NLP Tutorial 1: Verb Subcategorisation Frames

The intention of this tutorial is to get you to think explicitly about the description of a class of linguistic data, and to try to learn to tap your (possibly native-speaker) intuitions about English.

1. Preliminary Data Collection

Using the verbs in the list below, determine the range of subcategorisation frames licensed by English verbs (in their active declarative uses). Use the following categories:

pp[+p] i.e with a specific preposition,
pp i.e. with any, or at least a number of prepositions,
s[fin] - e.g. (that) Fred eats cakes
| s[bse] - e.g. (that) Fred eat cakes - Case
| vp[bse] - e.g. eat cakes
| vp[inf] - e.g. to eat cakes
| vp[ing] - e.g. eating cakes
| vp[pasp] - e.g. eaten
| ap | apechic | Mass.

Try to think of all uses of a verb, and if different subcategorisation frames seems to correspond to a difference in meaning, treat these as separate homophonous items. Note down any restrictions that a verb or one use of it puts on the form of its subject (e.g. sentential, 'it', 'there').

Treat the complements as a set, i.e. unordered, but see if you can detect any constraints on order.

2. Extending the coverage

For each class, try to think of at least one other member that shares the same distribution. Do the classes you defined in stage 1 exhaust the possibilities?

3. Semantics

Do the syntactic classes that you have defined correspond to semantic ones? When a verb subcategorises a vp, what is understood as the subject of that vp?

4. Interpreting Grammatical Descriptions

Can you think of any other ways of getting the required grammatical coverage than having a phrase structure rule for each subcat frame?

<i>,</i>		np (at, about), nothing. np, nothing (the case broke) CRA	CRASHED	
	break }			
	send	MAME .	, 51 KB.	
	call			
	put			
	turn			
	see			
	expect	np, 5, up (auf), up up		
	persuade	np, uplad)		
	hope	uplinds squit		
	tend	up (iif), np,		
	bother	up, pp (about) sentential	(SURPRISE)	
	promise	p(inf) up up(inf) upup		
	believe			
	ask			
	seem			
	be			
	can		•	

have