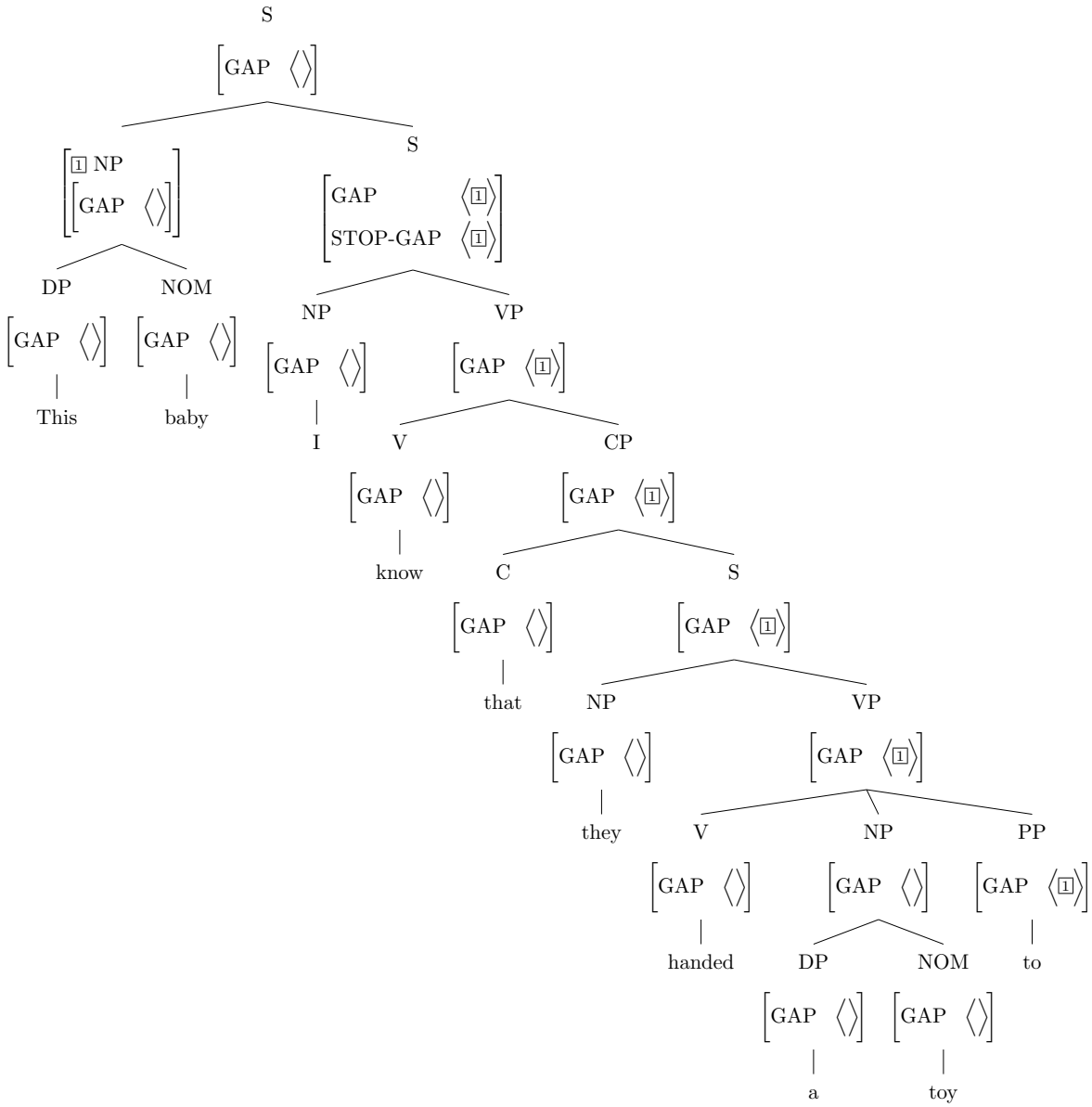
566 HW8

Daniel Campos dacampos@uw.edu

12/4/2019

1 Chapter 14, Problem 1



2 Chapter 14, Problem 3

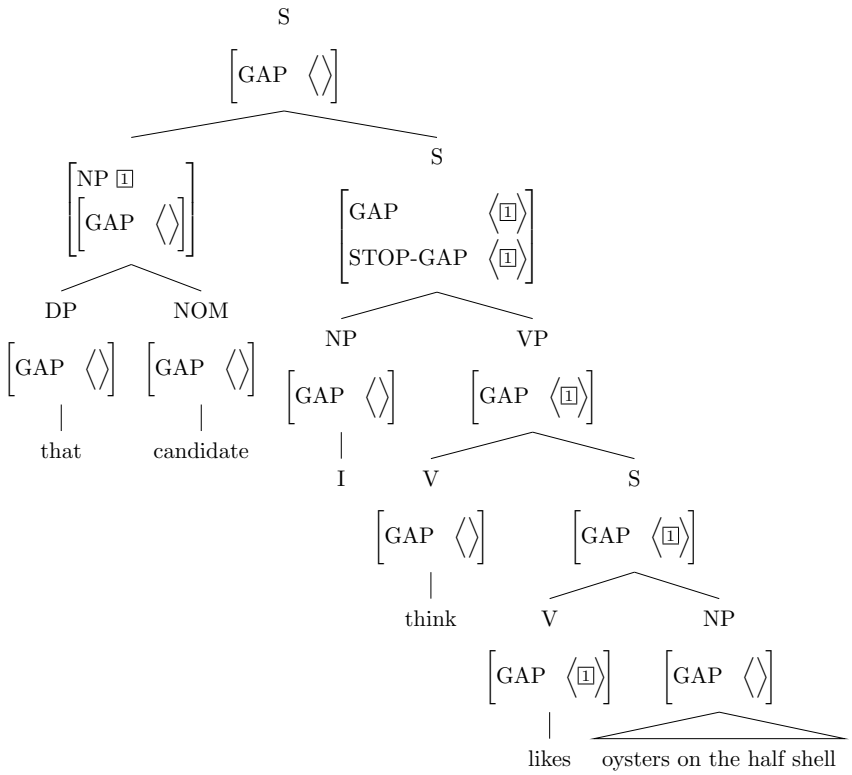
2.1 Lexical Sequence for likes before Extraction Lexical Rule

$$\left\langle \text{likes} , \left[\begin{array}{ll} \textit{word} & \\ \text{SYN} & \left[\begin{array}{ll} \text{HEAD} & \left[\begin{array}{ll} \textit{verb} & \\ \text{FORM} & \textit{fin} \\ \text{PRED} & - \\ \text{INF} & - \\ \text{AUX} & - \\ \text{PO} & - \\ \text{AGR} & \boxed{3}\textit{3sing} \end{array}\right] \\ \text{VAL} & \left[\begin{array}{ll} \text{SPR} & \left\langle \boxed{1}\text{NP}_i \left[\begin{array}{ll} \text{HEAD} & \left[\begin{array}{ll} \textit{nominal} & \\ \text{CASE} & \textit{nom} \\ \text{AGR} & \boxed{3} \end{array}\right] \end{array}\right] \right\rangle \\ \text{COMPS} & \left\langle \boxed{2}\text{NP}_j \left[\begin{array}{ll} \text{HEAD} & \left[\begin{array}{ll} \textit{nominal} & \\ \text{CASE} & \textit{acc} \end{array}\right] \end{array}\right] \right\rangle \end{array}\right] \\ \text{GAP} & \langle\rangle \\ \text{STOP-GAP} & \langle\rangle \end{array}\right] \\ \text{SEM} & \left[\begin{array}{ll} \text{MODE} & \textit{prop} \\ \text{INDEX} & \text{s} \\ \text{RESTR} & \left\langle \left[\begin{array}{ll} \text{RELN} & \text{like} \\ \text{SIT} & \text{s} \\ \text{LIKER} & \text{i} \\ \text{LIKED} & \text{j} \end{array}\right] \right\rangle \end{array}\right] \\ \text{ARG-ST} & \langle \boxed{1} , \boxed{2} \rangle \end{array}\right] \right\rangle$$

