Unaccusatives with Overt Causers and Experiencers

In several Balkan languages a passive core may combine with a dative DP, yielding among other possible interpretations an involuntary state reading, rendered through ‘feel like’ in English, as for the Albanian sentence in (1).2

(1) a. Benit i ndërto-hej (një shtëpi).
   Ben.thedat himdat.cl build-Nact,P,Imp3S a house
   ‘Ben felt like building (a house)’

On the other hand, according to Rivero (2004) all Balkan languages share the construction in (2), in which a dative/genitive combines with an anticausative core, yielding among other possible interpretations (discussed most recently in Kallulli 2005a) a reading best described in terms of unintended causation. This reading obtains also in other languages, e.g. German and Spanish, as in (2b,c).

(2) a. Albanian: Benit i-u thye dritarja.
   Ben.the dat him dat cl-nact.Aor broke.3S window.the
   ‘Ben unintentionally broke the window’

b. German: Dem Ben ist das Fenster zerbrochen.
   the dat Ben is the nom window broken
   ‘Ben unintentionally broke the window’

c. Spanish: A Pedro se le rompió el coche.
   To Pedro REFL cl.dat broke the car
   ‘Pedro unintentionally broke the car’

In spite of the interpretive differences between the sentences in (1) on the one hand and those in (2) on the other, the dyadic predicates in (1) and (2) qualify as unaccusative by several criteria, as discussed in Kallulli (2005a). The sentences in (1), (2) may then be described as dative unaccusative constructions (DUCs).
While the unintended causation reading is missing in (1), both the involuntary state reading and the unintended causation reading may obtain with one and the same predicate, as illustrated through the Albanian examples (3a) vs. (3b), which differ in terms of their grammatical aspect only. As revealed in the glosses in (3a,b), Albanian has two forms for simple past tense (P) that differ in their aspectual value: aorist (Aor), which is perfective, and imperfective (Imp). Only the perfective sentence in (3a) but not the imperfective in (3b) can get an unintended causation reading. On the other hand, with imperfective aspect only the involuntary state reading but not the unintended causation reading obtains.

(3) a. Ben. the dat him dat cl-nact.Aor break.3S window.the nom
   (i) ‘Ben unintendedly broke the window’
   (ii) *‘Ben felt like breaking the window’

   b. Ben. the dat him dat cl-Nact,P,Imp3S window.the nom
   (i) ‘Ben felt like breaking the window’
   (ii) *‘Ben unintendedly broke the window’

The semantic complementarity observed in (3) does not obtain with a non-external causation verb. The sentences in (4a) and (4b) differ morphologically exactly in the same way in which (3a) and (3b) differ. However, the unintended causation reading of (3a) does not obtain in (4b).

(4) a. Ben. the dat him dat cl build-Nact,P,Imp3S a house nom
   (i) ‘Ben felt like building (a house)’
   (ii) *‘Ben unintendedly built (a house)’

   b. Ben. the dat him dat cl-nact.Aor build-3S a house nom
   (i) ‘Ben felt like building (a house)’
   (ii) *‘Ben unintendedly built (a house)’

Why doesn’t the pattern in (3) replicate in (4)? The explanation must be that non-active morphology interacts differently with different (feature) primitives. That is, the lexical (and consequently syntactic) feature composition make-up of (the root of) eat is different from that of break. For the purposes of this article, abstracting away from state-denoting verbs, I will simply assume that activity verbal roots (e.g. build) differ from causative roots (e.g. break) lexically (and syntactically) in that the former project an [+act] feature and the latter a [+cause] feature in v. That is, I will assume that [+act] and [+cause] are primitives.
The main goal of this paper is to uniformly derive the involuntary state and the unintended causation reading of the DUC, as well as monadic unaccusatives (i.e. passives, anticausatives, middles, reflexives), which share the same morphology.

2 Predicate Structure

2.1 The structure of causative predications

Davis and Demirdache (1995) and Demirdache (1997) argue that agentive and causative predications are universally derived from distinct frames. The basic idea here is that an event participant identifying the instigation of a causative event is an agent if and only if that participant intentionally brings about such an event. To illustrate, paraphrasing Demirdache (1997), Rosa in (5) is an agent iff Rosa performs some action of melting which causes the ice to be melted. In contrast, Rosa is a causer (but not an agent) when there is no intentionality involved – e.g. Rosa accidentally turns off the fridge and the ice melts.

