What is case?

**Nominative/accusative languages**

- Many languages mark nouns or noun phrases with morphology that indicates their grammatical function in the clause (subject, object, etc.).

- The various forms that nouns (or NPs) take in such languages are called *cases*.
  
  **nominative**: subject of a finite (= not infinitival) clause ...

  **accusative**: direct object ...

  **genitive**: possessor, other syntactic dependents of N ...

  **dative**: recipient (indirect object), experiencer...

  *and others*
Nominative-Accusative case systems

Russian:

Ol'g-a dala [knig-u Maš-i] devušk-e.
Olga-NOM gave book.ACC Masha-GEN girl-DAT
subject direct object possessor indirect object

'Olga gave Masha's book to the girl.'
Nominative-Accusative case systems

Latin:

a. Caesar omnes druides in Galliā interfecit.
   Caesar.NOM all.ACC druids.ACC in Gaul.ABL killed
   'Caesar killed all the Druids in Gaul.'

b. Caesarem Romam redire populus voluit.
   Caesar.ACC Rome-to return people.NOM wanted
   'The people wanted Caesar to return to Rome.'

c. Senatus Caesarī provinciam dedit.
   senate.NOM Caesar.DAT province.ACC gave
   'The senate gave a/the province to Caesar.'

d. Legionēs Caesaris multas gentes subegerunt.
   legions.NOM Caesar.GEN many.ACC peoples.ACC subjugated
   'Caesar’s legions subjugated many peoples.'
Nominative-Accusative case systems

Finnish:

a. Kirja on pöydällä.
   book.NOM is table.ADESSIVE
   'The book is on the table.'

b. Pekka osti jonkin kirjan.
   Pekka bought some.ACC book.ACC
   'Pekka bought a book.'

c. Todennäköisesti hän etsi sitä kampaa.
   probably (s)he.NOM looked-for that.PART comb.PART
   'It was pretty clear that (s)he was looking for that comb.'

d. Hänellä on vihreät silmät.
   (s)he.ADESSIVE is green.NOM.pl eye.NOM.pl
   ‘(S)he has green eyes.’
Ergative-absolutive case systems

**absolutive:** direct object if the clause contains one, otherwise subject

**ergative:** subject of a clause that also contains an absolutive object

**Basque:**

a. Mari joan da.
   Mary.ABS left has
   'Mary left.'

b. Marik liburua erosi du.
   Mary.ERG book-the.ABS bought has
   'Mary bought the book.'

c. Nik diot Mariri trikota ez eman.
   I.ERG have Mary.DAT sweater-the.ABS not given
   'I did not give the sweater to Mary.'
Ergative-absolutive case systems

**absolutive:** direct object if the clause contains one, otherwise subject

**ergative:** subject of a clause that also contains an absolutive object

**Dyirbal (NE Australia, Pama-Nyungan):**

a. Bayi yara baninu.
   DEIC-I.ABS man.ABS coming
   'The man is coming.'

b. Bayi yara bangun dugumbiru balgan.
   DEIC-I.ABS man.ABS DEIC-II.ERG woman.ERG hitting
   'The woman is hitting the man.'
Ergative-absolutive case systems

Split ergative systems

Tense splits: past tense ERG/ABS, present tense NOM/ACC

Aspect splits: perfective ERG/ABS, imperfective NOM/ACC

Agreement splits: case ERG/ABS, verbal agreement NOM/ACC
(never the reverse!)

Person split: 3rd person ERG/ABS, [+participant] NOM/ACC

and more!
Ergative-absolutive case systems

In this class: we now return (permanently, alas) to NOM/ACC systems
Environments of Accusative case

- In languages like Russian, Latin, Japanese, and many others, \textit{accusative} case is found on the complements of V \textit{and some instances of P} — but not on the complements of N and A.

- A complement of N and A either bears a case such as genitive or else is a PP.
Environments of Accusative case

**Russian:**

(1) Complement to V (accusative)  
[VP čitaet knigu]  
reads book-ACC

(2) Complement to P (accusative)  
[PP v Moskvu]  
to Moscow-ACC
Environments of Accusative case

(3) **Complement to N** (*accusative*)
   a. \([NP \text{ kritika knigi}]\)    
      criticism book-GEN
   b. *[NP kritika knigu]*
      criticism book-ACC
   C. \([NP ljubov' [pp k muzyke]]\)    
      love to music-DAT
   d. *[NP ljubov' muzyku]*
      love music-ACC

(4) **Complement to A** (*accusative*)
   a. \([AP dovolen obedom]\)    
      satisfied dinner-INSTR
   b. *[AP dovolen obed]*
      satisfied dinner-ACC
   c. \([AP serdit [pp na menja]]\)    
      angry on me-ACC
   d. *[AP serdit menja]*
      angry me-ACC
Environments of Accusative case

Rules for accusative case in Russian (and similar languages)
a. V and P may assign accusative case to an NP complement.
b. N and A do not assign accusative case.

(simplified!)
Environments of Accusative case

**English:**

At first glance, case does not appear to be a part of English grammar.

(though ask me about *I vs. me, we vs. us*)
Environments of Accusative case

Rules for accusative case in Russian (and similar languages)

a. V and P may assign accusative case to an NP complement.
b. N and A do not assign accusative case.

