

L344 Computational Syntax and Semantics
Sample outputs

June 2, 2005

```
?- parse([duncan, gave, glamis, to, macbeth], X).
```

```
X = s(gave1(d, g, m), _G257-_G257)
```

Yes

```
?- parse([duncan, gave, macbeth, glamis], X).
```

```
X = s(gave1(d, g, m), _G251-_G251)
```

Yes

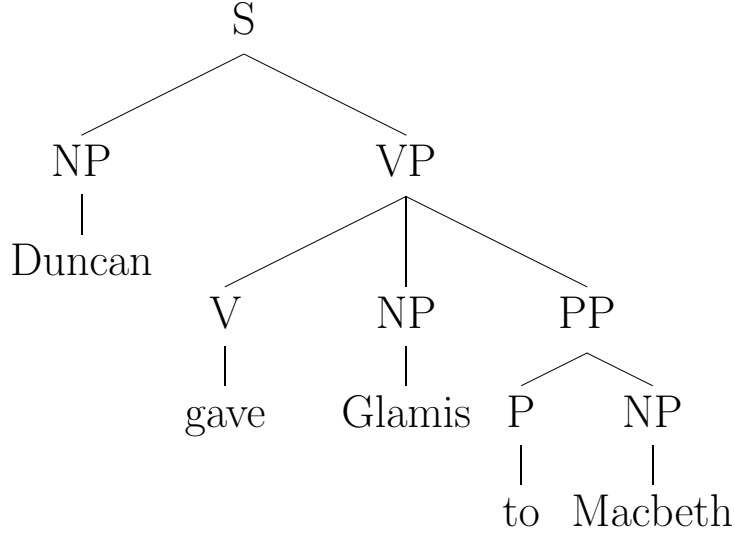
```
?- parse([glamis, was,given, to, macbeth, by, duncan], X).
```

```
X = s(gave1(d, g, m), _G269-_G269)
```

Yes

```
?- parse([macbeth, was,given, glamis , by, duncan], X).
```

```
X = s(gave1(d, g, m), _G263-_G263)
```

$$\lambda\mathcal{P}^1[\lambda\mathcal{P}^2[\lambda x^3[\mathcal{P}^1(\lambda x^1[\mathcal{P}^2(\lambda x^2[gave1(x^3, x^1, x^2)])])]]]]$$


$$duncan'(gave'(glamis')(to'(macbeth))) \equiv gave1(d, g, m)$$

$$\lambda\mathcal{P}^1[\lambda\mathcal{P}^2[\lambda x^3[\mathcal{P}^1(\lambda x^1[\mathcal{P}^2(\lambda x^2[gave1(x^3, x^1, x^2)])])]]](\lambda A[A(g)])(\lambda B[B(m)])$$

$$\lambda\mathcal{P}^2[\lambda x^3[\lambda A[A(g)](\lambda x^1[\mathcal{P}^2(\lambda x^2[gave1(x^3, x^1, x^2)])])]]](\lambda B[B(m)])$$

$$\lambda\mathcal{P}^2[\lambda x^3[\lambda x^1[\mathcal{P}^2(\lambda x^2[gave1(x^3, x^1, x^2)])](g)]](\lambda B[B(m)])$$

$$\lambda\mathcal{P}^2[\lambda x^3[\mathcal{P}^2(\lambda x^2[gave1(x^3, g, x^2)])]](\lambda B[B(m)])$$

$$\lambda x^3[\lambda x^2[gave1(x^3, g, x^2)](m)]$$

$$\lambda x^3[gave1(x^3, g, m)]$$

$$\lambda C[C(d)](\lambda x^3[gave1(x^3, g, m)])$$

$$\lambda x^3[gave1(x^3, g, m)](d)$$

$$gave1(d, g, m)$$