

Going is not Becoming Some Comments on the Resultative in English (and Icelandic)

1. Introduction

Halliday (1967) coined the term *resultative* for a construction in which the result of an event described by the main verbal predicate is specified by a secondary predicate, as in (1).

- (1) The blacksmith hammered the metal flat.

In (1), the verb *hammer* describes an activity and the adjective *flat* describes the result of this activity. He distinguished this from a secondary predicate which describes the general background state of a participant during the event, rather than as a result of it, as in (2).

- (2) The blacksmith hammered the metal, hot.

In (2), the metal is (and remains) hot during the hammering; it does not become hot as a result of the hammering. This he calls a *depictive*.

A striking contrast between the resultative and the depictive is that the depictive can often be used with the subject but the resultative appears to be tied to the direct object.

- (3) The blacksmith hammered the metal, tired and sweaty.

- (4) Tired and sweaty, the blacksmith hammered the metal.

So for instance, the depictive in (3) describes how the blacksmith

felt throughout the hammering process (he felt tired and sweaty): it is not naturally understood as describing how he became as a result of the hammering process (he started feeling fresh and clean and ended up feeling tired and sweaty), even though such a scenario is perfectly pragmatically plausible. When we have a depictive, predicated of the subject, we can also order the secondary predicate at the beginning of the clause, as in (4) (indeed this is often more natural for subject depictives).

This difference apparently relates to another important difference between resultatives and depictives: that depictives do not alter the basic argument-taking and aspectual properties of the main verb but resultatives do. In particular, resultative predicates turn atelic activity predicates into telic result predicates. For instance, the verb *hammer* is an atelic verb which does not specify any necessary endpoint or result, either with a direct object as in (5) or without one as in (6), and so occurs naturally with the atelic measure phrase *for x time* and not the telic measure phrase *in x time*.

- (5) The blacksmith hammered the metal for hours/*in an hour without any noticeable result.
- (6) The blacksmith hammered away at the metal for hours/*in an hour without any noticeable result.

Similarly, the adjective *flat* is a stative predicate, occurring naturally with the copula in the simple present, not the progressive.

- (7) The metal is flat.
- (8) *The metal is being flat.

However, combined in this way (*hammer ... flat*), the construction describes a telic event in which an activity leads to a result. In this case, the natural measure phrase is telic *in x time*, as in (9) unlike activity *hammer* in (5), and the construction occurs naturally with the progressive, as in (10) unlike stative *flat* in (8).

- (9) The blacksmith hammered the metal flat in an hour/*for hours.
- (10) The blacksmith was hammering the metal flat.

The object-orientation of resultatives has therefore been attributed to the way the syntax constructs information on the result of an event. Resultatives are therefore an excellent example of the interaction of syntax and semantics, in which the meaning of the combination of verb and adjective is clearly more than the sum of its parts.

The term resultative is often applied to any construction where a PP or AP is added to a verb to describe some final state, regardless of whether the event involves change to a final state or motion to a final location (Simpson 1983; Levin and Rappaport Hovav 1995; Tortora 1998; Beck 2001; Mateu and Rigau 2002; Mateu 2005). However, it is clear that there are important distinctions between the two types. This paper argues that change-of-state and motion constructions should not be collapsed into a uniform analysis, as this obscures important differences between the two constructions (Goldberg 1995; Kratzer 2005; Son 2007; Whelpton 2010). In particular, the restriction to direct object is robust for change-of-state resultatives but it does not hold for motion constructions, at least not in a straightforward way. In conceptual semantic terms, a distinction must be maintained between a change-of-state predicate (BECOME) and a motion predicate (GO), as for example in Jackendoff (1990) and McIntyre (2004), and not collapsed as it is in some approaches, both conceptual semantic (Randall 2010) and syntactic (Mateu 2005).

I begin in Section 2 with the classic formal analysis of resultatives which introduces a direct object restriction on resultative predicates and uses this restriction to account for a difference in behaviour between two classes of intransitive verb. In Section 3, I review a number of important differences between change-of-state resultatives and motion constructions with respect to the direct object, its case-marking and interpretation. In Section 4, I review a number of well-known counterexamples that have been proposed to the direct object restriction and show that in all but one case they are motion constructions whose behaviour is consistent with the properties established for motion constructions; in the one remaining case, the result-marking phrase behaves like an adjunct and not a normal resultative phrase. In Section 5, I conclude that the direct object restriction remains a robust constraint on change-of-state

resultatives but that it does not hold in any straightforward way for motion constructions. Further the systematic difference in behaviour between change-of-state resultatives and motion constructions requires that the two constructions receive distinct representations, otherwise these important differences are obscured.