Facts about the availability of NP complements in English

a. V and P allow an NP complement.
b. N and A do not allow an NP complement.
Environments of Accusative case

**English:**

(1) **Complement to V (NP)**
   \[VP \text{ reads the book}\]

(2) **Complement to P (NP)**
   \[PP \text{ to the city}\]

(3) **Complement to N**
   a. \[NP \text{ the criticism of the book}\]
   b. *\[NP \text{ the criticism the book}\]
   c. \[NP \text{ our love [PP of music]}\]
   d. *\[NP \text{ our love music}\]

(4) **Complement to A**
   a. \[AP \text{ satisfied with dinner}\]
   b. *\[AP \text{ satisfied dinner}\]
   c. \[AP \text{ fond [PP of the child]}\]
   d. *\[AP \text{ fond the child}\]
Environments of Accusative case

**Russian:**

(1) **Complement to V (accusative)**
   
   \[ VP \text{ čitaet knigu} \]
   
   reads book-ACC

(2) **Complement to P (accusative)**

   \[ PP \text{ v Moskvu} \]
   
   to Moscow-ACC
Environments of Accusative case

(3) Complement to N (*accusative)
   a. [NP kritika knigi]  
      criticism book-GEN  
   b. *[NP kritika knigu]
      criticism book-ACC  
   c. [NP ljubov' [PP k muzyke]]
      love to music-DAT  
   d. *[NP ljubov' muzyku]
      love music-ACC

(4) Complement to A (*accusative)
   a. [AP dovolen obedom]
      satisfied dinner-INSTR  
   b. *[AP dovolen obed]
      satisfied dinner-ACC  
   c. [AP serdit [PP na menja]]
      angry on me  
   d. *[AP serdit menja]
      angry me-ACC
Environments of Accusative case

Generalization:

• Where Russian allows an accusative NP as a complement, English allows an NP.

• Where Russian does not allow an accusative NP — but might allow an NP with some other case — English simply does not allow an NP.
Environments of Accusative case

- In Russian, the following fact is obvious on the face of it, since any NP that can show case morphology must show case morphology:

**Case Filter for Russian**

*\([NP – case]\)*
Environments of Accusative case

• In Russian, the following fact is obvious on the face of it, since any NP that can show case morphology must show case morphology:

  **Case Filter for Russian**
  *[NP –case]*

• Suppose the Case Filter is also true of English...

• and suppose the distribution of accusative case is governed by the same rules that govern it in Russian.

  **Rules for accusative case in Russian**
  a. V and P may assign accusative case to an NP complement.
  b. N and A do not assign accusative case.
Environments of Accusative case

Case Filter for Russian & English

* [NP –case]

Rules for accusative case in Russian & English
a. V and P may assign accusative case to an NP complement.
b. N and A do not assign accusative case.

Differences between English and Russian
a. Case morphology in English is phonologically zero.
b. English has rules assigning accusative case, but lacks genitive, dative, instrumental, etc.
Environments of Accusative case

The fact that English lacks such cases as genitive, dative, and instrumental, means the complement to N and A simply *may not be an NP*.

This is why what looks like a restriction on accusative case in Russian looks like a restriction on the *very existence of an NP* in English.

**Case Filter for Russian & English**

*[^NP –case]*

**Rules for accusative case in Russian & English**

a. V and P may assign accusative case to an NP complement.
b. N and A do not assign accusative case.

**Differences between English and Russian**

a. Case morphology in English is phonologically zero.
b. English has rules assigning accusative case, but lacks genitive, dative, instrumental, etc.
Environments of Accusative case

Is the idea of phonologically null case-marking absurd?
Environments of Accusative case

Is the idea of phonologically null case-marking absurd?

No.
Environments of Accusative case

**Indeclinable Russian kangaroos**

a. \([VP \ v \text{idit kenguru}]\)  
   sees kangaroo-ACC

b. \([PP v \text{ kenguru}]\)  
   into kangaroo-ACC

c. \([NP kritika kenguru]\)  
   criticism kangaroo-GEN
   'criticism of the kangaroo'

d. \([NP ljubov' [PP k kenguru]]\)  
   love to kangaroo
   'love for a kangaroo'

e. \([AP dovolen kenguru]\)  
   satisfied kangaroo-INSTR
   'satisfied with the kangaroo'

f. \([AP serdit [PP na kenguru]]\)  
   angry at kangaroo
   'angry at a kangaroo'
Environments of Accusative case

The indeclinable noun heads an NP that does bear case:

a. [VP vidit mo-ego kenguru]
   sees my-ACC kangaroo-ACC

b. [NP kritika èt-o go kenguru]
   criticism this-GEN kangaroo-GEN

c. [AP dovolen krasiv-ym kenguru]
   satisfied beautiful-INSTR kangaroo-INSTR

Declinable elements that agree with the head noun in case show the expected case suffix even when the head noun itself is indeclinable.
Кенгуру

Материал из Википедии — свободной энциклопедии

У этого термина существуют и другие значения, см. Кенгуру (значения).

Кенгуру (лат. *Macropus*) — общепринятое название группы животных из отряда двуручных сумчатых млекопитающих. В широком смысле термин кенгуру относится ко всем представителям семейства кенгуровых. В узком смысле это название применяется по отношению к наиболее крупным представителям этого семейства, тогда как более мелкие называются **валлару** и **валлаби**. Кенгуру живут от 8 до 16 лет [источник не указан 431 день].

**Содержание** [убрать]
1. Происхождение названия
2. Телосложение
3. Кенгуру и человек
4. Кенгуру как символ Австралии
5. Примечания
6. Литература

Происхождение названия [править | править вики-текст]

Слово «кенгуру» происходит от «kangaroo» или «ganggurru» — названия этого животного на кунгу-йимитирском языке аборигенов Австралии (язык пама-ньунгской семьи), услышанного Джеймсом Куком от аборигенов во время его высадки на северо-восточном берегу Австралии в 1770 году[1].

