Outline

   - Adverbs in French and English
   - Negation in French and English
   - Auxiliaries, Adverbs, and Negation
   - Summary of Data
   - Verb-Movement

2. V-initial Languages: Verb Phrase Internal Subject Hypothesis.
   - Irish
   - VP-internal Subject Hypothesis
   - Evidence from English: Quantifier stranding
   - Evidence from English: Small clauses
English vs. French: V-to-T movement.
Position of adverbs

(1)  
   a. Sally *often* speaks French.
   b. Sally speaks French *often*.
   c. *Sally speaks *often* French.

• Are these positions for adverbs predicted by the grammar?
Position of adverbs

English vs. French

Now let’s compare English with French:

(2) English
   a. Sally often speaks French.  S-Adv-V-O

(3) French
   a. Sally parle souvent Français.  S-V-Adv-O
      ‘Sally often speaks French’
      Sally often speaks French
Position of negation

English vs. French

Similar pattern in French is observed with negation:

- French negation is *pas*.

(4) **French**

a. Sally ne *parle* pas Français.
   Sally *ne speaks not* French
   ‘Sally doesn’t speak French’

b. *Sally ne *pas parle* Français.
   Sally *ne not* speaks French

(5) **English**

a. Sally does *not speak* French.

b. *Sally *speaks not* French.
Remark on French negation*

**English vs. French**

- French negation consists of two parts, *ne... pas*.
- There are convincing arguments that real negation part is *pas*.
- These arguments are based on the fact the *ne* appears in sentences that are not negative:
  
  (6) Jean *ne* boit *que* de la bière.
  
  Jean *ne* drinks *que* of the beer
  
  “Jean only drinks beer.”

- *ne* can also be omitted in colloquial French:

  (7) Jean *ne* parle *pas* français.
  
  Jean *ne* speaks *pas* French
  
  ‘Jean doesn’t speak French’
French auxiliaries and adverbs

English vs. French

Now let’s compare sentences with auxiliaries and negation in French and English:

(8) English
   a. John has often eaten apples.
   b. *John has eaten often apples.

(9) French
   a. Jean a souvent mangé des pommes.
      Jean has often eaten the apples
      ‘Jean has often eaten apples.’
   b. *Jean a mangé souvent des pommes
      Jean has eaten often the apples
Now let’s compare sentences with auxiliaries and negation in French and English:

(10) English
    a. John has not eaten apples.
    b. *John has eaten not apples.

(11) French
    a. Jean n’a pas mangé des pommes.
    Jean has not eaten the apples
    ‘Jean has often eaten apples.’
    b. *Jean n’a mangé pas des pommes
    Jean has eaten not the apples
# Summary of data – Adverbs

### No Auxiliary:

<table>
<thead>
<tr>
<th>English</th>
<th>John</th>
<th>[VP often eats apples]</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>Jean</td>
<td>mange [VP souvent des pommes]</td>
</tr>
</tbody>
</table>

### With Auxiliary:

<table>
<thead>
<tr>
<th>English</th>
<th>John</th>
<th>has [VP often eaten apples]</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>Jean</td>
<td>a [VP souvent mangé des pommes]</td>
</tr>
</tbody>
</table>

- **Aux** is in T, **Adv** is at the edge of VP.
- If T is filled, **V** is in its original position.
- If T is not filled, **V** in French moves to T.
### English vs. French: V-to-T movement.

#### V-initial Languages: Verb Phrase Internal Subject Hypothesis

#### Summary of data – Negation

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Auxiliary:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>John does not</td>
<td>Jean ne-mange pas</td>
</tr>
<tr>
<td></td>
<td>[VP eat apples ]</td>
<td>[VP des pommes ]</td>
</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>With Auxiliary:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>John has not</td>
<td>Jean n’a pas</td>
</tr>
<tr>
<td></td>
<td>[VP eaten apples ]</td>
<td>[VP mangé des pommes ]</td>
</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Aux is in T, Neg is right outside of VP.
- If T is filled, V is in its original position.
- **If T is not filled, V in French moves to T: V-to-T movement!**
Verb-movement in French: No Aux
No Verb-movement in French: Aux

**English:**

```
TP
   NP
   T
   PerfP
   has
   Perf
   VP
   V'
   AdvP
   often
   V
   NP
   eaten
```

**French:**

```
TP
   NP
   T
   PerfP
   a
   Perf
   VP
   V'
   AdvP
   souvent
   V
   NP
   mangé
   des pommes
```
Verb-movement in French: No Aux