2. Direct Objects and the Resultative

In the Introduction, I pointed to a well-known contrast between resultatives and depictives, namely that depictives can be predicated of either objects or subjects but resultatives appear to be more tightly associated with the direct object. It does not take long, however, to find examples in English which violate this apparent generalisation.

(11) The icecream froze solid.

Here the adjective *solid* describes the final state of the icecream and the icecream is the subject of the sentence. Even in Icelandic, we find apparent counterexamples (though significantly (11) is ungrammatical; see Whelpton (2010 to appear-b) for further discussion).

(12) Hann fraus fastur í ísnum.
 he.NOM froze stuck.NOM in ice-the
 ‘He froze stuck in the ice.’

Here it is the subject *hann* ‘he’ who becomes *fastur* ‘stuck’ as a result of the freezing. One of the most significant steps forward in the analysis of resultatives was to show these are not necessarily counterexamples to the generalisation that resultatives are associated with direct objects but rather provide support for a distinction between two classes of intransitive verbs which show distinct behaviour in the resultative.

The key observation with respect to such examples is that the subject of many intransitives which can act as antecedents to resultative adjectives are related to the objects of transitives. Consider the transitivity pairs in (13) to (18).

- (13) The icecream froze solid.
 (14) John froze the icecream solid.
 (15) Mary swung the gate open.
 (16) The gate swung open.
 (17) The clothes steamed dry.
 (18) Lee steamed the clothes dry.

Such transitivity alternations led Perlmutter (1978) to propose that some intransitive subjects are derived from underlying direct objects: the so-called Unaccusativity Hypothesis. This in turn allowed Simpson (1983) to suggest that the resultative adjective really is predicated of a direct object; it is simply that the initial direct object is turned into a subject.

- (19) John froze the icecream solid. → ___ froze the icecream solid.
 → The icecream froze solid.
 (20) Mary swung the gate open. → ___ swung the gate open.
 → The gate swung open.
 (21) Lee steamed the clothes dry. → ___ steamed the clothes dry.
 → The clothes steamed dry.

This argument for a class of *unaccusative* verbs whose subject is underlyingly a direct object is strengthened by a striking contrast in behaviour in the resultative between unaccusative verbs like *freeze*, *swing*, and *steam*, and another class of intransitives called *unergatives*.

Unergative intransitive verbs can also undergo transitivity alternations but the subject of the intransitive has essentially the same interpretation (i.e. bears the same theta role) as the subject of the transitive, not its object, as shown in (22) to (27).

- (22) John screamed a message to John.
 (23) John screamed.
 (24) *A message screamed.

(25) John danced the tango.

(26) John danced.

(27) *The tango danced.

Unlike unaccusatives, unergatives cannot form a resultative simply by adding a resultative adjective.

(28) *John screamed hoarse.

(29) *John danced dizzy.

This is consistent with the unaccusative analysis in that in this case the subjects are not derived from underlying direct objects. Assuming that resultative predicates require a direct object antecedent, then the sentences in (28) and (29) will be ungrammatical because the resultative adjectives lack a direct object antecedent.

Nevertheless, unergatives can form resultatives and they do so by adding an unselected direct object, as shown in (30) to (33).

(30) John screamed himself hoarse.

(31) *John screamed himself.

(32) John danced himself dizzy.

(33) *John danced himself.

By adding a reflexive direct object, (30) becomes grammatical, even though the verb *scream* would not normally take a reflexive direct object, as shown in (31). The same goes for *dance* in (32) and (33). Notice that this addition is completely semantically vacuous as far as identifying the holder of the result state is concerned, because we understand that it is the referent of the subject who comes to hold the property described by the resultative adjective: It is John who becomes hoarse from screaming and John who becomes dizzy from dancing. The requirement that reference to the holder of the result state be secured by a direct object reflexive rather than direct pre-

dication to the subject suggests a formal restriction requiring the presence of a direct object.¹

Notice that the unaccusative analysis also explains why such reflexive direct objects are not allowed with unaccusative verbs.

(34) *The icecream froze itself solid.

(35) *The gate swung itself open.

(36) *The clothes steamed themselves dry.

On a reading where it is the icecream that becomes frozen, the gate that swings and the clothes that release steam, then according to the Unaccusative Hypothesis, the intransitive subjects begin as underlying transitive objects which are then promoted to subject position: There is therefore nowhere for the reflexive direct object to go, as the direct object position has already been filled.

Of course, it is possible to imagine an alternative interpretation where the intransitive subjects are not interpreted as non-volitional undergoers of the event but rather as some sort of agent directing the event, in which case the sentences are in fact grammatical. For (35) this might be pragmatically plausible in the right context: for instance, if the gate is automated in some way and the gate's "intelligent" mechanism triggers the opening of the gate. In other cases, it is unlikely that such a reading will be available, except in a fairy-tale world, where for instance clothes are sentient characters capable of taking care of their own needs.