Широко распространялся миф, в соответствии с которым Джеймс Кук,
Environments of Accusative case

The Adjacency Condition on Accusative Case Assignment

We are developing a picture of a part of syntax called Case Theory. Case Theory distinguishes among the syntactic categories in two ways:

1. It distinguishes between *accusative case assigners* (V, P) and categories that do not assign accusative case (N, A).

2. It distinguishes between NP, *which needs case by the Case Filter*, and other categories such as PP and CP, *which do not need case*.

Let us focus on distinction 2. The distinction between NP complements and PP and CP complements is visible in the morphology of languages like Russian. *In Russian, nouns bear case morphology, but prepositions and complementizers do not.*
Environments of Accusative case

• Interestingly, the distinction shows up in English as well. Consider verbs like put and persuade that take more than one complement.

When one of these complements is an NP, it is always the one that is next to the verb:

(1) a. Sue put the book under the desk. \(\text{(ok V NP PP)}\)
   b. *Sue put under the desk the book. \(\text{(* V PP NP)}\)

(2) a. Bill persuaded his friends that the world is flat. \(\text{(ok V NP CP)}\)
   b. *Bill persuaded that the world is flat his friends. \(\text{(* V CP NP)}\)
Environments of Accusative case

• For verbs that take a PP and a CP complement, or two PPs, there may be a slight preference for one order of complements over another, but it is nothing like the strong effect seen in Error! Reference source not found.) and Error! Reference source not found.).

(1)a. Sue spoke to Tom about Bill. (ok V PP PP)
    b. Sue spoke about Bill to Tom.

(2)a. Sue shouted to her friends that it was snowing. (ok V PP CP)
    b. ?Sue shouted that it was snowing to her friends. (ok V CP PP)

• The ordering effect also disappears in NP, where the complement that would be accusative in VP is replaced by a PP.

(3)a. the placement of the book under the desk (ok N PP PP)
    b. the placement under the desk of the book
Environments of Accusative case

(4)a. her promise to her friends that she would leave
    b. ?her promise that she would leave early to her friends
Environments of Accusative case

**Accusative case assignment (version 1)**

$\alpha$ assigns accusative case to $\beta$ only if:

i. $\alpha$ is V or P (but not N or A);

ii. $\beta$ is the complement of $\alpha$; and

iii. $\alpha$ and $\beta$ are adjacent.

(ask me about French)

(ask me about English topicalization or $wh$-movement)
Environments of Accusative case

The glory of this proposal:

We do not need to suppose that any special rules besides the laws of Case Theory dictate the relative ordering of complements.

We do not need to build this into subcategorization frames or stipulations about Merge, for example.
Nominative Case assignment
T assigns nominative case to its specifier.
Nominative Case assignment

Finite T assigns nominative case to its specifier.

a. I am happy [that Mary left the room].
b. *I am happy [ø Mary to leave the room].
Nominative  Case assignment
Finite T assigns nominative case to its specifier.

a. I am happy [that Mary left the room].
b. *I am happy [ø Mary to leave the room].

but what about:

c. I would be happy [for Mary to leave the room].
Draw some conclusions:

a. Sue thinks [that soon the class will have a party].
b. I am happy [that soon the class will have a party].

c. Sue arranged [for (*soon) the class to have a party].
d. I would be happy [for (*soon) the class to have a party].
Accusative case assignment (version 2)
α assigns accusative case to β only if:
i. α is V or P or the complementizer *for* (not N or A);
ii. α c-commands β with no CP barrier intervening; and
iii. α and β are adjacent.

*if complementizer for has prepositional features, we can simplify this:*

Accusative case assignment (version 2’)
α assigns accusative case to β only if:
i. α is V or P (not N or A);
ii. α c-commands β with no CP barrier intervening; and
iii. α and β are adjacent.
"Exceptional case marking" (ECM) verbs

a. Tom believed [Mary to have left the room].

b. Sue considers [Jill to be the best candidate for the job].

What is case-marking *Mary* and *Jill*?
Case assignment across a clause boundary

"Exceptional case marking" verbs

a. Tom believed [Mary to have left the room].

b. Sue considers [Jill to be the best candidate for the job].

What is case-marking *Mary and Jill*?

c. Tom believed [that recently Mary had left the room].

d. *Tom believed [recently Mary to have left the room].
Case assignment across a clause boundary

"Exceptional case marking" verbs

a. Tom believed [Mary to have left the room].

b. Sue considers [Jill to be the best candidate for the job].

What is case-marking *Mary* and *Jill*?

c. Tom believed [that recently Mary had left the room].

d. *Tom believed [recently Mary to have left the room].

e. Tom's belief [that Mary left the room] ...

f. *Tom's belief [Mary to have left the room]...
Case assignment across a clause boundary

Accusative case assignment (version 2')

\(\alpha\) assigns accusative case to \(\beta\) only if:

i. \(\alpha\) is V or P (not N or A);

ii. \(\alpha\) c-commands \(\beta\) with no CP barrier intervening; and

iii. \(\alpha\) and \(\beta\) are adjacent.

Stipulation: A clause that is a complement to an ECM verb is not a barrier to case assignment.

