The morphophonology of passives and the architecture of Grammar

EGG 2017, Olomouc
Course outline:

• (Wasow 1977), Laskaratou and Philippaki (1984), Smirniotopoulos (1992), Horvath and Siloni (2008): at least some passives are *derived in the lexicon*

• lexicon is a subcomponent of the grammar in which certain operations can be performed

• these are usually semi productive operations that refer to the idiosyncratic properties of morphemes, analogical extension etc.
Course outline:

• Marantz (1997), Embick (2004), Bruening (2014), Alexiadou et al. (2015): lexicon is a list/several lists of features and relations between features

• no procedural knowledge in the lexicon

• all passives are derived syntactically

• the seemingly idiosyncratic properties of certain passives can be accounted for with reference to properties of syntactic pieces

• Bruening (2014): **the latter view is simpler as everybody has to assume the existence of syntax and the lexicon as a list**

• the burden of proof is on the proponents of the ‘procedural lexicon’
Course outline:

• Class 1: Passives: types and analyses I (well-known ‘facts’)

• Class 2: Passives: types and analyses II (the complex ugly truth)

• Class 3: The morphosyntax of passives: a case study of Polish

• Class 4: The morphophonology of passives: a case study of Polish

• Class 5: Are Polish resultative adjectives derived in the lexicon?
Passives: types and analyses

• the universality and regularity of passive construction contributed to their prominent place in the Generative literature

• John ate porridge.

external argument, internal argument (undergoer/patient), object argument (agent/doer/causer/holder), subject
Passives: types and analyses

• Porridge was eaten (by John).

- Internal argument, subject
- External argument, adjunct
- Auxiliary verb
- Participal morphology
Passives: types and analyses

Chomsky (1957) ‘Syntactic Structures’
Passives: types and analyses

- passive transformation is an optional transformation
- passive strings are always derived from active sentences, which are kernel sentences (‘...simple, declarative, active sentences...’ (1957: 80))

\[(34) \text{ If } S_1 \text{ is a grammatical sentence of the form } NP_1 \rightarrow Aux \rightarrow V \rightarrow NP_2, \text{ then the corresponding string of the form } NP_2 \rightarrow Aux + be + en \rightarrow V \rightarrow by + NP_1 \text{ is also a grammatical sentence.}\]
Passives: types and analyses

• the optionality of by-phrase accounted for by an optional ‘elliptical transformation’

• (34) is clearly motivated by the impressive productivity of passivization

(34) If $S_1$ is a grammatical sentence of the form

$NP_1 - Aux - V - NP_2$,

then the corresponding string of the form

$NP_2 - Aux + be + en - V - by + NP_1$

is also a grammatical sentence.
Passives: types and analyses

• Case filter:

  Every overt NP must be assigned abstract case

• θ-criterion:

  Each argument bears one and only one θ-role, and each θ-role is assigned to one and only one argument
Passives: types and analyses

• The assignment of case makes sure that an NP is visible. Only visible NPs may be assigned θ-roles (thematic roles, ‘agent’, ‘patient’ etc.)

• It was assumed that passive morphology is an argument so it: (1) absorbs the ACC case; (2) absorbs the θ-role of the external argument

• the internal argument cannot receive ACC case so it moves up to receive NOM case

• the external argument cannot be projected as there is neither case nor θ-role for it

• it may be introduced optionally in a by-phrase adjuncts
Passives: types and analyses

• in the current syntactic literature (e.g. Alexiadou et al. 2015, 2017) passive constructions differ from their active counterparts in the properties of the external argument introducing head

• after Kratzer (1996) they assume the relevant head to be the Voice-head

• Voice is a functional projection merged above the categorizing verbal head

• In Slavic languages it is also merged above the InnerAspect layer

• the function of Voice is to relates the event variable from VP with the argument variable
Schäfer’s (2008) typology of Voice Phrases

a. thematic active Voice:
   VoiceP
   └── DP
   └── VoiceP
      └── Voice \{agent, D\} ...

b. thematic passive Voice:
   VoiceP
   └── Voice \{agent, \emptyset\} ...

a. non-thematic active Voice:
   VoiceP
   └── DP
   └── Voice’
      └── Voice \{\emptyset, D\} ...

b. non-thematic passive Voice:
   Voice’
   └── Voice \{\emptyset\} ...

