CSE 675, Spring 2000

CONTEXT-FREE GRAMMAR FOR FRAGMENT OF ENGLISH

(from Jurafsky & Martin, Ch. 9)

S	→	VP	*Go to the store!*
	|	NP VP	*Ideas sleep furiously.*
	|	Aux NP VP	*Do birds fly?*
	|	Wh-NP VP	*Which birds fly?*
	|	Wh-NP Aux NP VP	*Which birds do you like?*
	|	S Conj S	S *and* S, S *or* S, S *but* S …
NP	→	Pro	*I*, *you* (etc.)
	|	Proper-N	*Bill*, *Buffalo*
	|	Det Nominal	*the house*
	|	(Det)(Card)(Ord)(Quant)(AdjP) Nominal	
		flights	
		four flights	
		the first flight	
		all flights	
		the fastest flight	
		colorful green ideas	
		the four last ? expensive flights (?)	
	|	NP Conj NP	NP *and* NP, NP *or* NP
Nominal	→	N	*house*
	|	N Nominal	*fire hydrant*
	|	Nominal PP (PP) (PP)	*flights from Buffalo to NYC in the evening*
	|	Nominal GerundVP	*flights leaving on time*
		(where GerundVP satisfies rules like those for VP)	
	|	Nominal RelClause	*a flight that is on time*
PP	→	Prep NP	*in the morning*
RelClause	→	Rel VP	*who is going*; *that is on time*
VP	→	V	*sleep*
	|	V NP	*give a book*
	|	V PP	*run to Mary*
	|	V NP PP	*give a book to Mary*
	|	V (that) S	*think (that) ideas sleep furiously*
		probably should be: V (that) NP VP	
	|	VP Conj VP	VP *and* VP (etc.)
AdjP	→	Adj | Adj AdjP	*red*, *big red*

N.B.: AdvP, punctuation missing