English:

```
[TP]
  [NP] John
  [T] does
  [NegP] not
  [VP] eat
  [V] apples
```

French:

```
[TP]
  [NP] Jean
  [T] ne-mange
  [NegP] pas
  [VP]⟨mange⟩
  [V] des pommes
```
No Verb-movement in French: Aux

English:

```
TP
   /   \
/     \   
NP     T'
   /     
     T
   /    
NegP
   /     
  Neg
   /    
PerfP
     /    
  Perf
     /     
  ⟨has⟩
     /     
V'     
   /     
V
   /     
NP
   /     
eaten
```

French:

```
TP
   /   \       
/     \       
NP     T'
   /     
     T
   /    
NegP
   /    
  Neg
   /   
PerfP
     /   
  Perf
     /   
  ⟨a⟩
     /   
V'     
   /     
V
   /     
NP
   /     
des pommes
```

A. Antonenko (Syntax)
English vs. French: V-to-T movement.

Pollock 1989

In English:
- Highest auxiliary moves to T.
- The main verb doesn’t move to T.

In French:
- Highest auxiliary moves to T.
- If T is empty and no Aux, the main verb moves to T.

Head Movement

- Such type of movement, where one head (V above) moves to adjoin to another head (T above) is called Head-Movement in general. This particular movement is a V-to-T movement.
- We already saw it with the movement of the top auxiliary to T.
V-initial Languages: Verb Phrase Internal Subject Hypothesis.
Verb-initial languages

Irish

(12) a. Phóg Máire an lucharachán.  
   kissed Mary the leprechaun  
   ‘Mary kissed the leprechaun.’

b. Tá Máire ag-pógáil an lucharachán.  
   is Mary ing-kiss the leprechaun  
   ‘Mary is kissing the leprechaun.’

Irish basic word order in VSO.

- It seems like we see a pattern remotely similar to French.
- Both auxiliaries and main verbs appear at the beginning of the sentence.
- They must have both raised somewhere...
Attempt #1 at Irish

Does it work?

Assume that the words below are Irish...

```
TP
  NP  T'
    Mary  T  VP
       V'  NP
         ⟨kissed⟩  leprechaun
```

Problem

That doesn’t seem to work: the subject is still the first!
Attempt #2 at Irish

Does it work?

Maybe verb moves higher, to C? That seems to work...

\[
\text{CP} \\
\text{C'} \\
\text{C} \\
\text{TP} \\
\text{NP} \\
\text{Mary} \quad \text{T'} \\
\text{T} \\
\langle \text{kissed} \rangle \\
\text{VP} \\
\text{V'} \\
\text{V} \\
\langle \text{kissed} \rangle \\
\text{NP} \\
\text{leprechaun}
\]
Does it work?

This approach predicts that if there is a complementizer, then the verb should end up after the subject.

\[
\begin{array}{c}
\text{CP} \\
\downarrow \\
\text{C'} \\
\downarrow \\
\text{C} \\
\downarrow \\
\text{TP} \\
\quad \downarrow \text{that} \\
\quad \text{NP} \\
\quad \downarrow \text{Mary} \\
\quad \text{T'} \\
\quad \text{T} \\
\quad \text{VP} \\
\quad \downarrow \text{kissed} \\
\quad \text{V'} \\
\quad \text{V} \\
\quad \text{NP} \\
\quad \text{leprechaun}
\end{array}
\]
Predictions of attempt #2 at Irish: FAIL

Does it work?

Prediction: If there is a complementizer, then the verb should end up after the subject.

(13) Is this Irish?

*Duirt mé gur Máire phóg an lucharachán.
said I that Mary kissed the leprechaun
‘I said that Mary kissed the leprechaun.’

Oh no...

(14) This is Irish:

Duirt mé phóg Máire an lucharachán.
said I that kissed Mary the leprechaun
‘I said that Mary kissed the leprechaun.’
What’s next?

What else can we do?

- We need to assume that verb/Aux in Irish raises, since the highest verbal element is in the first position in the sentence.
- It can’t raise to C, as C may be occupied, but word order remains VSO.

\[
\text{TP} \quad \text{NP} \quad \text{T'}
\]
\[
\text{Mary} \quad \text{T} \quad \text{VP}
\]
\[
\text{kissed} \quad \text{V'} \quad \text{V}
\]
\[
\langle \text{kissed} \rangle \quad \text{NP} \quad \text{leprechaun}
\]
VP-internal subject hypothesis

Subjects start in Spec,VP

- **Solution:** Subject is in Spec,VP, and stays there in Irish.
- Verb (or Aux) moves to T.

```
TP
  ↓
 T'
   ↓
 T

V'
  └── VP
     └── NP
         └── Mary
              〈kissed〉

V
  └── NP
     └── leprechaun

NP
```

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VP-internal subject hypothesis: Subjects always start in Spec,VP.

