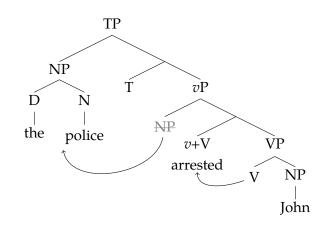
# More subjects

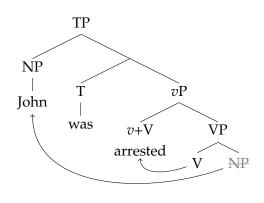
**Last week:** 5 properties of subjects and 3 arguments for the VP-internal subject hypothesis. **Key concepts to review:** Hierarchy of projections, UTAH, EPP

#### **Review**

#### Active transitive:



#### Passive:



#### Intransitive verbs

Transitive verbs generally have an agent (specifier of vP) which becomes the subject (specifier of TP) and a theme object (complement of V). Intransitive verbs only have one argument.

#### (1) The Unaccusative Hypothesis (Perlmutter, 1978):

There are two kinds of intransitive verbs:

- <u>unergative</u>: agentive subject, subject is originally the specifier of vP.
   "willed or volitional acts; certain involuntary bodily processes"
- <u>unaccusative:</u> non-agentive subject, subject is originally the complement of V. "predicates whose [arg] is a patient; predicates of existing and happening;" etc.

**The idea:** Subjects of some intransitive verbs behave like subjects of transitive verbs, while subjects of other intransitive verbs behave like objects of transitive verbs.

## 7 arguments for the Unaccusative Hypothesis:1

#### 1. Causative alternation (Levin and Rappaport Hovav, 1995):

English has pairs of intransitive and transitive verbs which are the same word, where the subject of the intransitive corresponds to the object of the transitive.

- (2) a. The window broke/opened.
  - b. She broke/opened the window.
- (3) a. The ship sank.
  - b. They sank the ship.
- (4) a. The ice melted.
  - b. We melted the ice.

These intransitives are all <u>unaccusative</u> verbs.

There are also intransitive verbs which do not have matching causative transitive verbs.

- (5) a. The crowd laughed/giggled.
  - b. \* The comedian/joke laughed/giggled the crowd.
- (6) a. The children played/spoke.
  - b. \* The teacher played/spoke the children.

These intransitives are all unergative verbs.

Yaqui/Hiaki (Uto-Aztecan, spoken in Arizona and northern Sonora; Jelinek, 1998) has different suffixes for transitive (-(t)a) and intransitive verbs (-(t)e). There are many transitive/intransitive verb pairs:

(7)	<u>Transitive</u>		Unergative	
	chep-ta	step on	chep-te	jump
	noi-ta	take/bring	noi-te	go/come

The subjects of these intransitives correspond to the <u>agent</u> of their corresponding transitives.

(8) Transitive Unaccusative

vee-ta burn... vee-te burn

kot-ta break... kot-te break

sip-a cool... sip-e become cool

The subjects of these intransitives correspond to the <u>theme</u> of their corresponding transitives.

<sup>&</sup>lt;sup>1</sup>This collection of arguments in part from Jason Merchant's notes.

#### 2. Postverbal subjects:

In some SVO languages, the EPP is not as strict, allowing (some) subjects to be postverbal.

First, Hebrew indefinite subjects (Shlonsky, 1987); data from Reinhart and Siloni 2005:

#### (9) Subject of passive:

Ne'ecru shlosha xayalim ba-hafgana. were.arrested three soldiers in-the.demonstration 'Three soldiers were arrested at the demonstration.'

## (10) Subject of unaccusative:

Hit'alfu shlosha xayalim ba-hafgana. fainted three soldiers in-the.demonstration 'Three soldiers fainted at the demonstration.'

## (11) Subject of unergative:

\* Radku shlosha yeladim ba-mesiba. danced three boys in-the.party Intended: 'Three boys danced at the party.'

We observe the same in Mandarin. Data below is from Li and Thompson 1981: 517–518; Travis (1984: 99) observes that the verbs in (12) are unaccusatives.

#### (12) Unaccusatives:

- a. Jîn-lái-le / chū-lái-le / lái-le yī-ge kèrén. enter-come-perf / exit-come-perf / come-perf one-cl guest 'A guest entered/came out/came.'
- b. Táo-le sān-zhī yáng. escape-perf three-cl sheep 'Three sheep escaped.'
- c. Dào-le yī-pí huò. arrive-perf one-cl merchandise 'A shipment of merchandise arrived.'

#### (13) Unergatives:

- a. \* Tiào-le yī-zhī xīshuài. jump-perf one-cl cricket
- b. \* Pá-le yī-tóu lǎohǔ. climb-perf one-cl tiger
- c. \* Fēi-le yī-zhī niǎo. fly-perf one-cl bird

#### 3. Adjectival participles:

English adjectival past participles can only describe objects of transitive verbs and subjects of unaccusative verbs (Levin and Rappaport Hovav, 1986):

- (14) Objects of transitives: unemployed man, uneaten food
- (15) Subjects of transitives: \*uneaten children (intended: children who have not eaten)
- (16) <u>Subjects of unaccusatives:</u> unfallen leaves, unsunken ship
- (17) Subjects of unergatives: \*unworked man, \*unrun jogger

*Un*- is used here to ensure that the forms have become adjectives.

