UNIVERSITY OF YORK

BA Degree Examinations 2005-2006

DEPARTMENT OF LANGUAGE & LINGUISTIC SCIENCE

L233: Head-driven Phrase Structure Grammar

Time allowed: THREE hours

Answer questions 1 and 2 and TWO other questions.

All questions are equally weighted.

You may consult the accompanying *HPSG Signature for the Grammar of English* in writing your answers.

You may refer back to your answers to the first two questions in answering subsequent questions.

(1) Assume the sortal hierarchy and constraints on the accompanying sheet. For each of the following AVMs draw the graphs for the feature structures that are compatible with it and with the information in the sortal hierarchy and constraints.

(a)
$$\begin{bmatrix} linguist \\ \text{NAME} & john \\ \text{NATIVE-LANGUAGE} & egyptian \\ \text{OCCUPATION} & \begin{bmatrix} student \\ \text{YEAR} & 2nd \end{bmatrix} \\ \text{RESEARCH-AREA} & \begin{bmatrix} research\text{-}area \\ \text{LANGUAGE} & greek \end{bmatrix} \end{bmatrix}$$

(b)
$$\begin{bmatrix} linguist \\ \text{NAME} & name \\ \text{SEX} & female \\ \text{NATIVE-LANGUAGE} & \boxed{1} \\ \text{OCCUPATION} & \begin{bmatrix} professor \\ \text{UNIVERSITY} & stanford \end{bmatrix} \\ \text{RESEARCH-AREA} & \begin{bmatrix} morphology \\ \text{LANGUAGE} & \boxed{1} \end{bmatrix} \end{bmatrix}$$

(2) Describe how valence information is handled in HPSG and show how sentence (a) below is admitted by the grammar, illustrating your discussion with an AVM (or AVMs). Make sure that you discuss the role of phrasal sorts and general constraints in determining well-formed linguistic entities.

(a) *"Kim admires Sandy"*

(3)   Describe how the auxiliary system of English is analysed in HPSG and provide an analysis of sentence (a) below. Explain also how the ungrammatical sequences in (b) are excluded.

(a) *"Toby may have been drinking scotch"*

(b)   (i) *"Kim is doing do very well."*
       (ii) *"Kim is having done very well."*

(4)   Explain how the 'that- trace' phenomenon exemplified in sentences (a) and (b) below is treated in HPSG. Include an account of Unbounded Dependency Constructions in your discussion.

(a) *"Who did Kim say left?"*

(b) *"Who did Kim say that left?"*

(5)   Describe the organisation of the lexicon in an HPSG grammar and explain and illustrate the role of (multiple-)inheritance in capturing lexical generalisations.

(6)   Describe the analysis of adjuncts in HPSG and explain how the grammar defines the following phrases:

(a) *"A man who likes Kim."*

(b) *"A man who Kim likes."*

(7)   Discuss and illustrate the analysis of the following sentence:

(a) *"Some student read every book."*

End of Exam