(5) Rosa melted the ice.

In this spirit, I contend that the two types of causative predications (agentive and non-agentive) differ in their feature composition make-up. While agentive causatives can be defined as an ordered tuple consisting of the features [+intent] (for intentionality or agency) and [+cause] in little v, as depicted in (6), non-agentive causatives lack the feature [+intent], as shown in (7). Accordingly, the tuple <$[+cause]$> in v makes an agent in Spec of vP, as shown in (6). In contrast, the tuple <$[+cause]$> makes a causer, but not an agent, as in (7).

(6) The structure of agentive causatives

```
  vP
     /\        \\
    Spec:Agent  v'
       /\        \\
      Anna      Spec
             /\        \\
            VP   V'
               /\        \\
              Spec V Compl
                     /\        \\
                    V break
```

(7) The structure of non-agentive causatives

```
  vP
     /\        \\
    Spec:Agent  v'
       /\        \\
      Anna      Spec
             /\        \\
            VP   V'
               /\        \\
              Spec V Compl
                     /\        \\
                    V break
```
The structure of non-agentive causatives

\[
  \text{Spec} : \text{Causer} \\ Anna / \text{the wind} \\
  \langle [+\text{cause}] \rangle \\
  \text{VP} \\
  \text{Spec} : \text{VP} \\
  V' \\
  V \\
  \text{Compl}
\]

2.2 The structure of activity (or process) predications

I claim that, like causatives, activity predications fall into two different types: agentive and non-agentive. Agentive activities differ from non-agentive activities in terms of their feature composition: agentive activity predicates are ordered tuples consisting of the features [+intent] and [+act] in little \( v \), as in (8), whereas non-agentive activities are ordered tuples consisting of the feature [+act] only, as in (9). The tuple \( \langle [+\text{intent}],[+\text{act}] \rangle \) makes an agent in Spec of \( vP \), as in (8). In contrast, the tuple \( \langle [+\text{act}] \rangle \) makes an actor, not an agent, as in (9).

(8) The structure of agentive activities

\[
  \text{Spec:Agent} \\ Anna \\
  \langle [+\text{intent}],[+\text{act}] \rangle \\
  \text{VP} \\
  \text{Spec} : \text{VP} \\
  V' \\
  V \\
  \text{Compl}
\]
(9) The structure of non-agentive activities

\[
\begin{array}{c}
\text{Spec} \\
\text{Actor} \\
\text{Anna} \\
\end{array}
\]

\[
\begin{array}{c}
\text{VP} \\
\text{Spec} \\
\text{V} \\
\end{array}
\]

In other words, I contend that a sentence containing an activity predicate as in (10) is ambiguous between an agentive and a non-agentive reading.

(10) Rosa screamed.

\textit{Rosa} in (10) is an agent iff she intends her action, i.e. she could stop screaming if she so willed. In contrast, \textit{Rosa} in (10) is an actor but not an agent if she does not intend her screaming activity (e.g. she is on drugs that make her scream and possibly even unaware of her screaming).

3 Analysis

3.1 Defining non-active morphology

Much research has maintained that certain morphological operations apply either in the lexicon, or in the syntax. To wit, passivization, and/or reflexivization have commonly been treated as operations that suppress either an argument position (external or internal), a theta role in the thematic grid of the verb, or some element in the lexical-semantic structure of a predicate (depending on the theory) (cf. Grimshaw 1990, Levin and Rappaport Hovav 1995, Rappaport Hovav and Levin 1998, among others). In this spirit, also here I will analyse non-active morphology as a suppression operation. However, unlike the types of suppression just cited, I believe that non-active morphology operates in the syntax solely and purely in a linear fashion fully ignoring the content of the element that it affects. Specifically, I define non-active morphology as in (11).
3.2 Deriving the unintended causation reading

I contend that the unintended causation reading of the dative unaccusative constructions in (2) is derived from (dyadic) agentive causative predications, the structure of which was given in (6). Specifically, if the definition in (11) is applied to the structure in (6), the outcome is the representation in (12), since the first feature in (6) is [+intent].

(11) Definition of non-active/reflexive (and other unaccusative) morphology:  
Non-active (and other unaccusative) morphology suppresses the first feature in a predicate structure.