2.2 Lexical sequence after Extraction Lexical Rule

$$\left\langle \text{likes} , \left[\begin{array}{ll} \textit{word} & \\ \text{SYN} & \left[\begin{array}{ll} \text{HEAD} & \left[\begin{array}{ll} \textit{verb} & \\ \text{FORM} & \textit{fin} \\ \text{PRED} & - \\ \text{INF} & - \\ \text{AUX} & - \\ \text{PO} & - \\ \text{AGR} \ \boxed{3} & \textit{3sing} \end{array}\right] \\ \text{VAL} & \left[\begin{array}{ll} \text{SPR} & \langle\rangle \\ \text{COMPS} & \left\langle \boxed{2}\text{NP}_j \left[\text{HEAD} \left[\begin{array}{ll} \textit{nominal} & \\ \text{CASE} & \textit{acc} \end{array}\right]\right] \right\rangle \end{array}\right] \\ \text{GAP} & \left\langle \boxed{1}\text{NP}_i \left[\text{HEAD} \left[\begin{array}{ll} \text{CASE} & \textit{nom} \\ \text{AGR} & \boxed{3} \end{array}\right]\right] \right\rangle \\ \text{STOP-GAP} & \langle\rangle \end{array}\right] \\ \text{SEM} & \left[\begin{array}{ll} \text{MODE} & \textit{prop} \\ \text{INDEX} & \text{s} \\ \text{RESTR} & \left\langle \left[\begin{array}{ll} \text{RELN} & \text{like} \\ \text{SIT} & \text{s} \\ \text{LIKER} & \text{i} \\ \text{LIKED} & \text{j} \end{array}\right] \right\rangle \end{array}\right] \\ \text{ARG-ST} & \langle \boxed{1} , \boxed{2} \rangle \end{array}\right] \right\rangle$$