(That is why such a clause is "exceptional"!)
Passive

a. The pizza was devoured by the lion.
Passive

a. The pizza was devoured (by the lion).

b. The book was put under the desk (by Tom).

c. Mary was persuaded [that the world was ending] (by her friends).
Passive

a. [The pizza] was devoured __ (by the lion).

b. [The book] was put __ [under the desk] (by Tom).

c. [Mary] was persuaded __ [that the world was ending] (by her friends).
Passive

Japanese

   car-NOM 3-cl thief-by steal-PASS-Past
   '3 cars were stolen by the thief.'

b. *Kuruma-ga* doroboo-ni *3-dai* nusum-are-ta.

   yesterday student-NOM 2-cl that man-by praise-PASS-Past
   'Yesterday, 2 students were praised by that man.'

   'Yesterday, 2 students were praised by that man.'
Passive

Japanese

car-NOM 3-cl thief-by steal-PASS-Past
'3 cars were stolen by the thief.'

Passive English idioms

(1) a. Bill let the cat out of the bag.
   b. The cat was let out of the bag (by Bill).
('let the cat out of the bag' = 'reveal the secret')

(2) a. John really took the wind out of our sails.
   b. The wind was really taken out of our sails (by John).
('take the wind out of someone's sails' = 'destroy someone's enthusiasm')

(3) a. Sue kept close tabs on the opposition.
   b. Close tabs were kept on the opposition (by Sue).
('keep close tabs on...' = 'monitor closely')

(4) a. John kept a close eye on the opposition.
   b. A close eye was kept on the opposition by (John).
('keep a close eye on ...' = 'monitor closely')

(5) a. Our programmers really dropped the ball on that one.
   b. The ball was really dropped on that one (by the programmers).
('drop the ball on X' = 'screwed up by forgetting something X-related')
Passive

The pizza was devoured by the lion.
Passive

Why does the NP complement have to move in a passive sentence, but not a PP or CP complement?

a. The pizza was devoured __ (by the lion).

b. The book was put __ [under the desk] (by Tom).

c. Mary was persuaded __ [that the world was ending] (by her friends).
Passive

Why does the NP complement have to move in a passive sentence, but not a PP or CP complement?

a. The pizza was devoured __ (by the lion).

b. The book was put __ [under the desk] (by Tom).

c. Mary was persuaded __ [that the world was ending] (by her friends).

Hypothesis about passive morphology

Passive morphology...

1. ...suppresses assignment of accusative case;
2. ...suppresses normal assignment of external semantic role (θ-role)
   (the role assigned to the subject in an active sentence)
Passive

T'
---
T

VP
---
NP
---
EXTERNAL ARGUMENT

V'
---
V
---
NP
---
INTERNAL ARGUMENT
Passive

Accusative case assignment (version 2')

α assigns accusative case to β only if:

i. α is a V in the active voice or P (not N or A);
ii. α c-commands β with no CP barrier intervening; and
iii. α and β are adjacent.

Hypothesis about passive morphology

Passive morphology...

1. suppresses assignment of accusative case;
2. suppresses normal assignment of external 0-role
Passive

• Notice also that English sentences need an overt specifier of TP.

• This requirement is sometimes called the **Extra Peripheral Position principle**, abbreviated **EPP**:

  **EPP**
  
  TP must have a specifier.

*(Note: You may meet linguists who tell you that the initials "EPP" stand for something else. If you do, report them promptly to me...)*
Passive

was (EPP not satisfied yet 😞)

V'

V

devoured

NP

the pizza (no case 😞)

P

by

NP

the lion
Passive

was (EPP not satisfied yet 😂)

V

devoured

V'

the pizza (no case 😐)

VP

PP

by

the lion 🐯
Passive

the pizza (nominative)

was (EPP satisfied)

devoured

by

the lion
Passive

Two results from passivizing a verb with a CP complement:

a. [That the world is round] was discovered __ by the ancient Greeks.
b. It was discovered by the ancient Greeks [that the world is round].

But verbs that take an NP complement have only one passive:

a. The book was put __ under the table (by Mary).
b. *It was put the book under the table (by Mary).

Why?
Passive

Two results from passivizing a verb with a CP complement:

a. [That the world is round] was discovered __ by the ancient Greeks.

b. It was discovered by the ancient Greeks [that the world is round].

   EPP satisfied by expletive it.
   CP does not need to receive case.

But verbs that take an NP complement have only one passive:

a. The book was put __ under the table (by John).

b. *It was put the book under the table (by John).

   EPP satisfied by expletive it.
   But the book does need to receive case — and remains caseless
Passive
Passive

ECM

John believed [Mary to have left the room]

Passive meets ECM

a. Mary was believed [ ___ to have left the room] (by her friends).

b. *It was believed [Mary to have left the room] (by her friends).

Why?
Passive

ECM
a. John believed [Mary to have left the room]

Passive meets ECM

b. Mary was believed [ ___ to have left the room] (by her friends).

EPP satisfied by raising Mary to Spec,TP

Mary, which needs case, is assigned NOM by finite T in the main clause.

c. *It was believed [Mary to have left the room] (by her friends).

EPP satisfied by expletive it.

Mary needs to receive case. In (a) the active form of believe assigns ACC, but in (b) the passive form does not (nor does to).
Passive

Idioms

*Recall full-sentence idioms:*

(1) a. Bill let the cat out of the bag.
   b. The cat was let out of the bag (by Bill).
   ('let the cat out of the bag' = 'reveal the secret')

(2) a. John really took the wind out of our sails.
   b. The wind was really taken out of our sails (by John).
   ('take the wind out of someone's sails' = 'destroy someone's enthusiasm')

(3) a. Sue believed [the shit to have hit the fan on Thursday].
    b. The shit was believed to have hit the fan on Thursday (by John).
    ('The shit hit the fan.' = '<Contextually salient people> got in trouble.')