(12)

\[
\begin{array}{c}
\text{Spec: Unint. Causer} \\
\text{VP} \\
\text{\langle [+\text{intent}], [+\text{cause}] \rangle} \\
\text{break} \\
\text{V} \\
\text{Compl}
\end{array}
\]

Due to the suppression of [+intent], no agent will be projected in Spec of vP. The feature [+cause] on the other hand is too little to assign a theta-role since the integrity of the tuple has been affected due to suppression of a feature, the idea being that assignments are tuples. On the other hand, for the derivation to converge the feature [+cause] has to be saturated. The only way for this feature to be licensed is by another argument moving to the specifier of vP. I claim that the dative argument projected in the Spec of VP is the one that fulfils this role. Let us assume that the feature that licenses the projection of the dative argument in Spec, VP is [+affected], which is why the dative here will be interpreted as an affected participant. When non-active morphology suppresses the feature [+intent], the dative argument moves from Spec of VP to Spec of vP so that the [+cause] feature is licensed. Consequently, once in Spec of vP, the theta-role of the dative will be something like an affected causer, which I argue is identical to unintentional causer. Precisely because of this syntactic (and semantic) composition, the dative argument in an unaccusative construction will always be ambiguous between an affected and a causer interpretation, unless pragmatic considerations (dis) favour one of these readings.
3.3 Deriving the involuntary state reading (ISR)

3.3.1 The simple(r) case: ‘build’-type roots and the ISR

Paralleling the discussion on the derivation of the unintended causation reading from dyadic agentive causatives, I claim that the involuntary state reading of the sentence in (1) is derived from (dyadic) agentive activity predications. The structure of dyadic agentive activities was given in (8). If the definition in (11) is applied to this structure, the outcome is the representation in (13), since the first feature in the structure in (8) is [+intent].

(13)

Again, the suppression of [+intent] here eliminates the possibility of the projection of an agent argument in Spec of vP. On the other hand, the remaining feature [+act] in v is not enough to make an actor since theta-role assignments are tuples. However, the derivation can be saved if the remaining feature in v, namely [+act] can be saturated in another way. As in the previous case, the only way for this feature to be checked off is by another argument moving to the Specifier of vP. Again, I claim that the dative argument introduced in the Spec of VP by the feature [+affected] of the root under V moves to Spec of vP to license the [+act] feature. Due to the bundling of the features [+affected] and [+act] upon movement of the dative argument to Spec of vP its resulting theta role will be something like an affected actor, which, metaphysically speaking, comes rather close to experiencer, which is how the dative argument is interpreted in the sentence in (1).

3.3.2 The hard(er) case: ‘break’-type roots and the ISR

While this analysis accounts for data like (1), the question arises whether and how the semantic complementarity in terms of the unintended causation vs. involuntary state reading between (3a) and (3b) can be captured by this analysis.
Both (3a) and (3b) contain the same verbal root. As discussed earlier, formally (3a) and (3b) differ only with regard to aspectual morphology. While the unintended causation reading of (3a) is straightforwardly derived under the analysis in 3.2, this cannot explain how the involuntary state reading of (3b) comes about. On the other hand, recall that as a causative root, the ontological event type of *break* is not [+act] but [+cause]. As such, it is expected to project a [+cause], not a [+act] feature in the syntax. However, if it does not project a [+act] feature the analysis in the previous section cannot readily account for the involuntary state reading of (3b).

I suggest that though the root *break* is causative rather than process-like, i.e. it is expected to project the feature [+cause] and not [+act], due to a procedure such as event composition (Pustejovsky 1991), it projects a [+act] (not a [+cause]) feature in the syntax. Specifically, I assume that imperfective morphology is an event functor that invariably shifts the event type of a root into a process. That is, when imperfective morphology quantifies over telic event types it yields atelic events, which will be projected as such in syntax.

3.4 Deriving the anticausative, passive and middle

I argue that the anticausative, passive and middle formations are derived from non-agentive predications, the structure of which was given in (7) and (9) for causative and activity verbs, respectively. Non-active/reflexive morphology was in (11) defined as an operation that suppresses the first feature in a predicate structure. Note that the first feature in the structures in (7) and (9) is [+cause] and [+act], respectively, so when this feature is suppressed by non-active/reflexive morphology, the outcome of this operation will be basically a monadic unaccusative structure, as in (14) and (15).
Anticausatives are derived when non-active/reflexive morphology operates on the structure of an aspectually telic non-agentive causative (recall the semantic complementarity between the perfective (3a) and the imperfective (3b)).

