The influence of volitionality on the acceptability of unaccusatives and passives in the resultative construction in English

Two significant, and apparently unrelated, claims about English resultatives have been made in the literature and have been widely accepted.

(I) On the one hand, it has been noted that unaccusative verbs such as *freeze* are special in allowing the result phrase (RP) to be predicated of either their intransitive subject or their transitive object (Simpson 1983, Levin & Rappaport Hovav (L&RH) 1995, RH&L 2001), as in (1).

(1)   a. *The lake* **froze solid**.
        b. *The cold* **froze the lake solid.**

This phenomenon has been accounted for in at least two different ways. Simpson(1983), and later L&RH(1995) among others, argue for 'the Direct Object Restriction' (DOR) and propose that RPs can only be predicated of underlying objects. More recently, RH&L(2001) have proposed an alternative analysis in terms of 'event complexity'. Based on the Argument-Per-Subevent condition, intransitive unaccusative verbs need not have their RPs be predicated of the NP in object position because they denote simple events where the causative event and the coming about of the resultant state coincide. This stands in sharp contrast to unergative verbs like *shout* which require their RPs to be predicated of a reflexive pronoun in object position (*he* **shouted himself hoarse**/*he* **shouted hoarse**) as they depict a complex event with two temporally distinct subevents.

(II) On the other hand, L&RH(2010) have suggested that the manner/result complementarity is crucial to account for the distribution of verbs in resultatives: while manner verbs can easily occur in the resultative frame (*he* **wiped the table clean**), result verbs cannot (**he* **cleared the table clean**). Although the relevance of this clear-cut dichotomy to the resultative construction is not rejected, it has recently been slightly refined (Koontz-Garboden&Beavers (KG&B) 2011). On the basis of the data in (2) it has been suggested that some result verbs are compatible with the resultative structure when the RPs express the canonical result of the action described by the verb.

(2)   a. *Faulty ground wires in a building* **electrocuted him to death** *in 2004* (KG&B 2010).
        b. *The Gestapo* **hanged him to death** *a few days before Allied Troops reached his camp* (Googlebooks).

The purpose of this paper is to show, on the basis of an extensive corpus investigation of naturally occurring data (using the COCA and, for cases where the latter provides insufficient data, google.books and the www), that both these claims require serious qualification and to propose a new explanatory factor, namely volitionality, influencing the acceptability of resultatives.

First, previously unnoticed is the fact that the two structures in (1) do not have the same status: the distribution of unaccusatives in the COCA indicates that intransitive unaccusatives are much more likely to occur in resultatives than their transitive counterparts. By way of example, the intransitive verb *dry* appears 35 times in the frame 'verb + AdjP' on a resultative reading while no occurrence of transitive *dry* in such a combination can be found. More strikingly, an RP that is felicitous with an intransitive unaccusative (cf. (3a,d)) will only (and not always) be felicitous in the transitive variant if the subject is a non volitional cause (cf. (3b,e)). Prototypical volitional agents (cf. DeLancey 1984) give rise to infelicitous sentences (3c,f) and are extremely rarely found in attested data.

(3)   a. *Despite my stretching them[=muskrat pelts], rubbing them with salt, they* **dried stiff** *as cardboard* (COCA).
        b. *The battlefield mud* **had dried it[=his coat] stiff.** (Googlebooks, C.J. Keim, 1969)
        c. *??I* **dried it/them stiff**.
        d. *Peter's throat* **dried shut.** (COCA)
        e. *rubbing a crusty eye where blood had* **dried it shut.**
        f. ??*John* **dried Peter's throat/it shut**.

The same striking differences in terms of frequency and distribution have been observed with unaccusatives like *freeze*, *melt*, *burn* and *break.* Yet, the two above-mentioned accounts of

unaccusative verbs in resultatives fail to correctly predict such behaviour. Because they condition the possibility of an RP on the fact that an argument is a deep object, analyses based on the DOR are unable to make a distinction between (3a,d) and (3c,f) and hence cannot account for a difference in acceptability between them. Similarly, (3d) undermines an analysis based on event complexity since it is highly probable that (3d) denotes a complex event where the drying event does not temporally coincide with the coming about of the resulting event (Peter can no longer speak).

Why is the question of the intentionality of the cause relevant? It is proposed that in those cases where a clear intentional reading is possible (*I dried the coat with a hair dryer*), the intentional causation of the event is understood to aim at simply obtaining the change of state denoted by the verb (i.e. my purpose is to get the shirt dry). If another result had been aimed at by the agent, with drying understood as a means, a verb denoting the intended aim would have been chosen (*I stiffened the shirt by drying it with a hair dryer*). On the other hand, in the intransitive construction (3a,d), the absence of intentionality allows for an interpretation where the change of state verb is used to describe a process which leads to a less prototypical or predictable outcome. This in turn allows an RP to be added to the verb's argument structure since the RP adds new information about the result of an event that is not directed by volition, a result which is consequently much less clearly determined.

As for the second claim about the manner/result complementarity, corpus evidence shows result verbs exhibit similar sensitivity to the presence of an explicit volitional agent. The active structure (4a) as well as the corresponding passive (4c) have a volitional agent and their acceptability is degraded. On the other hand, the passive in (4b) has no *by* phrase agent expressed. Examples of this type are well-formed and can be found in naturally occurring data.

(4)   a. ??*The thug **murdered him to death**.*
        b. *We would have time to tell everyone how wonderful it was in the new society, and then we would be fatally **murdered to death.** It would be those dreadful bandits, of course.* Googlebooks.
        c. ??*He **was murdered to death** by a thug.*

Once again, neither the classical explanations based on the DOR, nor the contrast between manner and result can explain the differences in acceptability in (4). However, the explanation suggested above for the first set of facts can be extended to the active/passive alternation. Intransitive unaccusatives and the passive voice actually share a common feature: they both allow the cause of the event described by the verb to be backgrounded. The final outcome of the event is therefore not presented as aimed at by any intentional agent, allowing an RP to be added as it provides useful information about a less predictable result. The unacceptable status of (4c) corroborates this hypothesis, as explicitly introducing a volitional agent in a *by* phrase strongly reduces acceptability.

In conclusion, it appears that neither the DOR nor the manner/result distinction can account for the differences in acceptability and attestability exhibited above. Instead, the contrast between the presence and absence of an explicit volitional agent appears to be a crucial explanatory factor.

References

DeLancey, Scott. 1984. Notes on agentivity and causation. *Studies in Language* 8.181-213.

Koontz-Garboden, Andrew and John Beavers. (Under review). Manner and Result in Verbal Meaning. Unpublished ms., University of Manchester and The University of Texas at Austin. Updated draft 02/01/11. Available online at http://comp.ling.utexas.edu/~jbeavers/manner-result-working.pdf

Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity : At the syntax-lexical semantics interface*. Cambridge, MA : MIT Press.

Rappaport Hovav, Malka, and Beth Levin. 2001. An Event Structure Account of English Resultatives. *Language*, Vol. 77, No. 4, pp. 766-797.

Rappaport Hovav, Malka and Beth Levin. 2010. Reflections on Manner/Result Complementarity. In E. Doron, M. Rappaport Hovav, and I. Sichel, eds., *Syntax, Lexical Semantics, and Event Structure*, Oxford University Press, Oxford, UK, 21-38.

Simpson, J. 1983. Resultatives. In Levin, Rapaport and Zaenen (eds.), *Papers in lexical functional Grammar*, IULC.