(4) a. John believed [the tide to have turned].
    b. The tide was believed to have turned (by John).
Passive
Passive meets ECM meets passive

a. The pizza was believed [__ to have been devoured __].

b. The cat was believed [__ to have been let __ out of the bag].
Passive

Passive meets ECM meets passive

a. The pizza was believed [__ to have been devoured __].

b. The cat was considered [__ to have been let __ out of the bag].
Passive recall:

a. Mary was believed [ ___ to have left the room] (by her friends).

b. The shit was believed [ ___ to have hit the fan].

c. The pizza was believed [ ___ to have been devoured ___].

d. The cat was considered [ ___ to have been let ___ out of the bag].
Raising

a. Mary seems [ ___ to have left the room]

b. The shit appears [ ___ to have hit the fan].

c. The pizza is likely [ ___ to have been devoured ___].

d. The cat is certain [ ___ to have been let ___ out of the bag].
**Raising**

a. Mary seems [ ___ to have left the room].

   It seems [that Mary has left the room].

deep down:

b. The shit appears [ ___ to have hit the fan].

   It appears [that the shit has hit the fan].

deep down:

c. John is likely [ ___ to eat the meal].

   It is likely [that John will eat the meal].
Raising

a. Mary seems [ ___ to have left the room]

   It seems [that Mary has left the room].
   *It seems [ Mary to have left the room].

b. The shit appears [ ___ to have hit the fan].

   It appears [ that the shit has hit the fan].
   *It appears [ the shit to have hit the fan].

c. John is likely [ ___ to eat the meal].

   It is likely [ that John will eat the meal].
   *It is likely [ John to eat the meal].
Raising

Passive morphology
1. suppresses assignment of accusative case;
2. suppresses normal assignment of external θ-role

Raising predicates
1. no assignment of accusative case;
2. no external θ-role
3. subcategorizes for an infinitival clause (of a particular type).

In a sense, raising predicates are active predicates with passive-like properties — which happen to take an clause as complement.
Raising

In the longer version of this class...

We would spend a whole class on infinitival constructions that look like raising, but are not:

a. Mary tried to leave the room.

b. Bill promised to read the book.

c. *The shit tried to hit the fan.

d. *The cat promised to be let out of the bag.
Raising

In the longer version of this class...

We would spend time on infinitival constructions that look like raising, but are not:

a. Mary tried to leave the room.

b. Bill promised to read the book.

c. *The shit tried to hit the fan.

d. *The cat promised to be let out of the bag.

The silent subject of the infinitive in these constructions is not due to movement (most linguists think) but to the availability of a silent pronoun called PRO, which is a semantic argument of the main verb:
Raising

a. Mary tried [PRO to leave the room].

b. Bill promised [PRO to read the book].
Raising

• In Raising, a nominal subject of an infinitival complement that needs case moves to a higher Spec,TP position where it can receive the case it needs.

• A very similar analysis can explain why the external argument generated as the specifier of VP must also move to Spec,TP in English: the subject raised to receive case and satisfy EPP.

\[
\text{The lion will devour the pizza.}
\]

*\[
\text{It will the lion devour the pizza.}
\]
Unaccusativity
Unaccusativity

Recall:

Passive morphology
1. suppresses assignment of accusative case;
2. suppresses normal assignment of external θ-role

Raising predicates
1. no assignment of accusative case;
2. no external θ-role
3. subcategorizes for an infinitival clause (of a particular type).
Unaccusativity

Recall:

Passive morphology
1. suppresses assignment of accusative case;
2. suppresses normal assignment of external $\theta$-role

Raising predicates
1. no assignment of accusative case;
2. no external $\theta$-role
3. *subcategorizes for an infinitival clause (of a particular type).*

- There is no good reason for a Raising predicate with properties 1 and 2 to necessarily have property 3 as well.

- Shouldn't we also find predicates that fail to assign accusative case and fail to assign an external $\theta$-role — but subcategorize for something other than an infinitival clause complement, e.g. for an NP?
Unaccusativity

- Shouldn't we also find predicates that fail to assign accusative case and fail to assign an external θ-role — but subcategorize for something other than an infinitival clause complement, e.g. for an NP?

- An obvious candidate for such a predicate is a verb like *melt* when it takes only one argument:

  The ice will melt.

- If a patient is always an internal argument, then *the ice* in (1) must be an internal argument that moves to Spec,TP from the complement of V position.

- There is evidence that this analysis is correct, to which we turn shortly.
**Unaccusativity**

- Verbs like *melt* (or *seem*, for that matter) that take only internal arguments, and no external argument, are called *unaccusative* (a term due to David Perlmutter and Paul Postal).

```
TP
  \-----------
   T'
     \-----
      T    VP
              \-----
               V    NP
                   \-----
                    melt the ice
```
Unaccusativity

Contrast a verb like *phone* in:

Bill will phone.

*Bill* here is an agent, and therefore is plausibly an *external argument*, unlike *the ice* in *The ice melted*.

A verb that takes an external argument, but no internal argument, is called *unergative*. 
Unaccusativity

An unergative analysis of *phone* makes sense because *Bill* in should occupy the same syntactic position as it does in sentences like *Bill will phone Tom*. We could draw this position as follows:
Unaccusativity

• The non-branching V' node: for now let's just assume that V merges with itself, so the external argument is the second element that merged with V.
The real story: this is where — in a longer class — we would introduce something called "little v" that can make sense of the structures we are talking about today.

