ConSOLE XIV at EHU-U of the Basque Country, Vitoria-Gasteiz
December 15th – 17th, 2005

Aspects on Passives

Nino Grillo (nino.grillo@let.uu.nl)* +, Berit Gehrke (berit.gehrke@let.uu.nl)*
*Utrecht Institute of Linguistics OTS, +University of Siena

1 Collins' (2004) smuggling approach

Collins (2004): the external argument in passive constructions[1] is still an argument of the verb (see also Belletti 2003) – evidence from binding, depictives and purpose-clauses:

(1) a. *Such privileges should be kept to oneself.*
b. *Damaging testimony is always given about oneself in secret trials.*
c. *The book was written drunk.*
d. *The book was written on purpose.*

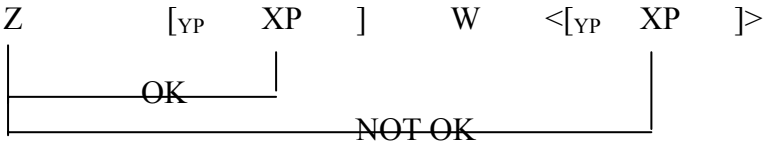
contra Baker (1988), Jaeggli (1986), Roberts (1987), Afarli (1989), among others:

- passive morphology does not absorb external theta role or accusative case.
- external theta role is assigned in Spec vP (in line with UTAH)
- accusative case is checked by the by-phrase in Voice° directly above vP

problem: locality

Collins' solution: 'Smuggling' of the VP over the vP makes the internal argument the closest to Spec TP allowing for its 'promotion' to subjecthood without any violation of Relativized Minimality or its derivational counterpart.

(2) **Smuggling**:
Suppose a constituent YP contains XP. Furthermore, XP is inaccessible to Z because of the presence of W, some kind of intervener that blocks any syntactic relation between Z and XP. If YP moves to a position c-commanding W, we say that YP smuggles XP past W.



1.1 three possibilities to derive the word order in passives

1. specifier of vP to the right
- violates generalization that specifiers always precede heads (Spec-Head-Compl)
- makes the wrong predictions about c-command tests:

(3) a. **The book was given to **any** student by **no** professor.*
The book was given **to the other by each professor.*
b. *The book was given by **no** professor to **any** student.*
*The book was given **by each** professor **to the other**.*

2. *by*-phrase moves to the right of the participle by extraposition
- makes the wrong predictions about c-command tests

3. particle moves to the left of the *by*-phrase.

[1] This holds for eventive passives; stative passives behave differently cross-linguistically where German, for instance, does not allow an external argument whereas Greek does (see Anagnostopoulou 2003, Kratzer 2000).

1.2 head movement or XP movement?

(4) a. *The argument was summed **up** by the coach.*
The argument was summed by the coach **up.*
b. *John was spoken **to** by Mary.*
John was by Mary spoken **to.*

(5) *The coach summed **up** the argument.*
*The coach summed the argument **up**.*

- more than just Part° moves in passive constructions

1.3 improving Collins' approach

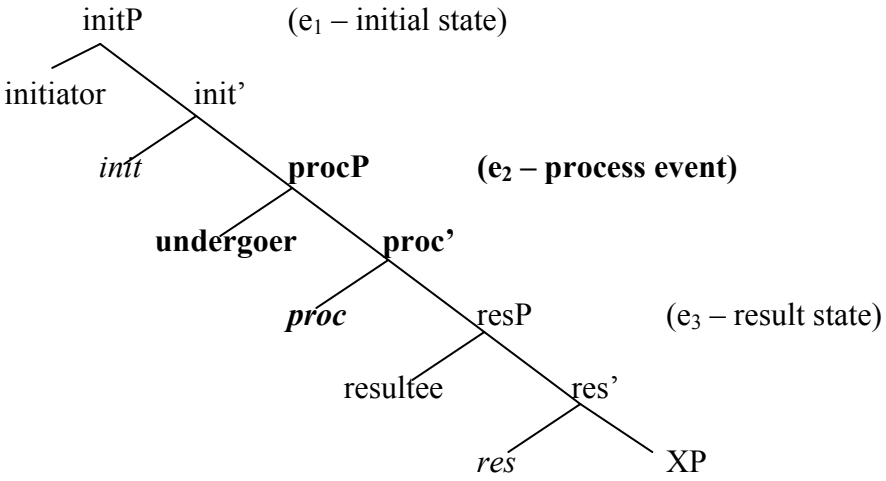
problem: no trigger for this first movement operation

