Word order
Here’s an English sentence…

Marie has discovered radium.
Here’s an English sentence…

Marie has discovered radium.
Here’s an English sentence…

Marie has discovered radium.

some reorderings of this sentence would make it ungrammatical:

*Marie discovered radium has.
*Marie has radium discovered.
*has discovered Marie radium.

…
Here’s an English sentence…

Marie has discovered radium.

some reorderings of this sentence would make it ungrammatical:

*Marie discovered radium has.
*Marie has radium discovered.
*has discovered Marie radium.

Others are grammatical, but mean different things, or just emphasize different parts of the sentence:

#radium has discovered Marie.
radium, Marie has discovered.
Languages vary in their word order...

Marie has discovered radium.

…da Jan wilt een huis kopen.  [West Flemish]

…dass Johann das Buch gelesen hat.  [German]

...dat Jan het boek wil lezen.  [Dutch]

…þæt ænig mon atellan mæge þone demm.  [Old English]
Languages vary in their word order…
...but not without limit!
Marie has discovered radium.
1 2 3

...da Jan wilt een huis kopen.  [West Flemish]
1 3 2

...dass Johann das Buch gelesen hat.  [German]
3 2 1

...dat Jan het boek wil lezen.  [Dutch]
3 1 2

...þæt ænig mon atellan mæge þone demm.  [Old English]
2 1 3

...that Marie discovered radium has.
2 3 1

[NO LANGUAGE ANYWHERE ON EARTH!!!!]
Languages vary in their word order…

We’ve been ignoring subjects (Marie).
Where can subjects go?
Languages vary in their word order...

We’ve been ignoring subjects *(Marie)*. Where can subjects go? WALS data:

<table>
<thead>
<tr>
<th>Order</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOV</td>
<td>48%</td>
</tr>
<tr>
<td>SVO</td>
<td>41%</td>
</tr>
<tr>
<td>VSO</td>
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*(4/1188 in the sample)*
Languages vary in their word order…

We’ve been ignoring subjects *(Marie)*. Where can subjects go? WALS data:

<table>
<thead>
<tr>
<th>Word Order</th>
<th>Percentage</th>
<th>Example Sentence</th>
<th>Language</th>
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<tbody>
<tr>
<td>SOV</td>
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<td>John-ga tegami-o yonda.</td>
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<tr>
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<td>41%</td>
<td>John read the letter</td>
<td>English</td>
</tr>
<tr>
<td>VSO</td>
<td>8%</td>
<td>Léann na sagairt na leabhair</td>
<td>Irish</td>
</tr>
<tr>
<td>VOS</td>
<td>2%</td>
<td>Irino vakhe ina-gu</td>
<td>Nias</td>
</tr>
<tr>
<td>OVS</td>
<td>1%</td>
<td>Toto yahosiye kamara</td>
<td>Hixkaryana</td>
</tr>
<tr>
<td>OSV</td>
<td>&lt;1%</td>
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<td>Nadëb</td>
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Languages vary in their word order…

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(translations:)
- ‘John read the letter’ (Japanese)
- ‘John read the letter’ (English)
- ‘The priests are reading the books’ (Irish)
- ‘My mother cooked rice’ (Nias)
- ‘The jaguar grabbed the man’ (Hixkaryana)
- ‘The child sees the jaguar’ (Nadëb)
Languages vary in their word order…

SOV 48% John-ga tegami-o yonda. [Japanese]
SVO 41% John read the letter [English]
VSO  8% Léann na sagairt na leabhair [Irish]
VOS  2% Irino vakhe ina-gu [Nias]
OVS  1% Toto yahosiye kamara [Hixkaryana]
OSV <1% Awad kalapée hapúh [Nadëb]

(recall that Klingon is like Hixkaryana …)

tera’ngan legh tlhIngan ‘The Klingon sees the human’
Side note about Hixkaryana…

Toto yahosiye kamara
man grabbed jaguar
‘The jaguar grabbed the man’
Side note about Hixkaryana…

**Toto yahosiye kamara**
*man* grabbed *jaguar*

‘The jaguar grabbed the man’

**biryekomo** *komo yonyetxkoni kamara [ txetxa wawo] [ amnyehra]*
*child* ate *jaguar in.the.forest long.ago*

‘The jaguar used to eat children *in the forest long ago*’
Side note about Hixkaryana…

**Toto yahosiye kamara**
**man** grabbed **jaguar**
‘The jaguar grabbed the man’

**biryekomo komo yonyetxkoni kamara [ txetxa wawo] [ amnyehra]**
**child** ate **jaguar** in.the.forest long.ago
‘The jaguar used to eat children in the forest long ago’

(Klingon is not like this…)
Sometimes languages have options.

*Japanese* (**SOV**)  
Taroo-kun-wa natto-o tabeta.  
‘Taro ate natto’

*Tagalog* (**VSO**)  
Kumain si Juan ng balut.  
‘Juan ate balut’
Sometimes languages have options.

*Japanese (SOV)*

Taroo-kun-wa natto-o tabeta.

natto-o Taroo-kun-wa tabeta.

‘Taro ate natto’

*Tagalog (VSO)*

Kumain si Juan ng balut.

Kumain ng balut si Juan.

‘Juan ate balut’
Sometimes languages have options…. 
…but often there are limits.

*Japanese (SOV)*

*Taro-kun-wa natto-o tabeta.* 
*T-kun-wa natto-o natto-o Taroo-kun-wa tabeta.*

‘Taro ate natto’

*Tagalog (VSO)*

*Kumain si Juan ng balut.* 
*Kumain ng balut si Juan.*

‘Juan ate balut’
Prepositions…

Taro ate the natto with a knife.
Prepositions…
…and Postpositions.

Taro ate the natto with a knife.
Taroo-kun-wa natto-o naifu-de tabeta.  (Japanese)

(WALS: about 53% postpositions, 47% prepositions)
Adjectives

big house
Adjectives

big house

dēk mənūʔ  (Temiar)
Adjectives

**big** house

dēk mənūʔ  (Temiar)

**malaking** bahay  (Tagalog)
bahay **na malaki**
Adjectives

(WALS)

27% big house

65% dēk mənūʔ (Temiar)

8% malaking bahay (Tagalog)
bahay na malaki
Embedded clauses

Taro thinks \textbf{that} natto is tasty \hspace{1cm} (\textit{complementizer})
Embedded clauses

Taro thinks [that natto is tasty] (complementizer)

Taroo-kun-wa [nattoo-ga oisii to] omou. (Japanese)

CheleTa Suneche [je or baba aSbe] (Bangla)
the.boy heard that his father will. come
Embedded clauses

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CheleTa [or baba aSbe bole] Suneche.

Bangla is mostly SOV…

KriSno hEmleT poRlo.
Krishna Hamlet read
‘Krishna read Hamlet’
Embedded clauses

Taro thinks [that natto is tasty]   (complementizer)

Taroo-kun-wa [nattoo-ga oisii to] omou.   (Japanese)

CheleTa Suneche [je or baba aSbe]    (Bangla)
the.boy heard    that his father will.come

CheleTa [or baba aSbe bole] Suneche.

Bangla is mostly SOV…

very common for embedded clauses

KriSno hEmleT poRlo.    to be ‘on the edge’
Krishna Hamlet  read    of the main clause.
‘Krishna read Hamlet’