There down in Spec,vP: an argument

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1. Introduction

- As is well known, *there-insertion* is possible in the context of *unaccusative verbs* but impossible with *unergative* and *transitive verbs*:[1]

(1) a. There arrived a man (in the garden) (unaccusative-1)
b. *There walked a man (in the garden) (unergative)
c. *There kissed a girl a boy (in the garden) (transitive → TEC)

- However, as has been pointed only a **subset** of unaccusative verbs allows *there*-insertion (Levin 1993), leading to an **unaccusativity mismatch**:[2]

(1) d. *There broke a glass (in the kitchen) (unaccusative-2)

Question: Does the *unaccusativity-mismatch* in (1a, d) point to a syntactic difference between the two classes of unaccusatives?

Analysis in a nutshell: Building on the "low-*there*" hypothesis, recently proposed by Richards & Biberauer 2005, Richards 2007, we argue that the theme argument of the two classes of unaccusatives (can) occupy different structural positions within vP, namely Spec,vP and Spec,ResultP. Insertion of *there* is blocked, if the theme obligatorily occupies Spec.vP.

(2) a. $[_{vP}$ ***there*** $[_{ResultP}$ *theme*$]]$ vs. b. $[_{vP}$ ***theme/*there*** $[_{ResultP}]]$

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[1] We only discuss "presentational *there*", i.e. expletive *there* in the context of *lexical verbs*. We will not discuss expletive *there* in the context of the copula *be* (i.e. in progressives, passives and existentials); see Deal (2009) for a recent discussion within the "low-*there*"-hypothesis applied in this talk.

[2] Similar restrictions can be observed for the distribution of post-verbal nominatives, which has been proposed as one diagnostic of unaccusativity in languages such as Hebrew and Greek, see Borer (2005) and Alexiadou (to appear) for a recent discussion. This is illustrated below with Hebrew data:

(i) a. hitxilu hapganot (unaccusative-1) b. *qap'u mayim (unaccusative-2)
started demonstrations froze water

2. The standard account of *there-insertion*: *there* in Spec,TP

- Chomsky (1981), Chomsky (1995) and subsequent work proposes that *there* is externally merged in the derived subject position Spec,TP to satisfy the EPP.
- On this logic, (1b, c) are ungrammatical for the following reasons:
  In English, (a NON-TEC language), the subject and the expletive compete for a single specifier position. [***Crucial assumption***: Subjects must leave the vP (cf. Alexiadou & Anagnostopoulou 2001, 2007).]
- In TEC-languages (e.g. Dutch in (3)), the counterparts of (1b, c) are grammatical because these languages have two specifiers available for subjects outside the vP.

(3) dat *er* iemand een appel gegeten heft (**T**ransitive **E**xpletive **C**onstruction)
that there someone an apple eaten has

- NOTE: The standard analysis of *there-insertion* cannot account for the contrast in (1a, d) (cf. also Borer 2005, Alexiadou to appear, Deal 2009).[3]

3. Against the standard analysis: *there* down in Spec,vP

The standard analysis of *there-insertion* has recently been challenged (Richards & Biberauer 2005, Richards 2007; cf. also Deal 2009) as it faces a number of problems.

A: It needs a number of extra assumptions to derive *Bure's Generalization*, i.e. the observation that TECs are available only in languages with Object Shift/Scrambling. (Why should the availability of a second specifier in the TP-region be related to the availability of a derived object position? cf. Alexiadou & Anagnostopoulou 2001, 2007 Richards 2004).

B: In Chomsky (2000, 2001, 2004), *there* is a head with [uF] and probes into TP.
This proposal has a technical problem: Only root nodes should probe. Since *there* in Spec,TP is not the root node (which is T), its probing is counter-cyclic.

[3] Borer (2005) and Alexiadou (to appear) are primarily concerned with the reasons why unergatives can, under very specific conditions, appear in inversion contexts, namely when an overt locative is included in the structure. However, the behavior of the two classes of unaccusatives described here seems to be consistent across languages and across unaccusativity diagnostics which have been classified as surface unaccusativity diagnostics by Levin & Rappaport Hovav (1995) (locative inversion, negation of negation in Russian, ne-cliticization).