• verbal vs. adjectival passives

• some languages utilize different auxiliary verbs to introduce verbal vs. adjectival passives (e.g. German)

Das Buch wurde geschrieben.  
The book was written
Das Buch ist gut geschrieben.  
The book is well written
• verbal vs. adjectival passives

• English does not always to that. This results in ambiguity (Embick 2004)

The door was opened.

a. Eventive passive
   Someone opened the door.

b. Resultative
   The door was in a state of having become open. (requires state resulting from an event; see Kratzer 1994)
• verbal vs. adjectival passives

• Only adjectival passives can be negated by un- (Bruening 2014)

Harry is being beaten (by his opponent). (verbal passive)
* Harry is being unbeaten. (adjective in verbal environment)
verbal vs. adjectival passives

• Only verbal passives may be fed by ECM/raising (look, act, seem, be known etc. Wasow 1977)

John is unknown.

John is known to be a communist.

*John is unknown to be a communist.
verbal vs. adjectival passives

• only verbal passives may be modified by *by-phrases*, which introduce the external argument (Polish)

Materac jest napompowany (adjectival passive)
mattress is pumped up

Materac jest napompowany przez Tomka
mattress is pumped up by Thomas
verbal vs. adjectival passives

• only verbal passives may be modified by *by-phrases*, which introduce the external argument

Materac został napompowany (verbal passive)
mattress became pumped up

Materac został napompowany przez Tomka
mattress became pumped up by Thomas
verbal vs. adjectival passives

- verbal passives do not allow reflexive reading, ‘disjoint reference’ (McIntyre 2013)

John was being dressed up. [verbal participle; disjoint reference]
John seemed very dressed up. [adjectival participle; coreference possible]
verbal vs. adjectival passives

- unaccusative verbs give rise only to adjectival passives, never to verbal passives (Bruening 2014)

  a recently arrived train
  a fallen tree
  * The train was recently being arrived.
  * The tree was being fallen.
verbal vs. adjectival passives

• indirect objects and applied arguments cannot occur with adjectival passives

(Wasow 1977:343 (54))

a.  * John {looks/acts/seems} given first prize every time we have a contest.
b.  * John {looks/acts/seems} told the bad news.

(Wasow 1977:344 (56d), (57d))

a.  * Bill was untold (the story).
b.  * Sue was unsent the letter.
verbal vs. adjectival passives

• adjectival passives may lack verbal bases (a) and form idiomatic readings not shown by the verbal bases (b)

(14)
(a) otyły ‘obese’ but *otyć; wypukły ‘convex’ but *wypuknąć; zapadła (dziura) ‘one-horse town’ but *zapaść (in the sense ‘to become one-horse town’)

(b) przebiegł ‘cunning’ vs. przebiec ‘to run a certain distance’; przyszły ‘future’ vs. przyjść ‘to come’, skruszony ‘regretful’ vs. skruszyć ‘to crumble’
verbal vs. adjectival passives

• (Bruening 2014)