According to the Unaccusative Hypothesis, we therefore have three classes of verb: transitives with an underlying subject and object; unaccusative intransitives with an underlying object; and unergative intransitives with an underlying subject.

1 As one reviewer points out, the grammatical requirement for a direct object may be semantically motivated: for instance, if the resultative itself introduces a thematic interpretation for the direct object, cf. Goldberg (1995) who suggests that the resultative construction imposes a Patient interpretation on the direct object. The point here is simply that the behaviour of unergatives suggests that direct objects are required in resultatives, a point which will provide a significant contrast with motion constructions.

(37) Transitive: SUBJECT VERB OBJECT

(38) Unaccusative: VERB OBJECT

(39) Unergative: SUBJECT VERB

Simpson (1983) proposes that the presence of a direct object is required in the resultative: transitives and unaccusatives provide one by default; unergatives have the option of adding a semantically unselected phrase in the unfilled direct object position. Levin & Rappaport Hovav (1995) dub this the Direct Object Restriction (DOR). The exact mechanism by which this restriction should be realised has been one of the driving forces of debates in the literature (see Whelpton 2010 for a review of these controversies); however, the essential validity of the restriction to direct object has been accepted through much of the syntactic literature.

Nevertheless, a number of counterexamples to the DOR have been proposed. First, there are the examples in (40) to (42) from Wechsler (1997: 313, ex. 15), discussed in detail by Rappaport Hovav & Levin (2001: 770, ex. 10) and Mateu (2005: 57, ex. 4a–b):

(40) The wise men followed the star out of Bethlehem.

(41) The sailors managed to catch a breeze and ride it clear of the rocks.

(42) He followed Lassie free of his captors.

Second, there are the examples in (43) to (45) from Verspoor (1997: 151, ex. 4.102), discussed in detail by Rappaport Hovav & Levin (2001: 770, ex.11) and Mateu (2005: 57, ex. 4c–d & 74, ex. 41c).

(43) John danced mazurkas across the room.

(44) John swam laps to exhaustion.

(45) The children played leapfrog across the park.

What is striking about all of these examples is that all except (44) involve motion to a final location (e.g. the boundary of the room or the park); the spatial path is generally expressed by a PP, as here,

but can be expressed by a relative-location AP, as in (41) and (42); (44) is the exception to this, as the event describes a change of state (becoming exhausted) caused by an open-ended motion event. What makes such examples problematic is that the final location described by the PPs and APs is the location of the subject and not the object. If these PPs and APs are characterised as resultative predicates then they are apparent counterexamples to the DOR, because the subjects in these examples cannot possibly be derived objects in the standard sense, given that there are already direct objects present.

In the following section, I review some basic transitivity contrasts in change-of-state resultatives and motion constructions and show that the same verb behaves differently in the two kinds of construction. I then consider the above counterexamples in more detail. It should be noted, however, that with the exception of (44), these examples underline the central point of this paper: that motion constructions are distinct from change-of-state resultatives with respect to the DOR.

3. Motion versus Change-of-State Resultatives

Motion constructions generally use the intransitive form of the verb, where the subject is the entity undergoing motion and the complement describes the path or final location to which the subject moves; this complement is typically a PP.

(46) John danced out of the room.

In (46), John moves from being in the room to being out of the room and the manner of his motion is described by the verb, i.e. dancing is his mode of movement. The basic meaning can be expressed as in (47) or (48), which Mateu (2005: 60, his ex. 10a) calls *Romanglish*, as it is the standard way of expressing this in Romance languages, where the path of motion is incorporated into the verb and the manner of motion expressed as an adjunct (Talmy 1991, 2000).

(47) John went dancing out of the room.

(48) John left the room dancing.

Grammatically, this meaning is expressed using an intransitive verb. The presence of a direct object is ungrammatical on a simple motion reading, as in (49).

(49) *John danced himself out of the room.

At best, (49) can have a caused motion reading, which one might paraphrase as in (50).

(50) John caused himself to go dancing out of the room.

This reading is also available with transitive uses of *dance*, where the object has disjoint reference.

(51) John danced Sue out of the room.

This would be grammatical on a reading where John can remotely control Sue in some way (say a chip in the brain) and he causes her to move in a particular way.

(52) John caused Sue to go dancing out of the room.

However, this is not the natural reading of (51), which is more naturally interpreted with a comitative reading of shared motion, which might be paraphrased as in (53).

(53) John went with Sue out of the room, dancing.