C: For conceptual reasons, *MERGE-Expl* should be a property of phase heads (C, v), i.e. expletives are externally merged either in Spec,CP or in Spec,vP. If an expletive occurs in Spec,TP, it must have moved there (→ EPP is checked only via *MOVE*).

Conclusion and proposal (Richards 2007):

- *There* is not a *probe* but a goal (like any other nominal category/DP).
- *There* merges in Spec,vP where it is in the probe domain of T.
- *There* has an *interpretable* phi-set, rendered active via an unvalued Case feature.[4]
- As *expletives* are dummies (they do not have reference and cannot bear a theta-role), they can merge (externally) only in *non-thematic specifiers*, i.e.:
  a) the specifier of a defective head $v_{passive}$
  b) the specifier of a defective head $v_{unaccusative}$
  c) the outer specifier of thematic v/Voice (the OS-position)

→ Option (c) determines the availability of TECs; English has no TECs as well as no OS as it has no outer Spec,vP / outer Spec,VoiceP (complementarity between *Expl* and external arguments).[5]

(4) a. *There ate a man an orange b. *There sleeps someone

→ It also explains the complementarity between *Expl* and raised internal arguments of unaccusatives.

(5) a. *There seems [$_{TP}$ a man to be $t_{a\ man}$ in the garden]
b. There seems [$_{TP}$ to be a man in the garden]
c. *[$_{TP}$ There [$_{vdef}$ a man [$_{VP}$ arrived $t_{a\ man}$]]]
d. There arrived a man

[4] But see Deal (2009) for the claim that *there* must have uninterpretable phi-features and locally probes the associate DP. This, she claims, is necessary in order to avoid the "too-many-*theres*" problem (*There seemed there to arrive a train in the station). We do not discuss the feature content of *there* but concentrate on its configurational, i.e. external-merge properties.

[5] Something in addition has to be said about the cyclic A'-movement of vP-internal elements which is, of course, possible in English.

(6) a. dat *(daar) gister 'n skip gesink het (Afrikaans)
that (there) yesterday a ship sunk has
b. dat (*daar) 'n skip gister gesink het.
that (there) a ship yesterday sunk has[6]

→ It explains why OS bleeds TECs.

(7) a. *dat er veel mensen dat boek gisteren gekocht hebben (Dutch)
that Expl many people the book yesterday bought have
b. dat daar baie mense baie/*die bier gedrink het (Afrikaans)
that Expl many people many/the beer drunk have

- Conclusion for English: *there* is blocked if
  i) an external argument occupies the specifier of v/Voice.
  ii) an object raises to Spec,$v_{defective}$ in passive or unaccusative structures

Recall our mismatch:

(8) a. There arrived a man in the garden (unaccusative-1)
b. *There broke a glass (in the kitchen) (unaccusative-2)

- Ideally, we should be able to explain this contrast along the same lines:
  - *arrive*-verbs make available an empty Spec,vP where *there* can merge.
  - *break*-verbs do not make available such an empty Spec,vP;
- It follows then that Spec,vP of *break*-unaccusatives must be occupied.
- **Question**: What is located in Spec,vP of *break*-unaccusatives?

[6] Note that this is out in English; our proposal presented below can only account for the English behaviour.
(i) ??There sank a ship (in the ...)

4. What does *there* correlate with? Two classes of unaccusatives

4.1 A classification of verbs allowing *there*-insertion

Levin (1993:88-91) characterizes the verbs allowing *there*-insertion roughly as *verbs of existence or appearance*. They can be broken down into the following subclasses (a-f) of unaccusatives. *Verbs of change of state* (g) do not permit *there* even though they are unaccusatives:

(9) a. *Verbs of Existence*: blaze, bubble, cling, coexist, ... , tower, wind, writhe
b. *Verbs of Spatial Configuration*: crouch, dangle, hang, kneel, ... , stretch, swing
c. *Meander Verbs*: cascade, climb, crawl, cut, ... , weave, wind
d. *Verbs of Appearance*: accumulate, appear, arise, ... , stem, supervene, surge
e. ?Verbs of disappearance: die, disappear, vanish
f. *Verbs of Inherently Directed Motion*: arrive, ascend, come, …. pass, rise
g. **Verbs of Change of State*: bend, break, chip, … rip, shatter, split, tear, wrinkle

- ***Side remark***: Levin (1993) points out that <u>*verbs of manner of motion*</u> also allow for *there* in the context of directional PPs, but they differ in that the subject must follow this PP.

