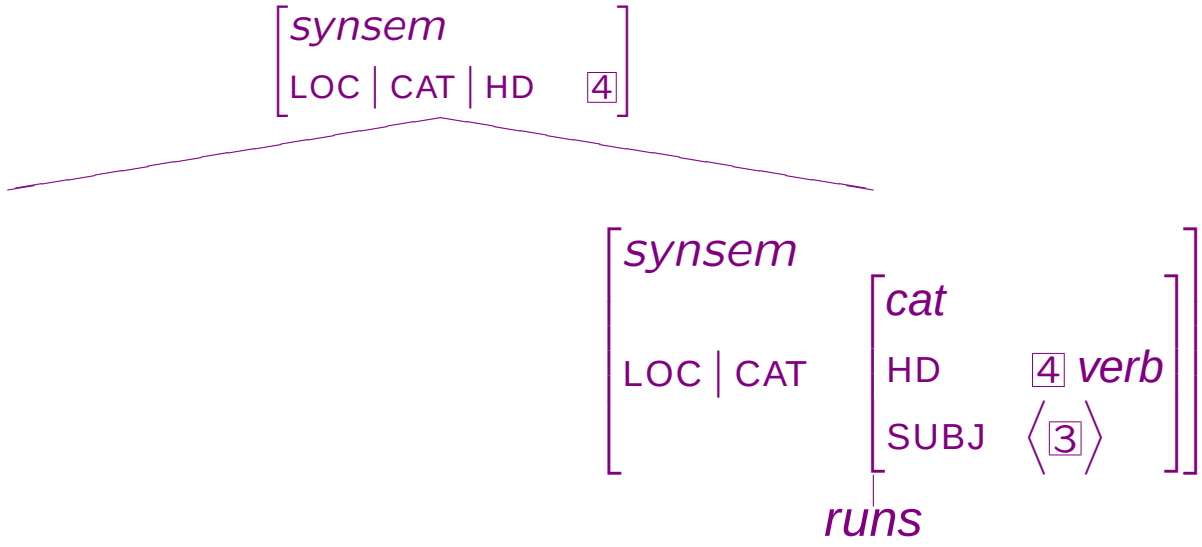


Figure 5

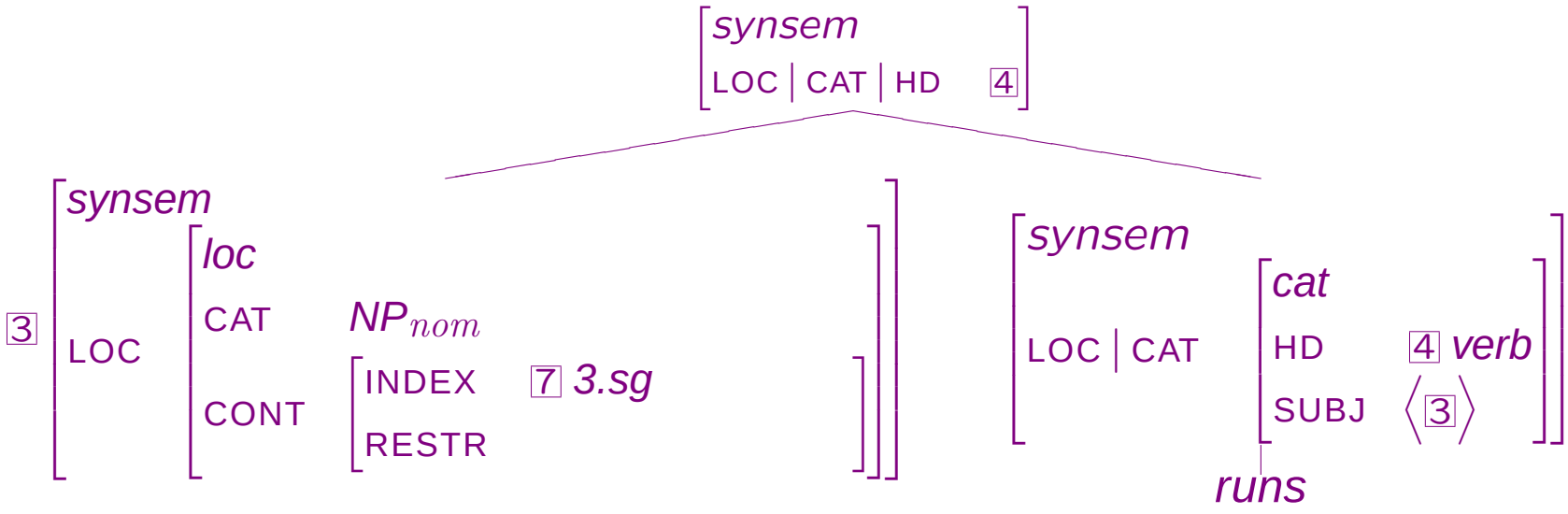
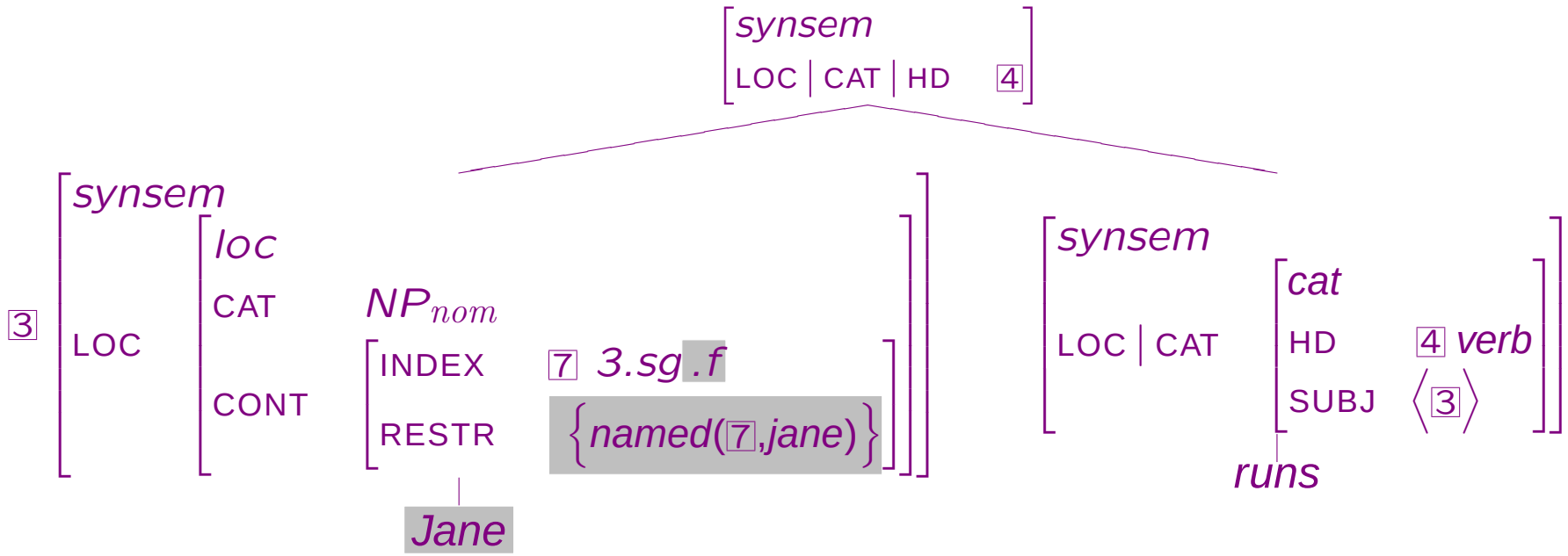

synsem
LOC | CAT | HD 4
3
synsem
LOC
loc
CAT
CONT
NP_nom
INDEX 7 3.sg
RESTR
synsem
LOC | CAT
cat
HD 4 verb
SUBJ ⟨3⟩
runs

Figure 6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3
synsem
LOC
loc
CAT
CONT
NP_nom
INDEX 7 3.sg .f
RESTR
{named(7,jane)}
Jane
synsem
LOC | CAT
cat
HD 4 verb
SUBJ ⟨3⟩
runs

Figure 7

- HPSG: if the decomposition operations are set up right, type expansion gives fragments at the right level of generality
- LFG: write a grammar that generates ‘abstract fragments’ which set an upper bound on fragment generality;
- Though formally very different, these embody essentially the same idea. Fragment creation should be constrained by the descriptive devices of the theory.

- A novel (but rather traditional) view of the role of the grammar;
- The role of the grammar is no longer to characterize (generate, constrain) the language, but to set bounds on fragment generality.
- The ‘grammar’ expresses generalizations over the fragment database, ‘licensing fragments’;
- The grammar characterizes grammaticality (‘Competence’);
- The fragment database characterizes Usage.
- The grammar may be rather unspecific (e.g. collocations).

Outline (1)

1 References

Stanley Dubinsky and Robert Hamilton. Epithets as antilogophoric pronouns. *Linguistic Inquiry*, 29:685–692., 1998.