But for now forget this tree.
Unaccusativity

TP
  T'
    T
      will
    VP
      V
        melt
      NP
        the ice

TP
  T'
    T
      will
    VP
      NP
        Bill
      V'
        phone
Unaccusativity

- Why do unaccusative and unergative verbs sound alike:

"<Noun Phrase> <Tense> <Verb>"

The ice will melt. John will phone.

EPP
TP must have a specifier.

Case Filter
*[NP –case]

(5) *It will [VP John read the book] [with dummy it]
Unaccusativity

- How might a child acquiring language distinguish these verb classes, since the sentences in which they are used sound so similar?

*The Uniformity of Theta Assignment Hypothesis (UTAH)*

Identical thematic relationships between items are represented by identical structural relationships at the point at which they are first merged. (adapted from Baker 1988)

- Let me tell you about *moaking*. 
**Unaccusativity**

- How might we learn whether the unaccusative/unergative distinction is real?

- What properties might help us distinguish these classes of verbs — thereby also putting UTAH to the test?
Unaccusativity

Suppose we were to find a pair of verbs V1 and V2, that meet the following conditions:

- V1 takes both an external and an internal argument.
- V2 takes only one argument — but the $\theta$-role borne by the internal argument of V1 is the same as the $\theta$-role borne by the single argument of V2.

It would be natural to speculate under such circumstances that V2 is unaccusative: the single argument of V2 bears the same $\theta$-role as V1's internal argument because it too is an internal argument.

It becomes a subject for case and EPP reasons, which masks its underlying status as an internal argument.
Unaccusativity

(1) a. The navy sank the submarine. [patient = direct object]
   b. The submarine sank. [patient = subject — *sounds the same*]

(2) a. We closed the door.
   b. The door closed.

(3) a. The waiter dropped a glass.
   b. A glass dropped.

(4) a. We slid the soap into the closet.
   b. The soap slid into the closet.

(5) a. The stagehand raised the curtain. *(different vowel)*
   b. The curtain rose.

(6) a. You must lay the object on its side.
   b. The object must lie on its side.
Unaccusativity

(7) a. Mary will set the lamp on the table.
   b. The lamp will sit on the table.
Unaccusativity

(8) a. The mailman brought the package yesterday.  (different phonology)
    b. The package came yesterday.

(9) a. Mary brought up the topic of linguistics.  (but same idioms!)
    b. The topic of linguistics came up.

(10) a. The war brought Bill to his senses.
    b. Bill came to his senses.

(11) a. I brought Sue around to my point of view.
    b. Sue came around to my point of view.

(12) a. %After John fainted, we brought him to.
    b. John came to.
**Unaccusativity**

Syntax cares about this distinction: auxiliary selection

**Italian**

a. Giovanni è arrivato. `John arrived` (be)
b. La nave è affondata. 'The ship sank' (be)
c. Giovanni ha telefonato. `John telephoned` (have)
d. Giovanni ha letto il libro. 'John read the book' (have)

**Dutch**

a. Jan is gevallen. 'John fell' (be)
b. Jan heeft gelachen. 'John laughed' (have)
Unaccusativity

Syntax cares about this distinction: auxiliary selection

Perfective Auxiliary Selection in Old Japanese
[K. Takezawa (1989 talk; citing Yoshida 1973)]:
  a. -tsu: oki-tsu ('have placed'), tsuge-tsu ('have told'), kiki-tsu ('have listened'), chirash-tsu ('have scattered' trans.), shi-su ('have done'), etc. [normal transitives, unergatives]

  b. -nu: ki-nu ('have come'), nari-nu ('have become'), he-nu ('have passed'), sugi-nu ('have elapsed'), chiri-nu ('have fallen/scattered' intr.), etc. [unaccusatives]
Unaccusativity
Syntax cares about this distinction: auxiliary selection

Complications:
- There are languages that only use *have* (English, Spanish), and languages that use only *be* (Slovenian, BCS):

  a. Prebral sem knjigo.
     read.PSTPART BE.1SG book.ACC 'I read the book.'

  b. Zavpil sem.
     yell.PSTPART BE.1SG 'I yelled.'

  c. Padel sem.
     fell.PSTPART BE.1SG 'I fell.'

- ...but among languages that use both auxiliaries, we do not find patterns that are the reverse of Italian, Dutch, etc. — i.e. *be* with transitives/unergatives and *have* with unaccusatives.
Unaccusativity
Syntax cares about this distinction: English passive

*Recall*: Passive morphology...
1. ... suppresses assignment of accusative case;
2. ... suppresses normal assignment of external θ-role

- Can property 2 of passive morphology apply vacuously?

That is, can morphology that tinkers with a verb's external argument be added to a verb that lacks an external argument in the first place?
Unaccusativity

*Recall:* Passive morphology...

1. ... suppresses assignment of accusative case;
2. ... suppresses normal assignment of external $\theta$-role

- Can property 1 of passive morphology apply vacuously?
- The answer appears to be *no*!

1-Advancement Exclusiveness Principle

A verb of the unaccusative class may not be passivized.

(Perlmutter & Postal)
Unaccusativity

- In some languages, property 2 can apply vacuously, allowing passive morphology on unergative verbs (without direct objects). Such constructions are called 'impersonal passives'.

German  
Es wurde getanzt.  
It became danced.