(10) a. i. There arrived three gentlemen from Verona.
ii. ??There arrived from Verona three gentlemen.
b. i. *There ran a raggedy looking cat into the room.
ii. There ran into the room a raggedy looking cat.
c. Suddenly there flew through the window [that shoe on the table]

- Cases such as (9bii) are called "outside verbals" in Deal (2009). Outside verbals do not obey the definiteness restriction (cf. 9c) and allow "a bewildery variety of verbs" (Milsark 1974). We refer to Deal (2009) for an analysis of these cases and concentrate on "inside verbals".

4.2 Is there a causative event in Spec,vP (Deal 2009)?

- Deal (2009) offers an account for the contrast between the two classes of unaccusatives concerning *there*-insertion, cf. also Borer (2005) and Alexiadou (to appear).

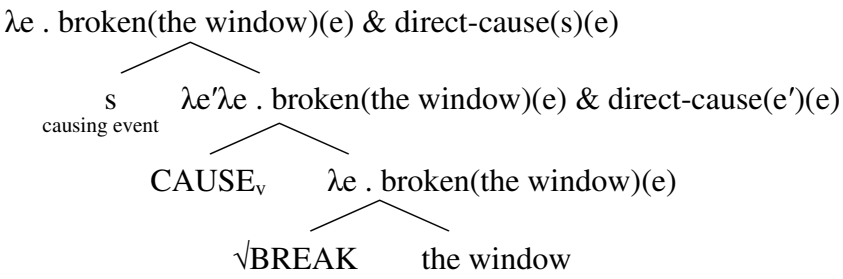
(11) a. There appeared a shadowy figure in the doorway.
b. There arrived a train in the station.
c. *There melted a block of ice in the front yard.
d. *There slowed a train (on the eastbound track)

- Hypothesis: *there* is selected by specific verbs (e.g. Freeze 1992). No!
  (i) This would be *optional* selection
  (ii) This would be selection of an element without meaning

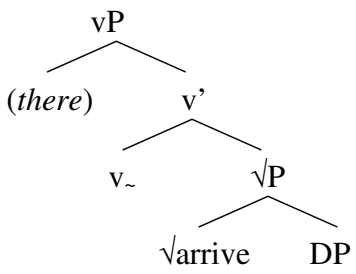
Deal's proposal:

- *There* is inserted at the edge of a vP that lacks an external argument, i.e. into a non-thematic Spec,vP position.
- Unaccusatives rejecting *there* have Spec,vP already occupied.
- **Causative hypothesis**: The vP of an unaccusative verbal root may contain expletive *there* just in case it does not contain CAUSE.
- The causing event is syntactically represented as an external argument of vP.

(12) a. *Severing the causing event from its CAUSE head (Deal 2009)*



b.



- Tests for the presence of CAUSE:

A: licensing of causer-PPs (cf. AAS 2006):

(13) a. The window cracked from the pressure
b. The plane arrived from Tokyo/*from the tailwind.

B: The licensing/interpretation of *by-itself* (Chierchia 1989, 2004):

(14) a. The window cracked by itself (without outside help)
b. The student arrived early by herself
No one else arrived early. ('alone' reading)
* Nothing caused the early arrival. ('without outside help' reading)

C: participation in the causative alternation:

Most verbs that undergo the causative alternation cannot undergo *there*-insertion (Haegeman 1991, Hale & Keyser 2000). But there are of course exceptions, as because participation in the causative alternation is not entirely predictable from the structure of the intransitive form:

causative <–> inchoative (break, grow) causative <–> unaccusative (hang, develop, grow)