Similarly for Japanese -*kake* participles (Kishimoto, 1996). Aspectual suffix -*kake*  $\approx$  'just started, not complete':

#### (18) Objects of transitives:

- a. nomi-kake-no biiru drink-kake-gen beer 'the half-drunk beer'
- b. yomi-kake-no zasshi read-kake-gen magazine 'the half-read magazine'

## (19) Subjects of transitives:

a. \* yomi-kake-no Masao read-каке-gen Masao Intended: 'Masao, who has only partially read'

#### (20) Subjects of unaccusatives:

- a. kare-kake-no hana wither-kake-gen flower 'a flower that is almost completely withered'
- b. obore-kake-no suiei-senshu drown-kake-gen swimming-athlete 'a swimmer who has almost drowned / is drowning'

#### (21) Subjects of unergatives:

- a. \* hataraki-kake-no roodoosha work-каке-gen worker 'the worker, who has only partially worked'
- b. \* hashiri-kake-no rannaa run-kake-gen runner 'the runner, who has only partially run'

#### 4. Resultatives (Levin and Rappaport Hovav, 1995):

<u>Direct object restriction</u>: A "resultative phrase" may describe the result state of a VP-internal NP, but not of the agent or of PP complements.

(22) He shot them *dead*.

(*They* end up dead, not *him*.)

- (23) The floor was swept clean.
- (24) The river froze *solid*. / The bottle broke *open*.
- (25) They laughed \*(themselves) helpless.

## 5. **Italian** *ne*-cliticization (Burzio, 1986): (also, French *en*)

*Ne* is a clitic meaning 'of them,' which attaches to the verb.

(26) Object of transitive:

(28) <u>Subject of unaccusative:</u>

Giovanni ne inviterà due. Giovanni ne will.invite two

'Giovanni will invite two of them.'

(29)

Ne arrivano molti.

Ne arrive many

'Many of them arrive.'

- (27) Subject of transitive:
  - \* Ne esamineranno il caso molti. NE will.examine the case many
  - Int.: 'Many of them will examine the case.'
- \* Ne telefonano molti.

NE call many
Int.: 'Many of them call.'

Subject of unergative:

#### 6. Japanese floated numerals (Miyagawa, 1989):

(30) Object of transitive:

Gakusei-ga <u>hon-o</u> [VP hon-ya-de yon-satu kat-ta. students-nom book-acc book-store-at 4-cl(book) buy-past 'The students bought four books at the book store.'

- (31) Subject of transitive:
  - ?\* <u>Gakusei-ga</u> hon-o [VP hon-ya-de yo-nin kat-ta. students-Noм book-acc book-store-at 4-cl(person) buy-разт 'Four students bought books at the book store.'
- (32) Subject of unaccusative:

<u>Gakusei-ga</u> (san-nin) [<sub>VP</sub> ofisu-ni (san-nin) ki-ta. student-noм (three-cl) office-Loc (three-cl) come-раsт 'Three students came to the office.'

(33) Subject of unergative:

 $\underline{Gakusei-ga}$  (san-nin) [VP geragera-to (\*san-nin) wara-tta. student-nom (three-cl) loudly (three-cl) laugh-раst 'Three students laughed loudly.'

#### 7. Impersonal passives:

Some languages allow passivization of intransitive verbs, with an expletive subject.

First, Dutch (Perlmutter, 1978):

## (34) <u>Unergative 'dance':</u>

- a. De jonge lui dansten hier veel. the young people danced here a.lot
- b. Er wordt hier door de jonge lui veel gedanst. there is here by the young people much danced ≈ 'There is a lot of dancing here by young people.'
  literally: 'There is danced here a lot by young people.'

#### (35) Unaccusative 'die':

- a. In dit ziekenhuis sterven de patienten dikwijls. In this hospital die the patients often
- b. \*Er wordt in dit ziekenhuis door de patienten dikwijls gestorven. there is in this hospital by the patients often died

In Yaqui/Hiaki (Jelinek, 1998), some intransitive verbs can be passivized with the passive morpheme -wa, just like transitives: (Note: -wa can trigger raising of the preceding vowel.)

## (36) <u>Transitive 'kill':</u>

- a. 'ume 'o'ow-im 'uka maaso-ta me'-a-k the.pl man-pl the.acc deer-acc kill-tr-perf 'The men killed the deer.'
- b. 'u maaso me'-a-wa-k the deer kill-tr-pass-perf 'The deer was killed.'

#### (37) Unergative 'dance':

- a. 'ume 'o'ow-im pahko-po ye'-e-ka the.pl man-pl ceremony-at dance-intr-perf 'The men danced at the ceremony.'
- b. pahko-po yi'-i-wa-k ceremony-at dance-INTR-PASS-PERF'People danced at the ceremony.'roughly literally: 'It was danced at the ceremony.'

## (38) Unaccusative 'burn':

a. 'u kari vee-te b. \*vee-ti-wa
DET house burn-INTR burn-INTR-PASS

'The house is burning.' Int.: 'There's something burning.'

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