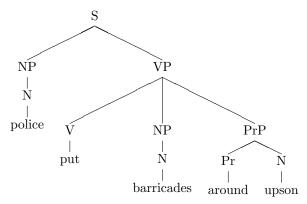
I. Constituent structure

I (a) police put barricades around upson

I (b)



S = sentence

NP = noun phrase

VP = verb phrase

PrP = prepositional phrase

N = noun

V = verb

Pr = preposition

Alternative bracket notation: [police [[put]_V [barricades]_{NP} [around upson]_{PrP}]_{VP}

- I (c) [What] will police [[put] [around upson]]
- I (d) [Where] will police [[put] [barricades]]
- I (e) [What] [where] will police [[put]] / [What] will police [[put]]

II. Evidence for category proliferation

- II (a) police [[informed]_V [the president]_{NP} [that students had hired lawyers]_{S'}]_{VP}
- II (b) police $[\inf_{V}]$ the president that students had hired lawyers
- II (c) police informed $[she]_{NP}$ that students had hired lawyers
- II (d) police $[informed]_V$ $[rocks]_{NP}$ that students had hired lawyers

III. Evidence for traces

III (a) *what will police put barricades around upson

IV. Lexicon entry for "inform"

$$\begin{bmatrix} \text{CAT}: & V \\ \text{ROOT}: & inform \\ \\ \text{SUBCAT}: & \begin{bmatrix} \text{CAT}: & NP \\ \text{ANIMATE}: & + \\ \text{CASE}: & \{-, ACC\} \end{bmatrix} \\ \\ 2: & \begin{bmatrix} \text{CAT}: & S' \end{bmatrix} \end{bmatrix}$$

V. Trace generation (assuming default values, head-feature propagation, etc.).

$$\begin{bmatrix} \operatorname{CAT}: & NP \\ \operatorname{CASE}: & ?c \\ \operatorname{ANIMATE}: & ?a \end{bmatrix} \longrightarrow \varepsilon$$

$$\begin{bmatrix} \operatorname{CAT}: & NP \\ \operatorname{CASE}: & ?c \\ \operatorname{ANIMATE}: & ?a \end{bmatrix}$$

$$S \longrightarrow ?g \begin{bmatrix} CAT : & S \\ INV : & + \\ GAP : & ?g \end{bmatrix}$$

V (b)

$$\begin{bmatrix} CAT: & S \\ INV: & + \\ GAP: & ?g \end{bmatrix} \longrightarrow \begin{bmatrix} CAT: & AUX \\ AGR: & ?a \end{bmatrix} \begin{bmatrix} CAT: & NP \\ CASE: & \{-, \text{NOM}\} \\ AGR: & ?a \\ GAP: & - \end{bmatrix} \begin{bmatrix} CAT: & VP \\ VFORM: & base \\ GAP: & ?g \end{bmatrix}$$

V (c) (abusing notation in last two nonterminals)

$$\begin{bmatrix} CAT: & VP \\ GAP: & ?g \end{bmatrix} \longrightarrow \begin{bmatrix} CAT: & V \\ \\ SUBCAT: & \begin{bmatrix} 1: & ?y \\ 2: & ?z \end{bmatrix} \end{bmatrix} \quad \begin{bmatrix} ?y \\ GAP: & ?g \end{bmatrix} \quad \begin{bmatrix} ?z \\ GAP: & - \end{bmatrix}$$