Comments: This proposal faces has a number of theoretical and empirical problems:

- In (12a), v does not introduce an event but just a CAUSE-relation. Normally, v introduces an event. How can such a v be a verbalizer?
- The claim that an event is located in a Specifier position is strange; a Spec position is typically a DP/NP position. Specifiers need a category; but the term "event" is not a category. "Event" is a semantic, not a syntactic notion. This corresponds to a v-category in the syntax, but v does not merge in Spec.
- ***from*-PPs**: English *from*-PPs are problematic as they seem to be much more restricted than their counterparts in e.g. German or Greek. Nevertheless, verbs such as *die*, *roll* allow from-PPs – to some extent – as well as *there.*

(15) a. The ball rolled across the goal-line from the strong wind (Schäfer 2009)
b. There rolled a ball across the goal-line (awake, arise, decay, …)

- **by itself** is not a good test for the presence of a causative event (Schäfer, 2007, Schäfer 2009, also Reinhart 2002). It does not need a syntactically represented *cause*-relation; it can presuppose one. Furthermore, *there*-verbs are compatible with *by-itself.*

(16) a. The ball rolled across the goal-line all by itself

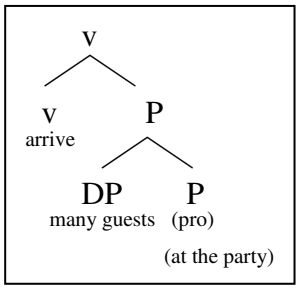
b. Der Student wird *von selbst* rechtzeitig ankommen, du must ihn nicht daran erinnern.
The student will by self on-time arrive, you do not have to remind him

→ While we are sympathetic with the overall idea, we do not think that it is a causative event that is relevant for the blocking.

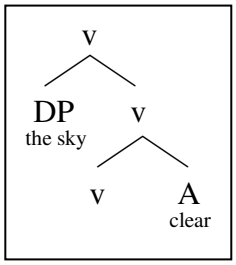
4.3 Hypothesis: *There* is an internal argument in Spec,vP

- Hale & Keyser (2000) assume two different lexical syntactic representations for unaccusatives.
- With verbs such as *arrive, occur*, …, the theme is introduced within the complement of the verb, in the specifier of a small-clause headed by a (potentially covert) P-projection.
- With verbs such as *break, open*, … the theme is introduced in the specifier of the verb that takes an adjective as its complement (a composite dyadic lexical projection, also called a complex predicate; e.g. Beck & Johnson 2004, Embick 2004, McIntyre 2004).
(Variation whether there is a PRO/trace in Spec,AP or not).

(17) a.

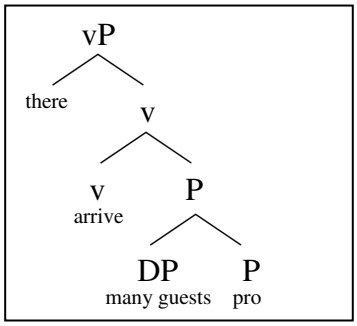


b.

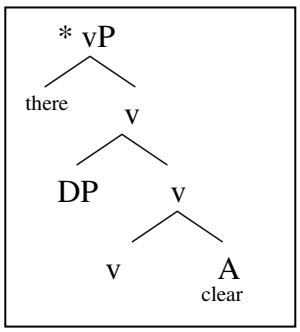


- Hale & Keyser do not propose this solution, but with the background of the "low-*there*"-hypothesis discussed above, these structures could, in principle, explain the distribution of *there* in the context of unaccusatives.

(18) a.



b.



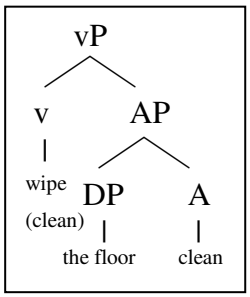
-/->There is no OS-Spec in English

- In the rest of this talk we want to investigate whether this is the correct explanation for the unaccusativity mismatch observed with *there*.