<table>
<thead>
<tr>
<th>Adjectival Passives</th>
<th>Verbal Passives</th>
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<tbody>
<tr>
<td>1. Category: Adjective</td>
<td>Category: Verb</td>
</tr>
<tr>
<td>2. Feed word formation</td>
<td>Do not feed word formation</td>
</tr>
<tr>
<td>3. Cannot be fed by ECM/raising</td>
<td>Can be fed by ECM/raising</td>
</tr>
<tr>
<td>4. No external argument present</td>
<td>External argument semantically present</td>
</tr>
<tr>
<td>5. Permit reflexive interpretation</td>
<td>Obligatory disjoint reference</td>
</tr>
<tr>
<td>6. Can be formed from unaccusatives</td>
<td>Cannot be formed from unaccusatives</td>
</tr>
<tr>
<td>7. Cannot affect applied arguments</td>
<td>Can affect applied arguments</td>
</tr>
<tr>
<td>8. Semantic drift</td>
<td>Interpretation is regular</td>
</tr>
<tr>
<td>9. Idioms that input does not share</td>
<td>No idioms that input does not share</td>
</tr>
<tr>
<td>10. Missing input</td>
<td>No missing input</td>
</tr>
</tbody>
</table>
target state vs. resultant state passives

- two subclasses of adjectival passives (Parsons 1990, Kratzer 2000)

<table>
<thead>
<tr>
<th>Target state passives</th>
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<tbody>
<tr>
<td>(1)</td>
</tr>
<tr>
<td>a. Die Geisslein sind immer noch versteckt.</td>
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<tr>
<td>The little goats are still hidden.</td>
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<tr>
<td>b. Die Reifen sind immer noch aufgepumpt.</td>
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<td>The tires are still pumped up.</td>
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<tr>
<td>c. Der Deckel ist immer noch abgeschraubt.</td>
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<td>The lid is still screwed off.</td>
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<tr>
<td>d. Das Gebäude ist immer noch geräumt.</td>
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<tr>
<td>The building is still evacuated.</td>
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<tr>
<td>e. Die Ausfahrt ist immer noch versperrt.</td>
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<tr>
<td>The driveway is still obstructed.</td>
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</table>
target state vs. resultant state passives

Resultant state passives
(2) a. Das Theorem ist (* immer noch) bewiesen.
    The theorem is (*still) proven.

    b. Der Briefkasten ist (* immer noch) geleert.
    The mailbox is (*still) emptied.

    c. Die Wäsche ist (* immer noch) getrocknet.
    The laundry is (*still) dried.

    d. Die Gäste sind (* immer noch) begrüßt.
    The guests are (*still) greeted.

    e. Die Töpfe sind (* immer noch) abgespült.
    The pots are (*still) washed up.
target state vs. resultant state passives

• the *immer noch*-test is not always unquestionably reliable

  a. * The feast is still over.
  b. * The homework is still done.
  c. # Melchiades is still dead.
  d. # The potatoes are still cooked.
target state vs. resultant state passives

• Kratzer (2000) notes that activity verbs are capable of giving rise to resultant states but render marked ‘job is done’ or ‘it’s over’ reading

Die Katze ist schon gestreichelt.
The cat is already petted

Dieser Kinderwagen ist schon geschoben.
This baby carriage is already pushed.
target state vs. resultant state passives

- Kratzer (2000) proposes that: (a) target state passives involve the quantification of an argument of a predicate that also involves a target state argument; (b) the stativizer in resultant state passives denotes a property of times: times that are preceded by the running time of the event that brought about the state must always share this property.

\[
\begin{align*}
(a) & \lambda R \lambda s \exists e \ R(s)(e) \\
(b) & \lambda P \lambda t \exists e \ [P(e) \& \tau(e) \ t]
\end{align*}
\]
resultatives vs. statives

- resultative passives allow for manner modification, while so-called stative passives do not (Embick 2004)

The package remained carefully opened.
*The package remained carefully open.
the carefully opened package
*the carefully open package
resultatives vs. statives

• (a) means that the door was in the state of being open recently and the state does not hold anymore

• (b) is ambiguous; has the same meaning as (a) or means that the event of opening the door took place recently

a. the recently open door
b. the recently opened door
resultatives vs. statives

• only statives are possible with creation verbs (otherwise contradiction arises)

a. This door was built open.
b. *This door was built opened.

a. This new ruler was built long.
b. *This new ruler was built lengthened.
resultatives vs. statives

- Embick (2004) analyzes statives as not possessing eventive v-head