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COSI 114b
PA 6

a)

Stack	Buffer	New Dependency	Transition
[ROOT]	[I, parsed, this, sentence, correctly]		Initial Configuration
[ROOT, I]	[parsed, this, sentence, correctly]		SHIFT
[ROOT, I, parsed]	[this, sentence, correctly]		SHIFT
[ROOT, parsed]	[this, sentence, correctly]	Parsed=> I	Left-arc
[ROOT, parsed, this]	[sentence, correctly]		SHIFT
[ROOT, parsed, this, sentence]	[correctly]		SHIFT
[ROOT, parsed, sentence]	[correctly]	Sentence => this	Left-arc
[ROOT, parsed]	[correctly]	Parsed=>sentence	Right-arc
[ROOT, parsed, correctly]			SHIFT
[ROOT, parsed]		Parsed=> correctly	Right-arc
[ROOT]		ROOT=>parsed	Right-arc

b) 2n steps. Each word needs to be moved from the buffer, which is one step, and then have a dependency relation assigned, which is one step. Thus, 2n.

f) i: Error – Verb phrase attachment
Incorrect: wedding => fearing
Correct: heading => fearing

ii: Error – Coordination attachment
incorrect: makes => rescue
correct : rush => rescue

iii: Error – Prepositional phrase attachment
incorrect: named => Midland
correct: guy => Midland

iv: Error – Adj. Modifier attachment
incorrect: elements => most
Correct: crucial => most

Results:

```
Average Train Loss: 0.19084856485715773
Evaluating on dev set
- dev UAS: 65.28
```

```
M88 (1088, 3) (1088, 3) (201, 3)
Average Train Loss: 0.07533499989292718
Evaluating on dev set
- dev UAS: 87.37

================================================================================
TESTING
================================================================================
Final evaluation on test set
- test UAS: 87.26
Done!
(base) Daniels-MacBook-Pro-2:PA6-3 Grey$
```