The distinction between a passive and a middle is, I believe, due to the difference between different aspectual operators. Specifically, the middle construction is derived when the verb in the structures in (14) and (15) is under the scope of a dispositional operator, such as the imperfective (though the notion ‘imperfective’ does not seem to be semantically homogenous). In contrast, passive obtains when the verb in (14) and (15) is under the scope of a non-dispositional aspectual operator (such as generic-habitual or episodic).

Space limitations prevent me from discussing the irrelevance of arguments bearing on facts such as the sanctioning of by-phrases or control into purpose clauses and/or adverbs of intentionality in passives vs. their impossibility in anticausatives and middles in English for the analysis that I have outlined here. However, I have discussed these issues in detail elsewhere, so the interested reader is referred to Kalluli (2005b).

### 3.5 Deriving reflexives

I claim that reflexives are derived from transitive agentive activities (i.e. basically the structure in (8)) when Spec, VP is empty (alternatively, not there). That is, as different from the dative unaccusative construction, reflexives are not derived from di-transitive agentive activities. By the definition in (11), when non-active morphology operates on a transitive agentive activity shell it suppresses the feature [+intent] in the tuple in v since this is the first feature. Since the only way for the remaining feature in the tuple, namely [+act] to get saturated is by another argument moving to its specifier position (recall the discussion in section 3.3), the internal argument (i.e. the theme) will move to Spec of vP, becoming therefore an actor theme, which is exactly how the surface subject of reflexives is interpreted.
4 Conclusion and open questions

A range of unaccusative constructions across languages (to wit the dative unaccusative construction and its various interpretations, as well as anticausatives, passives, middles and reflexives) can be formally and uniformly derived by combining the idea that agentive (both causative or activity) predications and non-agentive (both causative or activity) predications are universally derived from distinct frames (i.e. feature tuples) and that unaccusative morphology is a feature-suppression operation in the syntax that invokes linearity, a well-supported principle of cognitive processing.

Several other conclusions can be drawn. For instance, sentences such as in (1) show that telicity is not a semantic determinant of argument expression (in the sense that it does not determine grammatical function, which following Marantz (1984) and Levin (2000), I take to be the core of argument expression). Also, the data presented here support the claim in Rappaport Hovav and Levin (2002) that although argument expression is not determined entirely on the basis of its lexical feature composition make-up, a verb’s (alternatively, a verbal root’s) lexicalized meaning is important to determining or constraining its argument expression options, a view also maintained in Hale and Keyser (1993, 1998).

Another important conclusion is that theta roles are not primitives in the theory, but derived from the featural content of syntactic heads. In this respect, the analysis here is reminiscent of Reinhart’s (2002), though there are several important differences, which due to length considerations, cannot be addressed here.

The analysis that I have proposed makes several clear predictions. First, it predicts that non-agentive verbs of internal causation (e.g. blush, tremble, etc.) can’t appear in the dative unaccusative construction. Second, the analysis outlined here predicts that verbs of emission can’t appear in the dative unaccusative construction, either. Third, it predicts that extrinsic instigators
cannot appear in the dative unaccusative construction. All three predictions hold across all the languages cited.

I have glossed over some aspects which need to be dealt with in the framework of an integrated theory of the syntactic projection of unaccusatives. First, I haven’t gone into issues concerning the inability of accusative case assignment, but this specific aspect can in general be dealt with along the lines of Bennis (2004). Another open question is why the involuntary state reading which obtains in the rest of the Balkan languages does not obtain in Greek and Rumanian, which further scrutiny notwithstanding, seem to have the formal ingredients necessary for the licensing of this interpretation.

Notes

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2 In Kallulli (2005a) I have argued contra Rivero (2004) that constructions such as (1) (and (2)) are truly ambiguous, not vague. Space limitations prevent me from presenting these arguments here.

3 Active vs. non-active voice correspond roughly to the distinction unergative/unaccusative. This correspondence is rough by virtue of the fact that while unergatives are always active morphologically, some unaccusative verbs appear in this voice (i.e. are morphologically unmarked), too. For details, see Kallulli (1999, 2005b) on Albanian, Alexiadou and Anagnostopoulou (2004) on Greek. Crucially, however, unergatives cannot be formally non-active, just as passives, lexical reflexives and middles cannot be formally active.

References


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