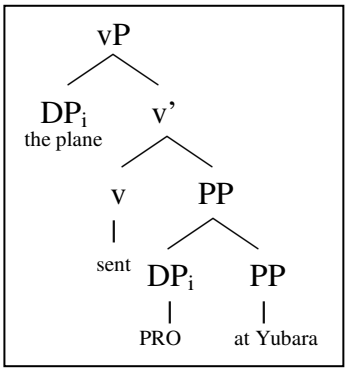
5. Tracing the position of internal arguments

- Both structures above in (17) are **bi-eventive/resultative**. They differ concerning the position where the theme argument is merged; either this is merged as the argument of the lower-event small-clause or as the argument of the higher-event verb.
- Over the years, there has been lots of discussion about the correct analysis of resultative structures. Some authors argued that the small-clause analysis is generally correct (e.g. Hoeckstra 1988), some claimed that the complex-predicate analysis is generally correct (e.g. Beck & Johnson 2004).

(19) a. He wiped the floor clean
(cf. Hoekstra 1988)



b. Thilo sent the plane to Yubara
(Beck & Johnson 2004)



- Dobler (2008a) discusses transitive, resultative constructions and concludes that both structures exist:
  - The small-clause analysis is correct for transitive resultatives referring to a *change of location.*
  - The complex-predicate analysis is correct for transitive resultatives referring to a *change of state*.

To determine this, she investigated whether an existential operator in object position can be part of the presupposition of ***restitutive again***.

5.1 The interaction of *wieder/again* and existential operators in object position

- Repetitive vs. restitutive *again* as a structural ambiguity (von Stechow 1996)
- Word order (i.e. syntax) disambiguates → syntactic decomposition (vP + resultP)

(20) a. Thilo öffnet die Tür wieder
Thilo hatte die Tür schon einmal geöffnet (repetitive &
Die Tür war schon einmal offen restitutive)
b. Thilo öffnet wieder die Tür (only repetitive)

- German definite objects always leave the vP (von Stechow 1996, Dobler 2008a, b modifying Webelhuth 1992):

(21) a. weil er (wohl) das Buch (wohl) gelesen hat
b. weil er (wohl) [$_{vP}$ das Buch [$_{vP}$(wohl) [$_{vP}$ t_{subj} t_{obj} lesen]]]

(22) a. weil er wieder seine Stiefel gesäubert hat
a'. *wieder*$_{repetitive}$ [seine Stiefel [$_{vP}$ $t_{subject}$ v_{cause} [$_{AP}$ t_{obj} sauber
b. weil er seine Stiefel wieder gesäubert hat
b'. [seine Stiefel [(*wieder*$_{repetitive}$) [$_{vP}$ $t_{subject}$ v_{cause} [$_{AP}$ (*wieder*$_{restitutive}$) t_{object} sauber

- Indefinite objects remain inside the vP (unless it gets a strong interpretation).

(23) weil er (wohl) ein Buch (*wohl) gelesen hat

- The fact that indefinites remain vP-internal is compatible with both the small-clause analysis as well as the complex predicate analysis of resultatives, if we assume that the subject is introduced by an extra projection (Voice):

(24) [$_{VocieP}$ Subject *Voice* [$_{vP}$ (Object) *v* [$_{ResultP}$ (Object) *state*]]]

- Nissenbaum (2006) discusses scope-interactions between *again* and indefinites. Below, we see this interaction in the context of a mono-eventive verb. Depending on where the indefinite is interpreted, we get different readings.

(25) Someone is sneezing again

a. again [∃x.x is sneezing] (different person)

b. ∃x [x is sneezing] (same person)

c. [$_{IP}$ Someone$_i$ is [[$_{vP}$ t_i sneezing] again]

- In German, the readings are determined by the surface order:

(26) a. weil [wieder [$_{VoiceP}$ jemand [$_{vP}$ nießt (different person)

b. weil [$_{VoiceP}$ jemand [$_{vP}$ wieder nießt (same person)

- Dobler (2008a, b) uses the scope-interaction between *restitutive again* and an indefinite object to investigate the position of the internal argument in transitive resultative constructions: Is the internal argument an argument of the result state (*small-clause analysis*) or of the verb (*complex-predicate analysis*)?
- The crucial difference is that only the small-clause analysis predicts that the existential operator can be interpreted inside of the result-state clause, i.e. inside the presupposition triggered by restituive *again*.