Dutch  
Er wordt hier door de jonge lui veel gedanst.  
There becomes here by the young people much danced

Russian  
V gazete bylo napisano ob ètom.  
in newspaper was written about this

French  
Il a été tiré sur le bateau.  
it was shot at the boat
Unaccusativity

... but universally, no impersonal passives from unaccusatives.

✓ active / *passive of unaccusative: Dutch
  a. active of unaccusative
     De lijken zijn al gerot/ ontbonden.
     the corpses are already rotted/decomposed. PSTPART
     'The corpses have rotted/decomposed.'
  
b. attempt at a passive of unaccusative
     *Door de lijken werd al gerot/ ontbonden. PSTPAR
Unaccusativity

... but universally, no impersonal passives from unaccusatives.

Impersonal passive of ✓ unergative / *unaccusative: Dutch

a. impersonal passive of unergative
   In de zomer wordt er hier vaak gezwommen.
   in the summer becomes there here frequently swim.PSTPART
   ‘In the summer it is swum here frequently.’

b. attempt at a passive of unaccusative
   * In de zomer wordt er hier vaak verdrinken.
   in the summer becomes there here frequently drown.PSTPART
   ‘In the summer it is drowned here frequently.’
Unaccusativity

- **English** disallows passive morphology on unergatives, presumably because the case-assigning potential of V may not be vacuously suppressed.

No impersonal passives:

a. *It was swum here frequently.
b. *It was drowned here frequently.
Unaccusativity

A slightly more complicated way to see the effects of the ban on passivization of unaccusatives — even in English.

• An English verb that takes a PP complement allows a passive form in which it is the object of the preposition that moves to subject position.

• For no good reason, this construction has come to be called "pseudo-passive" — though there is nothing "pseudo" about it! Some examples:

(1) a. The table was sat on __ (by Fred).
    b. Mary has been spoken to __ (by Pete).
Unaccusativity

A slightly more complicated way to see the effects of the ban on passivization of unaccusatives — even in English.

- It appears that the P has moved to V and glued to it (a kind of head movement called "incorporation").

- *Evidence for P-to-V incorporation in pseudo-passives*: the PP may not be moved rightward — something usually possible for PPs:

(1) a. Fred sat recently on it.
   b. *It was sat recently on __ (by Fred).

(2) a. Pete spoke on Friday to her.
   b. *She was spoken on Friday to __ (by Pete).
Unaccusativity

A slightly more complicated way to see the effects of the ban on passivization of unaccusatives — even in English.

- Passive morphology on V appears to affect the V+P unit together — so that it eliminates the case-assigning potential of the P. Consequently, the object NP must move for case reasons.

- Preposition-stranding passives are like impersonal passives in languages like Dutch in that the verb is not an accusative-assigner, but thanks to V+P incorporation, passive morphology is able to attach to the verb anyway.

- Thanks to this trick, it is now relevant to compare preposition-stranding passivization of unergative verbs with comparable passivization of unaccusative verbs.
Unaccusativity

A slightly more complicated way to see the effects of the ban on passivization of unaccusatives — even in English.


a. *The package was accumulated on by dust.
b. *The room was burst in by the bubble.
c. *The dome was collapsed under by the model.
d. *The bridge was existed under by trolls.
e. *The bed was fallen on by dust.
f. *The hill was grown on by grass.
g. *The hall was increased in by the noise.
h. *The oven was melted in by the ice cube.
i. *The woods were vanished in by Little Red Riding Hood.
Unaccusativity
A slightly more complicated way to see the effects of the ban on passivization of unaccusatives — even in English.

(1) a. The table was sat on by Fred.
    b. *The table was sat on by the lamp.

(2) a. The closet was slid into by Mary.
    b. *The closet was slid into by the soap.
<table>
<thead>
<tr>
<th>Unaccusativity</th>
<th>English</th>
<th>Dutch, French, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>vacuous elimination of external argument?</td>
<td>no (universal)</td>
<td>no (universal)</td>
</tr>
<tr>
<td>vacuous elimination of accusative-assigning capability?</td>
<td>no (but pseudopassives)</td>
<td>yes</td>
</tr>
</tbody>
</table>
Unaccusativity

Prediction:
In a language in which movement of a nominative to Spec,TP is not forced (because NOM case and EPP work differently), we should see the argument NP of unaccusatives and passives remaining in direct object position.
Unaccusativity

The magic of Italy!

a. Finite T may license nominative on a DP that remains in VP.
b. EPP does not require an overt element in Spec,TP.
Unaccusativity

Subject remains in VP / V moves to T

a. Telefoneranno [VP molti studenti [v' ____ ]].
   will-phone many students
   'Many students will phone.'

b. Affondarono [VP [v' ____ molti navi ]]
   will-sink many ships
   'Many ships will sink.'
Unaccusativity
A diagnostic for direct objects in Italian

Bare quantifiers in direct object position
A bare quantifier in direct object position must cooccur with a pronoun *ne* that cliticizes to (= morphologically attaches to) the finite verb in T.
**Unaccusativity**

**Direct-object bare quantifiers require *ne***

a. Gianni inviterà molti studenti. [not a bare quantifier, ✓ no *ne*]
   Gianni will-invite many students

b. *Gianni inviterà molti. [bare quantifier, *no* *ne*]
   Gianni will-invite many.

c. Gianni *ne* inviterà molti. [bare quantifier ✓ with *ne*]
   Gianni of-them will-invite many
**Unaccusativity**