We can already see therefore that there is a complexity in the interpretation of transitive motion constructions. Where there is a comitative reading, the dependent secondary agent (here Sue) can be realised as a direct object but the motion implicated by the verb applies to both subject and object. On the other hand, a purely causative construction is also possible, in which the subject is a remote controller and only the object undergoes motion along the path in the manner prescribed by the verb.

This contrasts with the behaviour of the same verb in the resultative construction, where the PP describes a final state of the dancer.

(54) John danced himself into a frenzy.

In (54), John comes to be in a state of frenzy by virtue of the dancing. We learn nothing of a change of location and indeed (54) is perfectly compatible with John dancing in the same spot with increasing emotional agitation. In this case, the presence of a direct object is required, even though the reflexive guarantees that we understand that the individual who ends up in the frenzy is the agent of the dancing, i.e. the subject.

(55) *John danced into a frenzy.

The change-of-state reading is therefore associated with an unergative use of the verb in which the subject is the agent of the action. We therefore have a clear contrast with the unaccusative form in (46), where the verb *dance* occurs in a simple motion construction and does not require a direct object.

Once again, it is possible in the change-of-state resultative to have a transitive construction with disjoint reference object but there are two interesting points to note.

(56) ?John danced Sue into a frenzy.

The first and most important point is that there is no comitative reading here with respect to the resultative predicate: i.e. there is no implication that John whipped himself into a frenzy by dancing and simply took Sue along for the ride. It is quite clear that, whether John himself was dancing or not, it is Sue that ends up in the state of frenzy. This is the core insight of the Direct Object Restriction: that resultative predicates predicate themselves of the direct object.

The second interesting point is that the acceptability of the reflexive version does not guarantee the acceptability of the disjoint-reference-object version. So, (56) sounds much stranger out of context than (54). However, in the motion construction, any path

phrase that is natural with the intransitive subject, will also be natural with the transitive construction on a comitative reading, as in (57).

(57) John danced (Sue) out of the room/into the garden/around the room/through the archway...

By contrast, it is well-known that unergative intransitives are much more likely to form natural resultatives with reflexive objects than disjoint-reference objects, a fact noted in Simpson's (1983) original analysis of English and this appears to be particularly true in Icelandic (Whelpton 2010, to appear-a). So although (58) is acceptable in English, it is completely unacceptable in Icelandic (59); even in English, a typical unergative activity verb like *scream* naturally forms an adjectival resultative with a reflexive object, as in (60), but sounds at best marginal with a pragmatically plausible disjoint-reference object, as in (61).

(58) The dog barked me awake.

(59) *Hundurinn gelti mig vakandi/vakinn.

(60) John screamed himself hoarse.

(61) !!!John screamed his husband deaf.

The conclusion is that change-of-state resultatives are object-oriented and the referential properties of the direct object are sensitive to whether or not the object is semantically selected by the verb, with the unselected objects of unergatives strongly preferring reflexive forms; motion constructions, on the other hand, allow comitative readings of shared subject-object motion and express subject-only movement along a path with an intransitive subject and not a reflexive direct object.

The above argument has been developed with a focus on PP complements, which can act both as paths of motion and paths to final states, and the same holds true for adjectival predicates. The

vast majority of AP predicates describe property states of an individual (qualities) and are therefore associated with the change-of-state resultative.

(62) John danced himself dizzy.

The adjective *dizzy* describes the state in which John ends up as a result of his dancing. Once again, the reflexive direct object is required to secure reference to the subject.

(63) *John danced dizzy.

However, if an adjective is used to describe a relative location rather than a quality then it is permissible to use the intransitive.

(64) John danced free of his captors.

(65) John danced clear of the fight.

Free and *clear* are formally adjectives. However, they describe a relative location and not an individual quality (Levin and Rappaport Hovav 1995: 187; Goldberg and Jackendoff 2004: 559; Iwata 2006: 477): in both (64) and (65), John comes to be in a location which is not nearby a locational reference point, his captors in the first case and the fight in the second; the verb *dance* is used as a verb of manner of motion.² Once again, it is possible to use a reflexive or disjoint reference object in these cases but this shifts to an externally caused motion reading which sounds odd out of context.

(66) ?*John danced himself free of his captors.

(67) ?John danced Sue free of her captors.

(68) ?*John danced himself clear of the fight.

(69) ?John danced Sue clear of the fight.

The reflexive cases have only a caused motion reading, which is marginal. The disjoint-reference-object cases are ambiguous be-

2 In this case the verb *dance* will probably not be taken literally to mean that he is dancing but rather metaphorically to refer to a light and lively style of movement!

tween a comitative motion reading (preferred) and a rather marginal caused motion reading. Interestingly, even the comitative motion reading is degraded with the adjectival path predicates.