our proposal: promoting the result state as fundamental ingredient of (eventive) passives

- result state of the event (res(ult)P in Ramchand 2005) moves to a position above init(iator)P (vP in other approaches)
- this position is independently needed to form a basis for the event time that subsequently serves as the internal argument of Asp° (Demirdache & Uribe-Etxebarria 2000)
- in passives: event time falls within the result state subevent

2 decomposing the event

(6) **The syntax / semantics of the first phase** (Ramchand 2005a)



all dynamic verbs identify at least a procP, the dynamic part of every event

not all verbs can identify causing (initP) and result state subevent (resP)

Starke (2001): lexical items do not necessarily insert under a single terminal node; elements can merge and project and then remerge at a later stage of the derivation.

(7) **Event Composition Rule** (Ramchand 2005a, p. 37)
$e = e_1 \rightarrow e_2$: e consists of two subevents, e_1, e_2 such that e_1 causally implicates e_2.

state embedded under a process: result state

state embedding a process: initial state

elements that can supply the result state subevent:

- verbs that can identify resP in and by themselves such as *find*, *kill*, among others
- (resultative) particles (8)
- (resultative) adjectives (9)

(8) *He ate **up** the chocolate.*

(9) *He hammered the metal **flat**.*

events are structurally complex and involve more than just one subevent
event structure itself is crucially atemporal in nature

- no times associated with any of the subevents
- no immediate link between (atemporal) event and temporal domain of the clause

3 (Eventive) passives involve resultativity

(10) a. *The argument was summed **up by the coach**.* (= (4), Collins 2004)
The argument was summed **by the coach up.*
b. *John was spoken **to by Mary**.*
John was **by Mary spoken **to**.*

- resP moves taking along particle in verb-particle constructions / *to*-phrase in ditransitives
- particle is generated in prtP as the direct complement of resP (cf. Ramchand 2005, Ramchand & Svenonius 2002) and there is no way to move the whole resP over initP without moving the particle along with it

(11) a. *The table was wiped **clean by John**.* (from Postal 2001)
??*The table was wiped **by John clean**.*
b. *The metal was hammered **flat by John**.*
??*The metal was hammered **by John flat**.*

3.1 not all transitive verbs can form passives (cf. e.g. Postal 2001)

transitive verbs involving telic predicates can (12), those involving atelic ones cannot (13):

(12) a. *The lion **killed the antilope**.*
***The antilope was killed** (by the lion).*
b. *He **put the card** on the table.*
***The card was put** on the table (by him).*

(13) a. *This laptop **weighed two kilos**.*
****Two kilos were weighed** (by this laptop).*
b. *This chair **cost 50 euro**.*
****50 euro were costed** (by this chair).*

- such transitive verbs never have a resultative reading and can never be part of an event structure containing a result state

3.2 problem: a number of atelic predicates (not containing resPs) can still form passives

Rizzi & Belletti (1988): two kinds of **psych-verbs** – ***worry*** (*preoccupare*) **vs. *appeal*** (*piacere*)

worry-verbs can undergo passivisation, *appeal*-verbs cannot (examples from Reinhart 2002):

(14) a. *The news **worried / surprised / excited** Max.*
b. *Max was **worried / surprised /excited** (by the news).*