(27) [Subject *Voice* [$_{vP}$ (Object$_{indef}$) *v* [again$_{restitutive}$ [$_{RP}$ (Object$_{indef}$) *state*]]]]

same *potentially different*

- Dobler argues that the following picture emerges (in both, English and German):

(28) *Change of state:*

Pandora scrubbed [a donkey clean again]

a. #again [∃x.x is a donkey and x is clean]

b. ∃x.x is a donkey and again [x is clean]

(29) *Change of location*:

Pandora put [a donkey in her stable again]

a. again [∃x.x is a donkey and x is in Pandora's stable]

b. ∃x.x is a donkey and again [x is in Pandora's stable]

→ She concludes that the theme in change-of-state resultatives is (syntactically) the argument of the verb (vP), while the theme in change-of-location resultatives is the argument of the secondary predicate (resultP).

5.1.1 change-of-state verbs

- The contexts exclude an irrelevant repetitive reading and force a restitutive reading

(30) a. Context: *Clyde goes to the beach and collects a couple of white shells and one pink shell. When Bonnie cleans the house, she accidentally breaks the pink shell. Hoping that Clyde will not notice the mishap, …*

b. #Bonnie malt wieder eine Muschel rosa an[7]

c. #Bonnie is painting a shell pink again

(31) a. Context: *Sally owns a brown mouse and a great number of white mice. While she is gone, Harry takes care of them and the brown mouse dies. Harry is freaked out and wants to cover up the loss…*

b. #Er färbt wieder eine Maus braun

c. #He dyes a mouse brown again

(32) a. again [∃x.x is a mouse and x is **brown**] → *impossible reading*

→ There is a brown mouse and there was a (different) brown mouse

b. again [∃x.x is a mouse and x is **dyed brown**] → *possible reading*

→ A mouse is (being) dyed brown at a previous time, and there was a (different) mouse that was (being) dyed brown

(33)

Word order (German)	repetitive	restitutive
wieder > indef. Object	o.k.	#
indef. Object > wieder	o.k.	o.k.

→ DO is located outside of the result phrase (when scope is computed). Possible variants:

i). $[_{vP}$ object$_i$ v $[_{AP}$ PRO$_i$ A]] (Dobler 2008a, von Stechow 2007, Beck & Johnson 2004; problem: case of PRO?

ii). $[_{vP}$ object$_i$ v $[_{AP}$ t$_i$ A]] (Ramchand 2008; problem: reconstruction should be possible

iii) $[_{vP}$ object v [A]] (Hale & Keyser 2000) problem: right semantics?

[7]The repetitive reading is available in English and German but is irrelevant here.

5.1.2 Change-of-location verbs (change of existence in a location)

(34) a. Context: *Until about 200 years ago, bears used to live in the Alps.*
b. Gestern haben Biologen wieder Bären in den Alpen angesiedelt
c. Yesterday, scientists put bears in the Alps again

(35) a. Context: *The island had a mountain that practically disappeared in the course of an earthquake.*
b. Die Bewohner der Insel haben wieder einen Berg errichtet
c. The inhabitants constructed a mountain again

- The judgements are the same for English and German. However, in German the difference in scope corresponds to a difference in word order:

(36) a. Context: *Niki loses his left ear in an accident. Fortunately, the hospital has enough donor ears.*
b. Die Arzte haben Niki wieder ein Ohr angenäht
c. #Die Arzte haben Niki ein Ohr wieder angenäht

(37) a. Context: *Niki loses his ears in an accident. Unfortunately, only one can be retrieved, the other one is lost for good.*
b. # Die Arzte haben Niki wieder ein Ohr angenäht
c. Die Arzte haben Niki ein Ohr wieder angenäht

→ DO can be located inside of the result phrase (when scope is computed).

i) $[_{vP}$ v $[_{RP}$ object$_i$ Result]] (Hale & Keyser 2000)

ii) $[_{vP\text{-}1}$ v$_{event}$ $[_{vP\text{-}2}$ Object$_i$ v$_{be}$ [PRO$_i$ PP] (Dobler 2008a)[8]

iii) $[_{vP\text{-}1}$ v$_{event}$ $[_{vP\text{-}2}$ Object$_i$ v$_{be}$ [t$_i$ PP]

5.2 Conclusion

Group A: #restitutive again > existential operator
melt, freeze, cool, warm, empty, fill, open, close …
paint (in) pink, dye brown, color blue, hammer flat, open wide, …

[8] This structure might eventually explain why extraction out of the object of these verbs is possible.

