Some sentences contain <u>subordinate</u> <u>clauses</u>, which can themselves be viewed as sentences since they contain a subject and a verb. For example, in The man who ate haggis painted the house. the phrase "who ate haggis" is a subordinate clause, where "who" is regarded as a pronoun.

Given the following lexical categories:

Art: a, the, this

N: man, haggis, house, cow, grass, side, road, dog, cat, rat, postmen

V: eat, eats, ate, paint, paints, painted, stand, stands, stood,

hate, hates, hated, kill, kills, killed

Pronoun: he, it, she, who, that, which

Prep: by, on, below, of

- (a) Draw syntactic tree diagrams for the following sentences, using the phrasal categories S (for Sentence), NP (for Noun Phrase) and PP (for Prepositional Phrase) and the lexical categories given.
 - (i) He eats haggis.
 - (ii) The man who ate haggis painted the house.
 - (iii) The cow eats the grass that stands by the side of the road.
 - (iv) The dog that killed the cat that ate the rat hates postmen.
- (b) Construct an RTN which will parse sentences (i)-(iv) to produce the structures you assigned in part (a).
- (c) The RTN you gave in (b) should parse the following ungrammatical sentences as well as those in (a):

The man she eat haggis paint the house. The cow eat the grass who stand by the side of the road.

Unless the RTN mechanism is extended or the lexical categories subdivided, it is impossible to give an RTN which will parse the sentences in (a) but not these ungrammatical ones. Explain why.