(15) a. *The solution **appeals** to me / **escapes** me.*
b. ***I am **appealed** / **escaped** (by the solution).*

- *worry*-verbs can have an inchoative meaning of the state denoted by the psych verb (e.g. *Max got into a worrying state*)
- *appeal*-verbs cannot (e.g. **I got into an escaping state*)

➢ *worry*-verbs allow secondary predication where the state denoted by the verb is a kind of result state predicated over the internal argument
➢ passive formation is possible if it involves promoting this kind of result state
➢ *appeal*-type verbs cannot involve such a secondary predication and cannot form passives

Similarly, *love* is able to form passives:

(16) a. *Mary **loved** Max.*
b. *Max was **loved** (by Mary).*

3.3 ditransitives

(17) a. *John **sold** a radio **to Mary**.*
*John **sold Mary** a radio.*
b. *John **bought** a radio **for Mary**.*
*John **bought Mary** a radio.*

(18) a. *A radio was **sold to Mary**.* (Postal 2001, citing Fillmore 1965)
***Mary** was **sold** a radio.*
b. *A radio was **bought for Mary**.*
****Mary** was **bought** a radio.*

assumption: only goals are part of the resP, benefactives are not (but see Tungseth 2006 for a different treatment)

3.4 floating quantifiers

floating Qs banned from post-verbal position in passives (unexpected under previous approaches):

(19) a. *John gave the boys **both** a good talking to.*
*John gave **both** the boys a good talking to.*
b. *The boys were **both** given a good talking to.*
The boys were given **both a good talking to.*

➢ floating Qs move together with internal argument and the resP to; remain stranded there after movement of internal argument to [Spec TP]

4 Comprehension patterns in agrammatic Broca's aphasics

Grillo (2004): selective deficitarian comprehension in agrammatic Broca's aphasia as a consequence of minimality effects (arise when a dependency has to be built over an intervening element which shares part of its featural make up with the goal)

➢ limitation of computational resources can affect the possibility to move resP over vP

predictions:

- comprehensions of passives with and without *by*-phrase should be equally problematic whereas unaccusatives and adjectival are not (see Grodzinsky 1999, Piñango 1999)
- there should be difficulties in computing dependencies that cross potentially similar elements

(20) . . . X . . . Z . . . Y . . .
$\{\alpha,\beta,\gamma,\delta,\varepsilon\}_{\text{class Q}}$ $\{\alpha,\beta,\gamma,\delta\}_{\text{class A}}$ $\{\alpha,\beta,\gamma,\delta,\varepsilon\}_{\text{class Q}}$

- every node is associated with particular set of morphosyntactic features
- RM should permit the formation of a relation Σ between X and Y: the presence of the element ε suffices for RM to see the difference between X and Z and therefore to authorize the movement of Y over Z.

(21) . . . X . . . Z . . . Y . . .
$\{\alpha,\beta,\gamma,\delta\}_{\text{class A}}$ $\{\alpha,\beta,\gamma,\delta\}_{\text{class A}}$ $\{\alpha,\beta,\gamma,\delta\}_{\text{class A}}$

- with this feature configuration RM disallows a relation between X and Y

(22) **Normal Representation of object cleft**
$\{D, N, \theta_2, \varphi_{s, acc}, \Sigma\}\{D, N, \theta_1, \varphi_{s, nom}\}\ \{D, N, \theta_1, \varphi_{s,}\}\{D, N, \theta_2, \varphi_{s, acc}, \Sigma\}$
It is the boy [*who* [*the girl*][<*the girl*> *loved* <*the boy*>]]

- Σ defines <*who*> as a member of the Operator's class and distinct from the Argumental class to which <*the girl*> belongs.