2.3 Tree for 47b



2.4 Grammars prediction of contrasts between 47b and i

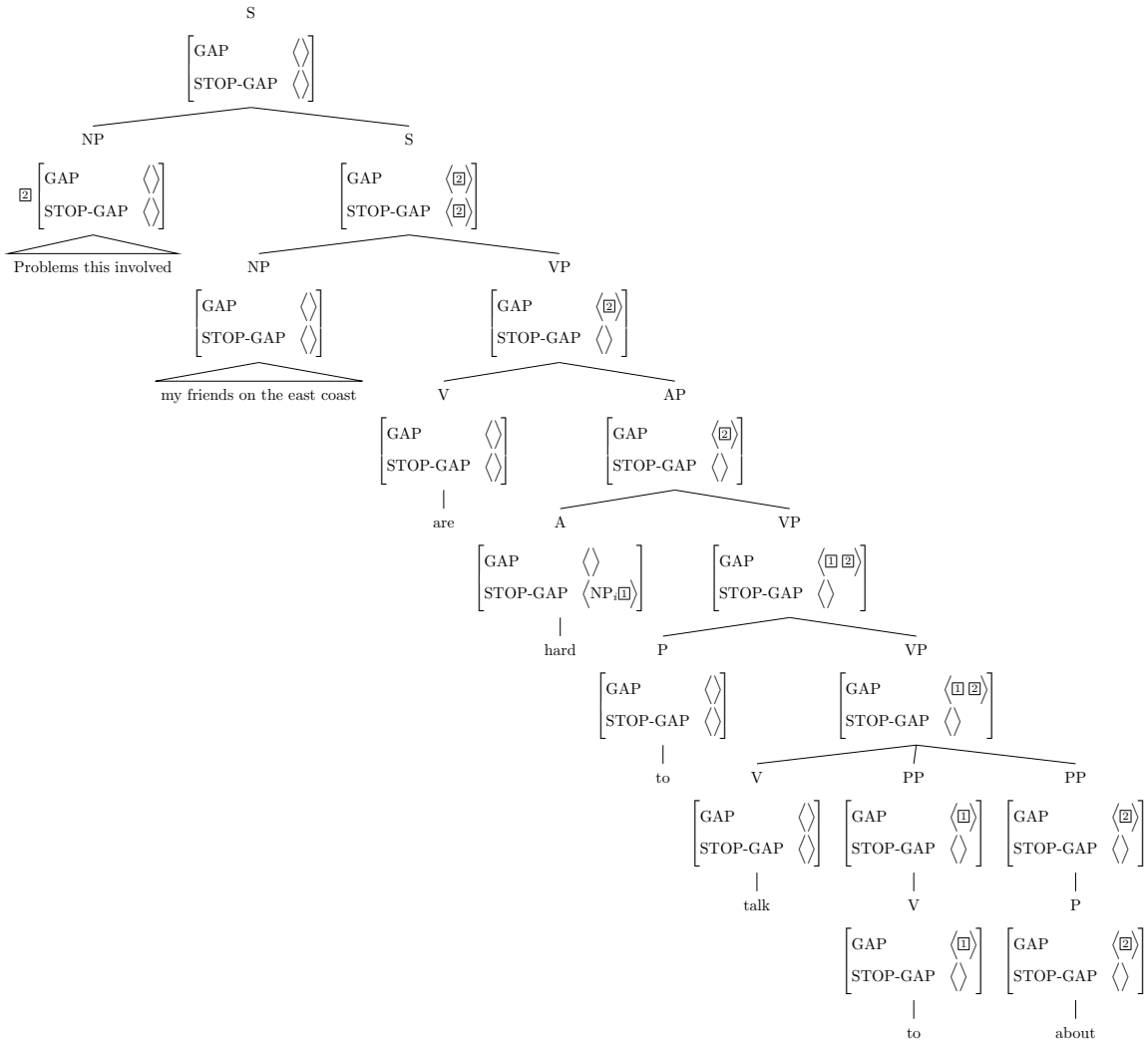
The grammar correctly predicts a distinction between 47b and i and correctly predicts i as ungrammatical because in i, the AGR values of those does not agree with likes. *Those candidates* is non 3sing and *likes* is 3sing. Since they do not agree the sentence cannot be licensed as grammatical. The example i is ungrammatical because:
1. The SHAC as specified in inf-lxm requires that the element on the SPR list of a verb agree with it(including its AGR).
2. Constraint mentioned above applies after the element moves from SPR to GAP because of the Subject Extraction Lexical Rule. 3. Based on this *those candidates*(from example i) and *that candidate*(from 47b) compose the NP that is the element in the GAP list of *likes*. As a result 47b has agreement and i does not.

3 Chapter 14, Problem 5

3.1 Which NP is interpreted as the filler for gap in i and ii

For sentence i) the NP above *my friends on the east coast* serves as the filler for the gap after *talk to* and the NP above *problems this involved* serves as the filler for the gap after about.
For sentence ii) the NP above *these sonatas* is serves as the filler for the gap following *easy to play* and the NP above *violins this well crafted* serves as the filler for the gap after *on*.

3.2 Tree for: Problems this involved, my friends on the east coast are hard to talk to about



3.3 Is predicted by analysis of LDD?

Yes these semantics are predicted by our LDD analysis. The two sentences are identical except the order of *to* and *about* are switched. This switch will result in switing the order the gap elements tagged 1 and 2 in tree above. In the second phrase, the element on the GAP of About comes first and will end up being the same as the STOP-GAP of hard which is coindexed with *my friends on the East Coast*. Similarly the GAP of *to* comes all the way ip the tree to be identified with *problems this involved.*