Questions:

• This seems like a big change from the previous theory.
• What do we do with English and French?
• Is there any evidence from any other language that this is possible?
Subject movement to Spec,TP

Variation

- To account for English and French, we will assume that in these languages the subject moves from Spec,VP to Spec,TP.
- In Irish, subject stays in Spec,VP.

English:

```
TP
  NP   T'
    ∅   V'  
      NP    V
        ⟨Mary⟩  kissed
```

Irish:

```
TP
  T'
  T
  VP
  NP
    V'
      NP
        ⟨kissed⟩  V
          NP
            ⟨Mary⟩  the leprechaun
```

A. Antonenko  (Syntax)
Subject movement to Spec,TP

Variation

- To account for English and French, we will assume that in these languages the subject moves from Spec,VP to Spec,TP.
- In Irish, subject stays in Spec,VP.

French:

```
TP
   /\    
  NP   T'
     /\     
    T   VP
       /\    
      NP  V'
         /\    
        NP  the leprechaun
           /\    
          ⟨Mary⟩ ⟨kissed⟩
```

$\langle$Mary$⟩$ kissed $\langle$kissed$⟩$ the leprechaun
Evidence from English: Quantifier stranding

(15) The men have all drunk whisky.

What does determiner all refer to?

Logic of the argument

- all is a quantifier, it quantifies the men;
- therefore, it must have started together with the NP the men as a constituent [all the men];
- all is right before the verb; so it must be in Spec,VP.
- If it weren’t there from the beginning, how would it end up in Spec,VP position?

Note: This quantifier stranding movement is similar to movement we saw in Japanese scrambling.
Evidence from English: Quantifier stranding

(16) The men have all drunk the whisky.

We should probably say something about the structure of all the men. We will soon — stay tuned!
Evidence from English: Small clauses

Clauses without T and C

There is a special class of clauses in English: Small Clauses:

(17) No agreement/tense

a. I saw [Sue prepare coffee].
b. I made [Sue prepare coffee].

There is of course a regular version with agreement/tense:

(18) I saw (that) Sue had prepared coffee.
Evidence from English: Small clauses

Arguments for no TP/CP

(19) **Infinitival** to (T) is impossible:
    a. *I saw [Sue to prepare coffee].
    b. *I made [Sue to prepare coffee].

(20) **Complementizers** (C) are impossible:
    a. *I saw [that Sue (to) prepare coffee].
    b. *I made [for Sue (to) prepare coffee].

So in the examples above, **Sue prepare coffee** is just a VP (bare VP), so the subject **Sue** must be a part of it.
Small clauses with AP and PP

Small clauses are not limited to bare VPs. One can have bare APs and bare PPs:

(21) I consider \([_{\text{AP}} \text{John} \text{very} \text{stupid}]\].

(22) I want \([_{\text{PP}} \text{Sally} \text{in} \text{the} \text{play}]\].

Subjects of such APs and PPs also start in their respective specifiers:

\[
\begin{align*}
\text{AP} & \quad \quad \text{PP} \\
\text{NP} & \quad \quad \text{NP} \\
\quad \quad \text{A'} & \quad \quad \text{P'} \\
\text{John} & \quad \quad \text{Sally} \\
\quad \quad \text{AdvP} & \quad \quad \text{P} \\
\text{very} & \quad \quad \text{in} \\
\text{stupid} & \quad \quad \text{the} \text{play}
\end{align*}
\]
Specifiers

- Phrases appear to contain a position for a non-modifier sister to a bar level, which is sometimes filled by movement, and sometimes “just there.”
- This position is generally unique (i.e. a phrase does not have more than one) and is always higher than all adjuncts/modifiers (i.e. a daughter of the maximal projection, or the phrase).
- This position is called a specifier.


**Summary of findings**

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>Irish</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>auxiliaries move to T?</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>main verbs move to T?</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>subject moves to Spec,TP?</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Specifier**

And we finally have some evidence and some use for the Specifier of the VP (and even AP and PP)!