(23) **Agrammatic Representation of object cleft**
$\{D, N, \theta_?, \varphi_{s,} \ldots\}\ \{D, N, \theta_?, \varphi_{s,} \ldots\}\ \{N, \theta_1, \varphi_{s,} \ldots\}\ \ \{N, \theta_2, \varphi_{s,} \ldots\}$
It is the boy [*who* [*the girl*] [<…> *loved* <…>]]

- extreme impoverishment of features leads to RM blocking chain formation: it is impossible to assign the correct theta role to each argument
- different with subject relatives (are correctly interpreted by agrammatic patients): no NP intervenes between moved constituent and trace, hence no RM effects

(24) *It is the boy* [*who* [<*the boy*> *loved the girl*]]

(25) **Agrammatic aphasia comprehension patterns** (see also Grodzinsky 2004)

Above Chance Performance	**Chance Performance**
Subject relatives	Object relatives
Subject Clefts	Object Clefts
Actives	Passives
Adjectival Passives	Verbal Passives
Unaccusatives	Passives
SVO Hebrew Actives	OSV/OVS Hebrew Actives
Object Control	Subject Control
Unscrambled Object	Scrambled Object
...	...

(26) a. *There was a man killed*.
b. **There was killed a man*.

- movement of the resP drags along internal argument

5 creating the link between the atemporal event and the temporal domain

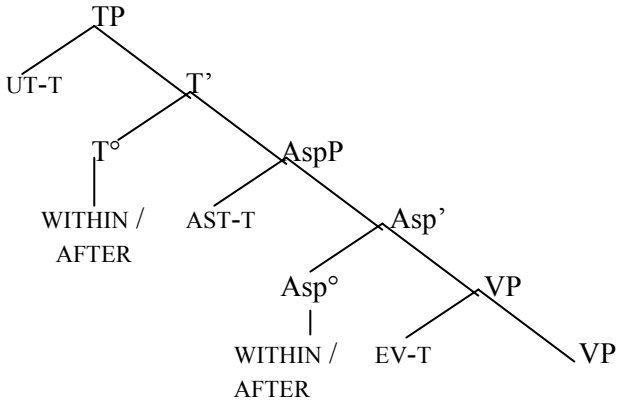
syntax and semantics of tense and aspect involve reference to points/intervals in time (Partee 1984, Zagona 1990, Stowell 1996, Giorgi & Pianesi 1997, Demirdache & Uribe-Etxebarria 2000)

Reichenbach (1947): event time (E), speech time (S), reference time (R)

- English simple tenses: E before R (past), E simultanous to R (present), E after R (future)
- English complex tenses: E before R (perfect), E simultaneous to R (progressive)

Klein (1994): intervals event time (EV-T), assertion time (AST-T), utterance time (UTT-T)

(27) **The syntax of Tense and Aspect in Demirdache & Uribe-Etxebarria (2000)**



Tense and Aspect are predicates that take temporal arguments (following Zagona 1990)

aspect head: event time as internal argument, assertion time as external argument

- imperfective aspect: assertion time lies within the event time (WITHIN)
- perfective aspect: assertion time lies after the event time (AFTER)

tense head: assertion time as internal argument, utterance time as external argument

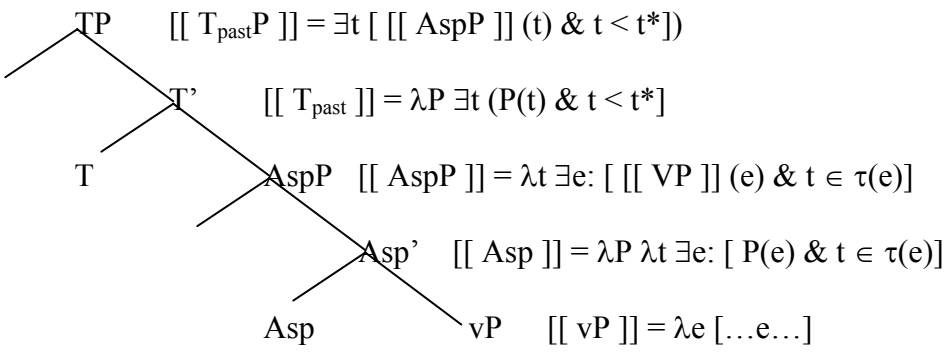
- present tense: utterance time WITHIN assertion time
- past tense: utterance time AFTER assertion time
- (Demirdache 2005:) future tense: utterance time BEFORE assertion time