**Direct-object bare quantifiers require *ne***

a. Gianni inviterà molti studenti.  
   Gianni will-invite many students  
   [not a bare quantifier, ✓ no *ne*]

b. *Gianni inviterà molti.  
   Gianni will-invite many.  
   [bare quantifier, *no *ne*]

c. Gianni ne inviterà molti.  
   Gianni of-them will-invite many  
   [bare quantifier ✓ with *ne*]

**Subjects moved to Spec,TP forbid *ne***

d. *Molti ne inviteranno Gianni.  
   Many of-them will-invite Gianni.  
   [bare quantifier *with* *ne*]

e. *Molti ne telefoneranno.  
   Many of-them will-phone

f. *Molti ne affonderanno.  
   Many of-them will-sink
Unaccusativity

Direct-object bare quantifiers require *ne*

a. Gianni inviterà molti studenti. [not a bare quantifier, ✓no *ne*]
   Gianni will-invite many students

   b. *Gianni inviterà molti.* [bare quantifier, *no *ne*]
   Gianni will-invite many.

   c. Gianni ne inviterà molti. [bare quantifier ✓with *ne*]
   Gianni of-them will-invite many

Bare quantifier as argument of unergative verb forbids *ne.*

   g. Telefoneranno [VP molti [V' __ ]] (*adding *ne*)
      will-phone many

Bare quantifier as argument of unaccusative verb requires *ne.*

   h. Ne affonderanno [VP [V' __ molti ]] (*omitting *ne*)
      of-them will-sink many
Unaccusativity

Direct-object bare quantifiers require *ne*

a. Gianni inviterà molti studenti. [not a bare quantifier, ✓no *ne*] Gianni will-invite many students

b. *Gianni inviterà molti. [bare quantifier, *no *ne*]
Gianni will-invite many.

c. Gianni *ne* inviterà molti. [bare quantifier ✓with *ne*] Gianni of-them will-invite many

Bare quantifier as argument of unergative verb forbids *ne.*

g. Telefoneranno [VP molti [v' __]]. (*adding *ne*)
will-phone many

Bare quantifier as argument of unaccusative verb requires *ne.*

h. Ne affonderanno [VP [v' __ molti ]] (*omitting *ne*)
of-them will-sink many

Passives behave like unaccusatives.

i. Ne saranno invitati molti.
of-them will-be invited many
Burzio's Generalization

Properties of passive morphology

1. suppresses assignment of accusative case;
2. suppresses normal assignment of external θ-role
Burzio's Generalization

Properties of passive morphology
  1. suppresses assignment of accusative case;
  2. suppresses normal assignment of external θ-role

Properties of unaccusative verbs:
  1. An unaccusative verb lacks an external argument.
  2. An unaccusative verb fails to assign accusative case.
Burzio's Generalization

Properties of passive morphology
1. suppresses assignment of accusative case;
2. suppresses normal assignment of external θ-role

Properties of unaccusative verbs:
1. An unaccusative verb lacks an external argument.
2. An unaccusative verb fails to assign accusative case.

Burzio's generalization
If a verb assigns accusative case, it has an external argument.
Burzio's Generalization

(we didn't get to any of the following slides, alas)
**Burzio's Generalization**

There is no English verb *sënk* or *arrüve* that lacks an external argument but does assign accusative case. Such a verb would occur with a dummy subject:

*It*$_{expl}$ *sënked* the ship.
'The ship sank.'

*It*$_{expl}$ *arruved* the package.
'The package arrived.'

- And there is no raising verb *sume* with these properties. Such a verb, of course, would not actually require any raising:

  It*$_{expl}$ sums* [Mary to have left the room].
  'Mary seems to have left the room.'
Burzio's Generalization

• Burzio's Generalization also entails the absence of any morpheme that could eliminate the external argument role of a verb without also eliminating the accusative case assigning capacity of that verb. That is, it also provides a link between the two properties of passive.
Burzio's Generalization

A consequence of Burzio's Generalization:

In principle, any unergative verb can assign accusative case, but in principle, no unaccusative verb can do so.
Burzio's Generalization

Cognate objects
a. The dog barked a great big bark [unergatives]
b. The baby yawned a tremendous yawn
c. John smiled an amazing smile
d. Mary jumped an astonishingly high jump
Burzio's Generalization

Cognate objects
a. The dog barked a great big bark  [unergatives]
b. The baby yawned a tremendous yawn
c. John smiled an amazing smile
d. Mary jumped an astonishingly high jump

e. *Sue arrived an excellent arrival.  [unaccusatives]
f. *The wicked witch melted a rapid melt.
g. *The careless climber dropped a terrifying drop.
Burzio's Generalization

Fake reflexives
   a. The dog barked himself hoarse.
   b. The baby cried herself to sleep.
   c. John drank himself senseless.
   d. ?Mary jumped herself dizzy.
Burzio's Generalization

Fake reflexives

a. The dog barked himself hoarse.
b. The baby cried herself to sleep.
c. John drank himself senseless.
d. ?Mary jumped herself dizzy.

e. *The politician arrived herself to death.
f. *The candle melted itself into a puddle of wax.
g. *The stuntman dropped himself senseless rehearsing the scene.
Burzio's Generalization

The "X's way" construction
  a. Babe Ruth homered his way into the hearts of America.
  b. The dog barked his way into the room.
  c. The baby cried her merry way across the state.
  d. Mary whistled her way home.
Burzio's Generalization

The "X's way" construction
a. Babe Ruth homered his way into the hearts of America.
b. The dog barked his way into the room.
c. The baby cried her merry way across the state.
d. Mary whistled her way home.

e. *The politician arrived her way across the state.