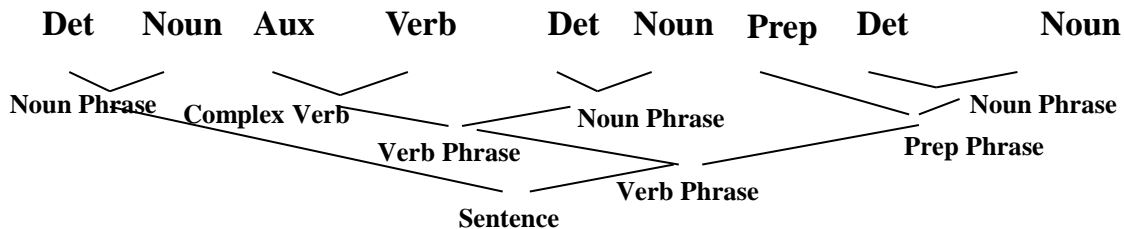A dog is chasing a boy on the playground **String of characters**
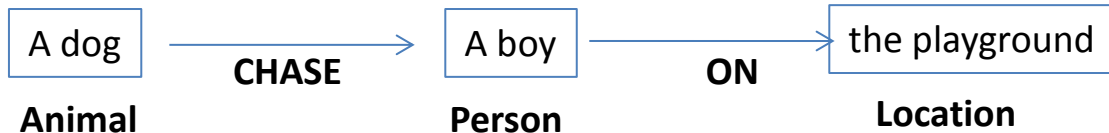
A dog is chasing a boy on the playground **Sequence of words**

Det Noun Aux Verb Det Noun Prep Det Noun **+ POS tags**

Noun Phrase Complex Verb Noun Phrase Noun Phrase **+ Syntactic structures**

Verb Phrase Prep Phrase

Verb Phrase

Sentence

| A dog | → CHASE → | A boy | → ON → | the playground | **+ Entities and relations** |
| Animal | | Person | | Location | |

Dog(d1). Boy(b1). Playground(p1). Chasing(d1,b1,p1). **+ Logic predicates**

Speech Act = REQUEST **+ Speech acts**

Deeper NLP: requires more human effort; less accurate

Closer to knowledge representation