Ramchand (2004): "crucial phase boundary between vP and the temporal phrase structural domain requires the establishment of a relation between the extended event topology which makes no direct reference to times, and the actual time variable which is only introduced at Asp"

- ➢ **there is no event time since vP is crucially atemporal in nature**

- aspect introduces a time variable [~ assertion time in Demirdache & Uribe-Etxebarria 2000] that is in some way related to the event structure
- minimal denotation of Asp (in Russian, $\tau(e)$ is Krifka's (1998) temporal trace function): $[\![\text{Asp}]\!] = \lambda P\, \lambda t\, \exists e: [\, P(e) \,\&\, t \in \tau(e)]$

(28) **The syntax / semantics of Aspect and Tense in Russian** (Ramchand 2004)



- utterance time and assertion time in Demirdache & Uribe-Etxebarria (2000) ~ Ramchand's (2004) t* and t, respectively
- crucial difference: event time is not existent in Ramchand's approach but is more or less replaced by Krifka's (1998) temporal trace function

problems: - AspP provides both the temporal trace function as well as the event time
- still not clear in which part of the event the event time is located

➢ **split Krifka's temporal trace function and introduction of the assertion time**

necessary ingredients:

- syntactic reflex of Krifka's temporal trace function: extra projection
- additional landing site for the part of the event structure that the event time is related to (some kind of focus projection, cf. Belletti 2000)
- Aspect and Tense heads come with an argument structure with the relevant arguments utterance time[2], assertion time, event time (Demirdache & Uribe-Etxebarria 2000)
- events are complex and consist of atemporal subevents (Ramchand 2004, 2005a,b)

see also: Borer's (2005) quantificational phrase QP, quantification over events
Arsenijević (2006): verbal predicates have some functional projection that basically picks out that part of the complex event structure that something is asserted about

➢ whatever is asserted about the event has to move up – in that sense it could also be the case that it is used to focalize some particular subevent

6 summary & outlook

we provided further evidence for Collins' proposal
improvement on this proposal: 'smuggling' is not really smuggling – semantic trigger for movement of result state subevent
new predictions wrt impoverished syntactic representation that turned out to be correct

<u>future research</u>:

- **Is the participle in perfect tenses the same as in passives?**

both are morphologically identical in many languages
both constructions involve some resultative semantics
but: external argument in perfect tense constructions / internal argument in passive constructions promoted to subject position

- **What makes progressive of a passive grammatical in Spanish but not in Italian?**

still: *Juan está siendo pegado*. vs. ***Juan es estando pegado*.
John is (SLP) being (ILP) hit John is (ILP) being (SLP) hit

- **What happens to accusative case?**

[2] Or in any case, some reference time which in many cases is the utterance time. See Stowell (1996) for this point.

7 References

Anagnostopoulou, Elena (2003). Participles and voice. In Alexiadou, Artemis, Monika Rathert & Arnim von Stechow (eds.), *Perfect Explorations*. Berlin: Mouton de Gruyter.

Arsenijević, Boban (2006). *Inner Aspect and Telicity.* Ph.D. thesis, Leiden University.

Belletti Adriana (2000). *Aspects of the low IP area.* Ms. University of Siena.

Belletti, Adriana (2003). *Handouts of the Siena Lectures 2002-2003*.

Belletti, Adriana and Luigi Rizzi (1988). Psych-verbs and θ theory. *Natural Language and Linguistic Theory* 6, 291-352.

Borer, Hagit (2005). *Structuring Sense. Volume I: In Name Only* / *Volume II: The Normal Course of Events*. Oxford: Oxford University Press.