So far we have seen some systematic differences between change-of-state resultatives and motion constructions with respect to transitivity. Before moving on to a more detailed discussion of the proposed counterexamples to the DOR, it is worth noting another important contrast between motion and change-of-state constructions with respect to object case-marking in Icelandic.

Icelandic has a well-known alternation in which direct objects which are themes of motion are marked with dative case, even when their non-motion variants take accusative case (Barðdal 2001; Jónsson to appear: his ex. 9a–b).

- (70) Jón sópaði gólfíð.
 Jón swept floor-the.ACC
 “John swept the floor.”
- (71) Jón sópaði snjónum burt.
 he shovelled snow-the.DAT away
 “John swept the snow away.”

In (70), *sópa* ‘sweep’ is used as a verb of forceful contact and as such takes the accusative; in (71), it is used as a motion verb and so takes the dative. Not only verbs of forceful contact but also verbs of change-of-state (degree achievements) take the accusative. It is therefore not surprising that accusative is the case used with resultatives. For instance, (72) shows the verb *ljúga* ‘lie’, which marks the topic of the lie with dative and the addressee of the lie with the preposition *að* ‘to’ followed by the dative; however, *ljúga* ‘lie’ can be used idiomatically in a resultative with *fullur* ‘full’, in which case, the addressee is realised as a direct object marked with accusative, as in (73).³

3 Thanks to Einar Freyr Sigurðsson for pointing out this nice example to me.

- (72) Hann laug því að henni.
 he lied it.DAT to her.DAT
 “He lied about it to her.”

- (73) Hann laug hana fulla.
 he lied her.ACC full
 “He filled her with lies.”

Accusative case-marking is therefore expected with change-of-state resultatives in Icelandic, even when the verb normally marks its complement with dative.⁴ There is one important exception to this rule, however, and once again the exception involves motion verbs (Whelpton to appear-b).

- (74) Hún skellti honum flötum á gólfíð.
 she slammed him.DAT flat.DAT on ground-the
 “She slammed him flat on the ground.”

Here the direct object retains its dative case-marking despite the presence of the apparently resultative adjective *flatur* ‘flat’, which simply agrees with the dative case form of the direct object. The fact that this is a motion construction means that the dative marking is retained; indeed, this appears to be a candidate for an analysis along the lines suggested by Rapoport (1999) for inchoatives,⁵ in which the adjective is in fact a depictive on the final locational state

4 One reviewer points out that accusative is also the default case in Icelandic and it is therefore not surprising when it appears on an unselected object, as we have here. However, accusative does not occur with all nonce or borrowed verbs and case selection appears to be at least partly semantically motivated (Barðdal 2001). Even formal accounts acknowledge the role of verb semantics in Icelandic case-marking (Jónsson to appear). The only examples I have found with dative case retention in the resultative involve motion verbs.

5 Rapoport’s analysis of inchoatives would be problematic for Icelandic which does not allow adjectival resultatives with inchoatives, e.g. *frjósa gegnheill ‘freeze solid’. However, the idea of a depictive adjunct on a final state – rather than the whole change event – does seem to suit these motion resultatives well and underlines again the difference between straightforward change-of-state resultatives and motion “resultatives”.

(not the whole motion event), i.e. *flat* describes the general disposition of the theme when it is located on the ground (but not during the whole motion event).

We have now seen a number of ways in which change-of-state resultatives and motion constructions differ in their treatment of direct objects. In light of this discussion, we will now consider the well-known proposed counterexamples to the DOR in more detail.

4. Subject-Oriented Resultatives? Motion vs Change-of-State

First, let us consider the group of examples introduced by Wechsler (1997: 313, ex. 15).

(75) The wise men followed the star out of Bethlehem.

(76) The sailors managed to catch a breeze and ride it clear of the rocks.

(77) He followed Lassie free of his captors.

In (75), the object of *follow* is *the star* but the entity which comes to be *out of Bethlehem* is *the wise men*, the subject; similarly in (76), the object of *ride* is *it* (the breeze) but the entity which comes to be *clear of the rocks* is the subject *the sailors*; and again in (77), the object of *follow* is Lassie (female) but the (male) entity who comes to be free of his captors is the subject, *he*. In each case, therefore, we have a phrase describing a resulting location which is apparently predicated of the subject and not the object.

Rappaport Hovav & Levin (2001: 770–773) argue that subject predication in these examples is confirmed by the failure of the verbs to passivise.

(78) *The star was followed out of Bethlehem.

(79) *The breeze was ridden clear of the rocks.

(80) *Lassie was followed free of his/the captors.

They suggest that this is because of Visser's Generalization (Bresnan

1982: 402; Visser 1963–1973: part 1 11.2:2118): verbs taking subject-controlled predicative complements cannot be passivised, cf. the contrast between (81) and (82).