Group B: restitutive again > existential operator
put, place, donate, construct, build, …

- Group A contains verbs undergoing the causative alternation; but this is not the right generalization as group B contains such verbs, too (cf. *(sich) ansiedeln*) (Dobler 2008a).
- Group A contains de-adjectival verbs, but we get the same result if we replace "paint pink" with "paint in pink" (cf. Dobler 2008a).
- The correct generalization (Dobler 2008a, b): *change of state verbs* vs. *change of location* (as well as *creation verbs* ≈ cause to be in a location).[9]

6. On the position of the subjects of unaccusatives blocking *there*-insertion in spec,vP?

- Dobler investigated transitive constructions while we are interested in unaccusatives.
- Many of the Group-A verbs express a change-of-state and have an unaccusative alternant. If "*transitive object ≈ unaccusative subject*", we would expect the same results for the unaccusative counterparts.
- The transitives in Group B express a change of location; the unaccusatives allowing *there* express also a change-of-location (come into existence ~ come to be in a location).

Prediction:[10]

- The argument of change-of-state unaccusatives is located outside the ResultP in the specifier of the unaccusative vP; there, it blocks *there*-insertion.
- The argument of change-of-location unaccusatives can be located inside the ResultP; if it stays there, it does not block *there*-insertion in Spec,vP.

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[9] Borer (2005) and Alexiadou (to appear) also capitalize on the notion of location. Concerning the unavailability of VS orders with verbs of change of state and passives which do not embed a change of state in e.g. Greek and Hebrew, it is argued that these lack a locational argument and thus are incompatible in a structure which has very specific semantic and discourse properties, as suggested by Cohen and Erteschik-Shir (2002). Here we show that such predicates actually involve a different structure from the ones that have a locative argument.

[10] In order to test this prediction, we checked several examples with English native speakers. The results presented here are somehow idealised, as not all speakers judged them in a similar manner. However, we think that the overall picture is correct; the #-sign indicates that a reading *restitutive again* >> *indefinite theme* is not available. We would like to thank Eva Dobler, Terje Lohndal, Andrew McIntyre, Walter Pederson and Marc Richards for providing us with judgements.

6.1 Verbs of change of location

- *Verbs of Appearance*:

(38) a. Context: *Until about 200 years ago, bears used to live in Bavaria, but they were completely wiped out by the inhabitants in the 19th century.*
b. Letzten Sommer ist wieder ein Bär in Bayern aufgetaucht/erschienen
c. Last summer, a bear appeared in Bavaria again

- *Verbs of Inherently Directed Motion*

(39) a. *Context*: *Until about 200 years ago, bears used to live in Bavaria, but they were completely wiped out by the inhabitants in the 19th century.*
b. Letzten Sommer ist wieder ein Bär nach Bayern gekommen
c. Last summer, a bear came to Bavaria again

(40) a. Context: *Until about 200 years ago, bears used to live in Bavaria, but they were completely wiped out by the inhabitants in the 19th century. In Northern Italy, however, some bears still exist.*
b. (#)Man hat mir erzählt dass letzten Sommer wieder ein Bär in Bayern ankam
c. (#)Last summer, a bear arrived from northern Italy in Bavaria again

- *Verbs of disappearance*: (die, disappear) It is argued in Levin, that these verbs allow *there*-insertion marginally; it is argued in Deal (2009) that these verbs do not allow there-insertion. (We do not discuss this class here, as it is hard to test.)