Collins, Chris (2004). *A Smuggling Approach to the Passive in English.* Ms., Cornell University.

Demirdache, Hamida and Myriam Uribe-Etxebarria (2000). The primitives of temporal relations. In Martin, Roger, David Michaels and Juan Uriagereka (eds.). *Step by Step. Essays on Minimalist Syntax in Honour of Howard Lasnik.* Cambridge, MA: MIT Press, 157-186.

Demirdache, Hamida (2005). *Scope and Anaphora with Time Arguments: The Case of 'Perfect Modals'.* Paper presented at the LAGB satellite workshop on Perfectivity and Telicity in Cambridge, UK.

Friedmann, Naama & Shapiro, Lewis (2003). Agrammatic comprehension of simple active sentences with moved constituents: Hebrew OSV and OVS structures. *Journal of speech language and hearing research* 46, pp. 288-297.

Giorgi, Alessandra and Fabio Pianesi (1997). *Tense and Aspect: from Semantics to Morphosyntax*. Oxford: Oxford University Press.

Grillo, Nino (2005). Minimality effects in agrammatic comprehension. In Blaho, Schoorlemmer and Vicente (eds.) *Proceedings of Console XIII,* 107-120. www.sole.leidenuniv.nl

Grodzinsky, Yosef (1999). The neurology of syntax: language use without Broca's area, *Behavioral and brain sciences* 23, pp. 47-117.

Grodzinsky, Yosef (2000). Syntactic dependencies as memorized sequences in the brain. Paper presented at the *TENNET XI annual conference on theoretical and experimental neuropsychology*, Montreal, Canada. June 2000.

Klein, Wolfgang (1994). *Time in language.* London / New York: Routledge.

Krifka, Manfred (1998). The Origins of Telicity. In Rothstein, Susan (ed.). *Events and Grammar.* Dordrecht: Kluwer, 197-235.

Kratzer, Angelika (2000). Building statives. In Conathan, Lisa J. et al. (eds.). *Proceedings of the Twenty-sixth Annual Meeting of the Berkeley Linguistics Society.* Berkeley: Berkeley Linguistics Society, 385-399.

Partee, Barbara (1984). Nominal and Temporal Anaphora. *Linguistics and Philosophy 7.3*, 243-286.

Piñango, Maria Mercedes (1999). Syntactic displacement in Broca's aphasia comprehension. In Y. Grodzinsky and R. Bastiaanse (eds.), *Grammatical disorders in aphasia: a neurolinguistic perspective*, pp. 75-87. Whurr, London.

Rizzi, Luigi (1990). *Relativized minimality*. MIT Press, Cambridge, MA.

Rizzi, Luigi (2002). *Locality and left periphery*. Ms. University of Siena.

Reichenbach, Hans (1947). Elements of Symbolic Logic. London: MacMillian.

Reinhart, Tanya (2002). The Theta System – an overview. *Theoretical Linguistics 28(3)*, 229-290.

Ramchand, Gillian (2004). Time and the event. The semantics of Russian prefixes. *Nordlyd 32.2*, 323-361.

Ramchand, Gillian (2005a). *Verb meaning and the lexicon.* Ms. University of Tromsø.

Ramchand, Gillian (2005b). *Time and the Event: the Semantics of Russian Prefixes.* Paper presented at the LAGB satellite workshop on Perfectivity and Telicity in Cambridge, UK.

Starke, Michal (2001). *Move dissolves into merge, a theory of locality*. PhD thesis, University of Geneva.

Stowell, Tim (1996). The phrase structure of tense. In Rooryck, Johan and Laurie Zaring (eds.). *Phrase structure and the lexicon.* Dordrecht: Kluwer.

Tungseth, Mai (2006). PhD thesis, University of Tromsø.

Zagona, Karen (1990). *Times as temporal argument structure.* Paper presented at the conference "Time in Language". MIT, Cambridge, MA.