(81) John promised Bill to leave. [John is to leave = subject control]

(82) *Bill was promised to leave.

This argument is, however, extremely problematic.

Croft (2000: 97, ex. 41b–d; 2012: 304, ex.54a–c) characterises these examples as *correlated motion* constructions. They involve correlated motion because the motion of the agentive subject is determined by the relative location or movement of the object. The clearest example is (77), where Lassie is naturally understood to move to a location away from the captors and the man, by following her, comes to be free of his captors. We can therefore say that the path of Lassie’s movement in some sense determines the path of the man’s movement and it is the man’s movement that gets him free of his captors. (75) is similar in the sense that the path that the wise men take is determined by the position of the star. Croft (2012: 304, fn. 2) acknowledges that this latter example is slightly different in that the star may not in fact move, though he maintains that the two examples are essentially equivalent in the sense that the star is construed as moving: (75) “is somewhat different in that the star is not moving, but the star may be construed as moving in this context”.⁶

Rappaport Hovav & Levin (2001: 772) distinguish the two senses clearly: “In the first the subject is intentionally and actively pursuing the object, which is capable of independent motion, as when a detective follows a suspect... The second sense is [when] the motion of the subject is constrained by the position of the object...”. Unfortunately, they introduce a terminological confusion in their description: they apply the term “correlated motion” to the second sense which may involve a stationary object. Mateu (2005:

6 In fact, I agree with Cruse that this sense involves the construal of movement where none exists. It would be odd for instance to say (a) even if the ranger used the mountain as a prominent orientation point to navigate by. The crucial distinction turns out to be the degree to which the path is shared by subject and object (homomorphism). (a) *The ranger followed the mountain home.

73, ex. 38 & fn. 25) takes up this terminology, further labelling the detective-suspect sense as “causative”. My reading of Croft (2000: 97–98; 2012: 304) is that it is precisely the detective-suspect sense which he takes to be the prototypical case of correlated motion and that he assimilates the stationary-orientation sense (the star) to this by suggesting that the star is construed as moving away from those following it, even though we know in fact that it is not. I will use the term “correlated motion” as Croft does to cover both cases: however, I follow Rappaport Hovav & Levin (2001) and Mateu (2005) in acknowledging the critical importance of distinguishing the two sub-senses.

In the first and primary sense, the path of the subject is determined by the path of the object (detective-suspect): I will refer to this simply as the detective sense and it involves a kind of path homomorphism in the sense that the path the object follows is the very path that the subject then pursues (hence Mateu’s (2005) use of the label “causative” for this sense). The second sense is the one where the object is a stationary object that the subject uses to navigate by: I will refer to this as the navigation sense and it involves path orientation because the subject orients their path towards the object reference point. This distinction matters because it affects passivisation.

(83) The detective followed the suspect to the house.

(84) The suspect was followed to the house.

(85) The sailor followed the North Star to land.

(86) *The North Star was followed to land.

Uses of *follow* involving the detective sense (83) readily allow passivisation (84); however, uses of *follow* involving the navigation sense (85) do not (86). As is typical of motion constructions, the path need not be bounded, unlike the resultative which is by definition a bounding construction; indeed it is not strictly necessary to include a path phrase at all with *follow*, though due to discourse constraints, acknowledged by Rappaport Hovav & Levin (2001:

771, fn. 9), the bare passives are better with some additional context provided.

(87) The suspect was followed (all day long but he never met up with his contact).

(88) *The North Star was followed (all day long but the ship never made it to land).

Returning to Wechsler's examples, it should now be clear that (78), the passive of (75), is ungrammatical on grounds quite independent of Visser's Generalisation: *follow* on the navigation sense does not passivise. The problem is therefore not subject predication over an object by a resultative predicate but rather a restriction on the correlated motion construction. More surprising is the unacceptability of (80), the passive of (77), as following Lassie surely involves the detective sense and not the navigation sense of *follow*. This brings us to the importance of the notion of path homomorphism. Consider the following examples:

(89) Lassie was followed into the woods.

(90) ?Lassie was followed clear of the wreckage.

(91) *Lassie was followed free of the captors.

One obvious factor that may be degrading acceptability here is the categorial difference between adjectives and prepositions: a fact that was also mentioned with respect to examples (66) to (69). As one reviewer notes, subject-oriented depictive adjectives tend to sound marginal in passives.

(92) ?Breakfast was always eaten nude at the commune.

We saw a similar effect even with the comitative shared-motion reading of (67) and (69). However, the contrast between (90) and (91), both with adjectival path phrases, suggests that something more is going on here. I suggest that another important factor relates to the degree to which the paths attributed to the (unexpressed) agent correspond to the path taken by Lassie and that this

in turn is sensitive to whether or not the agent and Lassie begin in the same location.