6.2 Verbs of Change of State[11]

(41) a. *Context: Yesterday, Sally visited a popsicle factory. There she had the opportunity to taste the popsicle mixture before it was frozen. She really loved it.*
<u>transitive example (Dobler 2008a):</u>
b. #Daheim angekommen hat Sally wieder ein Eis am Stiel geschmolzen
c. #Once she was at home, Sally melted a popsicle again.

[11] There is a general complication with change-of-state verbs. Many of these verbs express "the disruption of material integrity" (Levin 1993). Since we are interested in a restitutive reading, these verbs are complicated to test; how can something start out broken, become united and break again?

unaccusative example:

b'.#Daheim angekommen ließ sie wieder ein Eis am Stiel schmelzen

c'. #Once she was at home she made/let a popsicle melt again

(42) a. *Many years ago, a type of squirrel existed which was yellow. Unfortunately, they all died due to a mysterious infection.*

b. #Forscher haben es geschafft, dass sich in einem Labor wieder ein Eichhörnchen rot gefärbt hat.

c. #Scientists working in a Swiss laboratory managed to bring it about that a squirrel turned yellow again.

6.3 '*Verbs of change of state*' under a '*come into existence*' reading

- In addition to its use as a verb of change of state, the verb *break* also has a use as a verb of coming into existence, as in *The war broke (out.)*
- Besides its change-of-state sense, the verb *open* has an appearance sense paraphraseable as 'become visible' or 'come into existence".

Question: Is this difference relevant for *there*-insertion? It seems so as a tendency:
(1[(very good] - 5[very bad])

(43)	a. There broke a vase in the living room	5	4	4
	b. There opened a window in the living room	5	4+	3
	c. During the spring, there suddenly broke (out) a war in west India.	5	2	2,5
	d. Suddenly, there opened a cavity underneath their feet.	1	2	2
	e. Suddenly there opened a gap in the middle of the street	3	1	4

- The '*come into existence*' reading makes available the scope again$_{\text{restiutive}}$ < indefinite

(44) a. *For hundreds of years, people could get into the mountain through a small hole/crack. After a strong earthquake, this entrance was blocked. But after a long period of rain,*

b. a hole opened in the rock again which allowed the people to enter.

c. Im Laufe der Zeit hat sich aber wieder eine Lücke geöffnet

(45) a. *Context: When we started here, all the walls were covered with numerous gaps and holes which we closed with great effort.*
b. But during the storm, a huge gap opened again.
c. Durch den Sturm hat sich plötzlich wieder ein Spalt in der Wand öffnete

→ This suggests that the relevant parameter is not strictly syntactic/categorial (adjectival vs. prepositional), but semantic/conceptual (change-of-state vs. change of location/existence).

→ But this semantic parameter is syntactically reflected by the position possible for the theme.

7. Conclusions and open questions

- The theme of change-of-location verbs originates inside the result-phrase where it can, in principle, stay.
- The theme of change-of-state verbs is obligatorily located in Spec,vP, not in the Result state.
- *There-insertion* is blocked in the latter context.

(46) a. $[_{vP}$ ***there*** $[_{ResultP}$ *theme*$]]$ vs. b. $[_{vP}$ **theme/*there** $[_{ResultP}]]$

Problem:
Many of the *there*-insertion verbs are stative or atelic; while these allow a reading *again* << *indefinite*, it is not clear that this is a *restitutive* reading.

(47) <u>*Verbs of Existence*</u>:
a. Jetzt lebt/haust wieder ein Maulwurf in unserem Garten
b. A mole lives in our garden again

(48) <u>*Verbs of Spatial Configuration*</u>*:*
a. A cross hangs above the table again
b. jetzt hängt wieder ein Kreuz über dem Tisch

(49) *Meander Verbs*:

a. Wir hoffen, dass sich bald wieder Flüsse durch diese Ebene schlängeln.

b. We hope that soon a river will meander through this area again

If our account of the distribution of *there* is correct, these verbs must have a structure as in (50) below. However, at the moment we have no clear distributional evidence in favor of this.

(50) [$_{vP}$ *there* lives/hang/meander [$_{secondaryP}$ *theme* in place]]

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