Basic Constituent Order

- English sentence constituent order: $s[NP \ VP]$
- If VP has object complement: $s[NP_{vp}[V\ NP]]$
- This is our familiar SVO (Subj Verb Object)

Question Formation and Movement

Bill ate cookies yesterday at the park
S V O Complements

-Where does a question-word go?

Who ate cookies yesterday at the park?
S V O Complements

-But

What did Bill eat yesterday at the park?
O Aux S V Complements
We assume that there is a structural relationship between the interrogative sentence and the declarative sentence. Put another way:

**What did Bill eat yesterday at the park?**  
is at some basic level really  
**Bill ate what yesterday at the park?**

*Syntactic rules* of English *transform* constituent order when a question word is involved.

This transformation is a *movement* that places the question-word constituent at the front:

**What did Bill eat _____ yesterday at the park?**  
↑←____←____←_↓

The same movement happens if we substitute question word *when* for *yesterday* or *where* for *at the park*:

**Where did Bill eat cookies yesterday _____?**  
**When did Bill eat cookies _____ at the park?**
The movement of question words to the front of the sentence is a basic feature of English syntax:

Linguists believe that structural relationships in sentences can be best explained by assuming that there is an underlying, or deep structure to sentences, and that this structure is transformed by movement to yield a surface structure which is actually spoken.

Note the parallel to underlying morphemes and phonemes which are realized as surface allomorphs and allophones.

Sometimes the deep structure can be revealed. For example, if you say

*Bill ate grooveles yesterday at the park.*

I might say:

*Bill ate WHAT yesterday at the park?*
Other Languages - QW Movement?
Statement: “Mary ate lunch.”
Hind.: /Mary-ne dopahar ka: ḍodʒan kʰaːja:/
    Mary-ERG noon POSS meal ate
Jap. /meri-ga hiruogohan-o tabemasita/
    Mary-SUB lunch-OBJ eat-POL-PAST
Kor. /mɛli-ka tʃamsim-ul makassajo/
    Mary-SUB lunch-OBJ eat-PAST-POL
Chin. /mali tʂʰʐɭ lə ufan/
    Mary eat-PAST lunch

“Who ate lunch?”
“What did Mary eat?”

Which languages have movement?
Agreement
Agreement involves syntax and morphology
A word in a sentence *inflects* based on a word somewhere else in the sentence.

*I sing poorly.*
*Mary sings well.*

The verb inflects based on the subject Mary.
We say that the verb *agrees* in *person* (first, second, or third) and *number* (singular or plural) with the subject.

French:  
*Le garçon est petit* [pəti]  
The boy is little.  
*La maison est petite* [pətɪ]  
The house is small.

The article (“the”) and the adjective (“small”) both agree in *gender* with the modified noun.
The same is found with adjectives in Hindi. These adjectives agree in *number* and *gender* with the nouns they modify:

- **lamba** लंबा: tall boy (masculine singular)
- **lambi** लंबी: tall girl (feminine singular)
- **lambe** लंबे: tall boys (masculine plural)
- **lambi** लंबी: tall girls (feminine plural)

In many languages, the verb inflects to agree in *person*, *number*, and *gender* with the subject. We saw this with Kannada verbs.

Because agreement involves inflection, it is not found in isolating languages. So it is not a feature of the syntax of Chinese, Vietnamese, Thai. Agreement is also absent from Japanese and Korean.
Example of verbal agreement in Hindi:

/Ra:m dilliː mẽ nahĩː rẽhtaː/
*Ram doesn’t live in Delhi* (masc. sg.)

/Raːniː dilliː mẽ nahĩː rẽhtiː/
*Rani doesn’t live in Delhi* (fem. sg.)

/Raːm ər Lakṣmaṇ dilliː mẽ nahĩː rẽhte/
*Ram and Lakshman don’t live in Delhi* (masc. pl.)

/Raːniː ər Sīṭaː dilliː mẽ nahĩː rẽhtĩː/
*Rani and Sita don’t live in Delhi* (fem. pl.)

Can you identify the inflectional affixes involved in the agreement?