In (89), we are told that Lassie follows some path leading into the woods; the use of the passive forces us to take the detective sense of *follow* and therefore we assume that the path of the agent is determined by Lassie's path. In this example, the origin point of Lassie's path (at least the point at which the pursuit began) is vague: we therefore assume whatever origin point for the pursuit is pragmatically most plausible.

The adjective *clear* in (90) is used in its relative location sense and here crucially, the relative spatial locations are determined with respect to an origin: the path must start amongst the wreckage. For the agent and Lassie to share a path, Lassie must also start amongst the wreckage. To the extent that we understand Lassie not to have been herself involved in the crash, the sentence will be odd because we are shifting to the navigation sense of *follow* (path orientation), rather than the detective sense. The effect is even stronger with *free* in (91) because the implication here is that Lassie herself must begin as one of the captives and her movement must free herself and not just the agent. The natural understanding of this scenario, however, is that the agent is a captive and the dog is a friendly helper.

It is clear from this discussion that the unacceptability of passive in some examples cannot be used as an argument for subject-orientation of the path predicate in line with Visser's Generalisation. Rather, the passive is sensitive to the semantics of comitative motion versus path orientation. It is significant in itself that the issue here is the correlation of subject and object movement, as we have already seen that change-of-state resultatives are strictly object-oriented and carry no implication of the subject being involved in the resultative state along with the object, even if the subject causes the change, cf. the discussion of example (56). Wechsler's examples may show that the DOR does not hold for motion constructions (though this will depend on the precise syntax proposed for motion constructions) but they do not undermine the DOR for change-of-state resultatives, rather emphasising the difference between the two constructions.

A slightly different set of counterexamples to the DOR is offered by Verspoor (1997: 151, ex. 4.102).

(93) John danced mazurkas across the room.

(94) John swam laps to exhaustion.

(95) The children played leapfrog across the park.

(93) and (95) are once again motion constructions in which the Theme of motion who comes to be in the final location is the subject of the sentence, despite the fact that a direct object is present. Rappaport Hovav & Levin (2001) once again offer a contrast between the passivisation of these examples with the result phrases (ungrammatical) and without (merely marginal but sensitive to discourse factors): “Another minimal pair is *Leapfrog can be played in this park*, with a locative PP, vs. **Leapfrog can be played across this park*, with a result XP predicated of the unexpressed logical subject.” However, Mateu (2005: 75, ex. 44) cites internet examples from Heidi Harley (p.c.) showing that just such examples can also be found in the appropriate discourse context.

(96) One recorded Iroquois lacrosse game was played with over 6000 players per team, and was played across miles.

(97) Field four was played across a wide open slope (dotted with inflatable Speedball targets) and the surrounding woodland.

(98) There are also cases when Tag was played across a particularly large space.

It appears that in this case passives may be available in appropriate discourse contexts. We therefore do not find the simple ban on passivisation expected from Visser’s Generalisation. Rather the marginality of these examples seems to relate to the semantic status of the object.

In both (93) and (95), along with (96) to (98), the objects are what one might call pseudo-cognate objects; as Croft (2012: 304) puts it: “a performance that is reified as a creation resulting from the performance”. In (93), John does a dance and the kind of dance

is a mazurka; in (95), John “does a game” and the game is leapfrog. We can therefore treat “dance mazurkas” and “play leapfrog” as complex unergatives which can be used in motion constructions to express a manner of motion. These examples do suggest however that the DOR does not apply to motion constructions in the way that it applies to change-of-state resultatives. We have already seen that change-of-state resultatives with *dance* are perfectly natural but there is no way of forming them in the presence of the pseudocognate direct object here.

(99) *John danced mazurkas dizzy.

(100) *John danced mazurkas himself dizzy.

(101) *John danced mazurkas into a frenzy.

(102) *John danced mazurkas himself into a frenzy.

This suggests that whatever the analysis of the pseudo-cognate objects, they are grammatically direct objects in this case and they therefore block the formation of change-of-state resultatives, to which the DOR applies. The fact that they are acceptable in motion constructions only goes to confirm that the DOR does not apply to motion constructions and that the relation between the path of motion and the theme of motion is not handled by a predication structure of the sort that we see in change-of-state resultatives. The two kinds of construction must therefore be handled differently and not collapsed.

This leaves us with one potential genuine counterexample to our claim. (94) is a change-of-state resultative (*to exhaustion*) not a motion-to-endpoint construction. Nevertheless, it is the subject (*John*) and not the object (*laps*) who comes to be in the resultative state of exhaustion. (94) is however an extremely weak piece of evidence. Rappaport Hovav & Levin (2001: 770, fn. 6) and some of their informants find the example marginal and my own intuitions agree. Mateu (2005: 74, ex. 41c) includes an amended version along the lines of (103).

