Split intransitivity, thematic roles and functional heads

James Baker, University of Cambridge
Manchester Forum in Linguistics,
6th November 2015
1. Introduction
Split intransitivity

- **Split intransitivity**: phenomena whereby intransitive verbs divide into different classes which behave differently in regard to different constructions.

- Most famously Perlmutter’s (1978) **Unaccusative Hypothesis**: two classes of intransitives.
Split intransitivity

- Unergatives:

\[
\text{vP} \quad \text{v} \quad \text{VP}
\]

\[
\text{DP} \quad \text{v} \quad \text{VP}
\]

\[
\text{Lucy} \quad \text{v} \quad \text{works}
\]
Split intransitivity

Unaccusatives:

\[
\begin{array}{c}
vP \\
\uparrow \\
v \quad VP \\
\quad \quad V \quad DP \\
\quad \quad arrives \quad Lucy
\end{array}
\]
Split intransitivity

- Various **unaccusativity diagnostics** in the literature purport to show whether an intransitive verb belongs to one class or the other.
- Here I argue these diagnostics actually pick out *multiple* classes (section 2).
- I relate this to a theory of thematic roles and functional heads (section 3).
Split intransitivity


Online at [www.seven-fifty.net/linguistics](http://www.seven-fifty.net/linguistics).
2. Unaccusativity diagnostics in English
Unaccusativity diagnostics in English

- Around a dozen unaccusativity diagnostics in the literature for English:
  - Locative inversion, *there*-insertion
  - *V one’s way into, V away*, cognate objects, *-er, out-*
  - resultatives, causatives, prenominal past participles, *for hours*
Two illusory “diagnostics”

- Locative inversion: *Into the room arrived a man.*
- *there*-insertion: *There arrived a man.*
  - But as likely to be accepted with prototypical unergatives: *In the room worked a man; There worked a man*
  - No consistent semantic basis
  - Cf. Levin & Rappaport Hovav (1995: ch. 9)
Process diagnostics

- V one’s way into (Marantz 1992)
- V away (Keyser and Roeper 1984)
- cognate objects (Massam 1990)
- agentive suffix -er (Burzio 1981)
- out-prefixation (Keyser and Roeper 1984)
Process diagnostics

- V one’s way into, V away, cognate objects, -er, out-
- Identify primarily verbs from Sorace’s (2000) “process” class:
  - talk, play, work
  - swim, run, walk
  - tremble, cough, skid?
for hours

- Restricted to atelic verbs
- Some inherently telic verbs however very restricted in allowing it
- Telicity has often been connected to unaccusativity (e.g. Zaenen 1988)
  - for hours :: proposed as a diagnostic by Schloorlemmer (2004)
for hours

- OK with most intransitives:
  - Lucy worked/ran/coughed/stayed for hours
  - The chocolate melted for hours
- Not OK with a subset of change of state/change of location verbs:
  - *Lucy arrived/died/came for hours
  - ?Lucy fell for hours
  - *The window broke for hours
Resultatives and the causative alternation

- **Resultative construction** another purported diagnostic (see Levin & Rappaport Hovav, ch. 2)

- Possible with most but not all change of state verbs:
  - The lake froze solid, The kettle boiled dry
  - *Lucy died dead

- Doesn’t occur with other intransitive verbs
Resultatives and the causative alternation

- Another diagnostic: the **causative alternation** (Perlmutter 1978)
- Occurs with a very similar set of intransitives to those which allow resultatives
  - *Lucy froze the lollipops / The lollipops froze*
  - *Lucy boiled the water / The water boiled*
- Out with other intransitives
Resultatives and the causative alternation

Following Levin & Rappaport Hovav (1995) and Ramchand (2008) these verbs can be characterised as:

- expressing a **change of state** (not a process, state, or change of location); and
- lacking an **initiator**.
Prenominal past participles

- Levin and Rappaport (1986)
- OK with a subset of change of state/change of location verbs:
  - *the melted chocolate, the broken window*
  - *fallen leaves, the recently arrived recruits*
- Not OK with most other verbs:
  - *the played man, *the swam man, *the coughed man, *the stayed man*
  - *the died man, *the come man*
Summary

- V away etc.: process verbs (especially controlled processes)
- for hours: all except inherently telic change verbs
- Resultatives/causatives: non-initiated change of state verbs
- Prenominal past participles: a (different) subset of change of state/location verbs
Unaccusativity diagnostics in English

- Intransitives do not fall neatly into just two categories!
- “Unaccusatives” particularly fall into various groups – traditional analysis does not capture this
- Diagnostics pick out distinct but (more-or-less) semantically well-defined groups
  - Traditional analysis makes no strong semantic predictions
Unaccusativity diagnostics in English

❖ What about stative verbs?
  ❖ *be, sit, persist, remain* ...
  ❖ Diagnostics don’t clearly place them in either of the traditional categories

❖ All this suggests a need for a more fine-grained analysis ...
Cross-linguistic parallels

- A similar set of features ([±control], [±state] [±change], ([±process]), [±telic]) also play a role in auxiliary selection in Western European languages (Sorace 2000).
Cross-linguistic parallels

- Some languages have a *case split* in intransitives (split-S languages)
- Similar set of features at play, e.g.:
  - [±control]: Eastern Pomo, Tibetan ...
  - [±initiation]: Lakhota ...
  - [±state]: Guaraní ...
  - [±state], [±change]: Chol, (Basque)
  - [±telic] + others: Nepali, Georgian

(references available on request)
3. Split intransitivity and the thematic functional hierarchy
The thematic functional hierarchy

The thematic functional hierarchy

- Split intransitive behaviours arise through sensitivity of different constructions to different heads, e.g.
  - Prenominal past participle suffix -en/-ed selects [+change] ChangeP
  - -er, out- select [+control, –state, –change] ControlP
  - Causative alternation operates on [–initiation, +change] verbs
The thematic functional hierarchy

- These heads are also *thematic role assigners* (after Ramchand 2008)
- Roles assigned to arguments merged in their specifiers
- E.g. DP in [+control] Spec,ControlP bears Θ-CONTROL
  DP in [+state] Spec,StateP bears Θ-STATE
  etc.
The thematic functional hierarchy

- Arguments can bear multiple roles (through movement)
- E.g. Lucy worked:
  
  *Lucy* is Θ-CONTROL+Θ-INITIATION

- The window broke:
  
  *the window* is Θ-CHANGE+Θ-TELIC
The thematic functional hierarchy

- The same roles can be used in describing transitive clauses, e.g.

Lucy ate the cake.

Θ-CONTROL  Θ-CHANGE
Θ-INITIATION
The thematic functional hierarchy

- The same roles can be used in describing transitive clauses, e.g.

\[ \text{Dogs frighten Chris.} \]
\[ \Theta\text{-INIT} \quad \Theta\text{-STATE} \]

etc.
Why a hierarchy?

- *Cross-linguistic evidence* from e.g. variation in auxiliary selection (Sorace 2000)
- *Diachronic evidence* ...
- Distinction in transitives between typical subject properties (control, initiation) and object properties (state/change, boundedness).
- Cf. cartography generally.
Diachronic evidence

- General trend in Romance to associate auxiliary BE with fewer categories, moving down the hierarchy (see Sorace 1993, Legendre 2007).
- Similar evidence from history of English (Baker 2015).
4. Conclusion
Conclusions

- Split intransitivity diagnostics identify more than just the two classes traditionally assumed.
- This behaviour can be related to a hierarchy of functional heads.
  - The insight that split intransitive behaviours relate to different structural positions of arguments is retained.
  - These heads can be associated with thematic roles more generally.
Thank you