(103) John swam laps to the point of exhaustion.

(103) does indeed sound much better than (94), however it is not clear that the PP here is structurally analogous to the others that we have seen. All other examples have involved genuine VP-internal material of some sort and so fail to strand in VP pseudoclefts.

(104) *What the wise men did out of Bethlehem was follow the star.

(105) *What the sailors did clear of the rocks was ride the breeze.

(106) *What he did free of his captors was follow Lassie.

(107) *What John did across the room was dance mazurkas.

(108) *What the children did across the park was play leapfrog.

This is typical for both path phrases and resultative predicates in general, all of which behave like complements with respect to VP diagnostics. However, (103) strands fairly naturally in a VP pseudo-cleft.

(109) What John did to (the point of) exhaustion was swim laps.

Whatever the status of this example, it is not structurally analogous to the others.

It is also worth noting that the presence or absence of full DP structure has significant if little understood effects on the interpretation of the result phrase and the kind of construction with which it is compatible. Consider for instance the contrast between (110) and (111).

(110) He fell to a horrible death.

(111) !!!He fell to death.

(110) is a motion construction: it means that he fell to some location where he met a horrible death. Notice that the death is subsequent to the falling and in fact not necessarily caused by it. He might fall into an underground river and there he might drown or be dashed against the rocks, even though the fall itself did not kill him. Although the falling might bring him into the location where

he meets his death it is not the falling itself that causes the death. However, (111) has only a change-of-state resultative reading: it must mean that he fell and the falling itself killed him, as if for instance, he was falling endlessly through space and the falling itself caused his death. This is a bizarre interpretation. It is worth noting that *fall* has a third kind of result-oriented reading which is nevertheless distinct: an aspectual reading which is triggered with the adjective *dead*.

(112) He fell dead.

This is the pure aspect construction: he died and so fell, where the verb aspectually marks the sudden onset of the new state. Note that, if anything, the causal relation here is the other way around: that it was his dying which caused him to fall.

The fact that (94) is structurally distinct from the other result phrases and that it is marginal without the extra DP structure in (103) suggests that it is not a resultative complement but a general VP-modifier. We are therefore left with the conclusion that none of these examples constitute counterexamples to the DOR for change-of-state resultatives. They constitute stronger evidence, especially the Verspoor examples, that the DOR does not apply to motion constructions. It is therefore clear that the two constructions must be given a distinct analysis.

5. Conclusion

This review of counterexamples to the DOR leads to a number of important conclusions: that there is a fundamental difference in the behaviour of change-of-state resultatives and motion constructions and so the two kinds of construction should be represented differently; that the DOR holds straightforwardly for change-of-state resultatives; but that the DOR does not hold for motion constructions, where a much more complex analysis of the relation between the path phrase and the theme or themes of motion must be given, especially to explain comitative interpretations of shared motion.

ABSTRACT

This paper concerns resultatives such as *The blacksmith hammered the metal flat* and argues that change-of-state and motion constructions with result phrases should not be collapsed under a uniform analysis, as this obscures important differences between the two constructions. In particular, it argues that there is a direct object restriction on change-of-state resultatives that does not apply in motion constructions. The article reviews a number of important differences with respect to transitivity, case-marking and interpretation between the two constructions and addresses a number of well-known counterexamples to the direct object restriction, which turn out to be almost uniformly examples of motion constructions.

Keywords: resultative, depictive, change-of-state, motion, comitative

ÚTDRÁTTUR

Að fara er ekki að verða:

Nokkur orð um útkomusetningar í ensku (og íslensku)

Í greininni er fjallað um útkomusetningar á borð við *The blacksmith hammered the metal flat*. Færð eru rök fyrir því að greina verður á ólíkan hátt útkomusetningar með sögnum sem tjá ástandsbreytingu og sögnum sem tjá hreyfingu því að annars verður hinn mikilvægi munur á þessum tveimur setningagerðum óljós. Einkum er því haldið fram að í útkomusetningum sem tjá ástandsbreytingu séu hömlur á notkun beins andlags en það eigi ekki við um setningagerðir sem tjá hreyfingu. Höfundur bendir á ýmiss konar þýðingarmikinn munur á þessum tveimur setningagerðum, sem lýtur að fallstjórn sagna, fallmörkun og túlkun setningagerðanna. Hann dregur fram mörg vel þekkt gagndæmi gegn tilgátunni um hömlur beins andlags og sýnir fram á að nánast öll slík dæmi eru í setningum með hreyfingarsögnum.

Lykilorð: útkomusetningar, lýsandi, ástandsbreyting, hreyfing, samvistarfall

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