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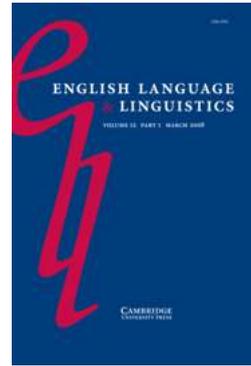
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Towards a history of English resultative constructions: the case of adjectival resultative constructions¹

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This contribution provides a corpus-based investigation of the history of adjectival RESULTATIVE CONSTRUCTIONS (RCs), e.g. *He wiped the table clean*, with special reference to Old English and Middle English. The article first briefly discusses some of the parameters relevant to a synchronic analysis of RCs, namely causativity, causality and force-dynamics, as well as the distinction between adjectival and adverbial RCs (collectively referred to as ARCs since the two types cannot always be differentiated diachronically). The article then shows that the diachronic data point to an expansion of the ARC from very specific instantiations, involving a limited set of verbs and adjectives/adverbs (i.e. the washing and cutting scenarios), to progressively more general types (which, however, set up a coherent network of analogical extensions). It is observed that this evolutionary path correlates with the metaphorical interpretation of actions as forces and the emergence of ‘proper’ causative examples, i.e. examples where the verb only symbolises the causing subevent in the causal chain evoked by the RC. Further, it is argued that this investigation highlights the importance of the usage-based model in linguistic analysis.

1 Introduction

1.1 (*Adjectival*) resultative constructions: causation and force-dynamics

This article is about the history of English adjectival RESULTATIVE CONSTRUCTIONS (RCs), e.g. *He wiped the table clean*, never previously the subject of detailed investigation. However, before the historical analysis proper and in order to understand its importance, some general remarks on RCs are needed.

RCs (see e.g. Goldberg 1995; Boas 2003; Broccias 2003 among others) are usually defined as constructions containing a resultative phrase. A RESULTATIVE PHRASE (RP) is, according to Levin (1993: 101), ‘an XP which describes the state achieved by the referent of the noun phrase it is predicated of as a result of the action named by the verb’. All three transitive examples in (1) below count therefore as RCs. The adjective *clean* in (1a) describes the state achieved by *the table* as a result of the event of somebody wiping it, the adjective *hoarse* in (1b) refers to the state the subject referent ended up in as a result of talking (possibly too much), and, finally, the adjective *threadbare* is predicated of the subject referent’s *sneakers* as a result of him running probably too much. The sentences in (1) also show that English transitive RCs are found with all

¹ I am grateful to the audience at the 14th International Conference on English Historical Linguistics (held at the University of Bergamo in August 2006) and two anonymous referees for their comments. Special thanks go to David Denison for his suggestions and editorial help. All remaining errors are mine, of course.

verb types, i.e. transitive (*wipe*), unergative (*talk*), and unaccusative (*run*). This also means that in the latter two cases the constructional objects (*himself* and *his sneakers* respectively) are not possible objects of the constructional verbs (*talk* and *run*) if they are used in isolation, i.e. independently of the construction in which they appear (cf. **He talked himself*, **He ran his sneakers*). For this reason, the reflexive object in (1b) is usually referred to as a fake reflexive (i.e. it is not subcategorised by the verb itself but, rather, by the construction).

- (1) (a) He wiped the table clean.
 (b) He talked himself hoarse.
 (c) He ran his sneakers threadbare.

Some analysts (e.g. Halliday 1967; Rapoport 1999) have pointed out however that we should distinguish ‘proper’ resultative examples like (1) from what I will refer to here as pseudo-RCs like (2):

- (2) (a) He cut the bread thin.
 (b) He painted the door red.

The distinction is explained most clearly by Rapoport (1999: 672) in connection with the example *Smith cut the bread into thick slices*, which differs minimally, from a syntactic point of view, from (2a) in that it employs a resultative PP (*into thick slices*) rather than a resultative AP (i.e. *thick*):

[The e]xample [*Smith cut the bread into thick slices*]... is not some kind of (double) resultative meaning ‘Smith caused the bread to go into thick slices by causing the bread to go to a cut state.’ What [this example] means, roughly is ‘Smith caused the bread to go to a cut state and the (final) cut state was (into) thick slices.’ The PP *into thick slices* is a modifier of the final cut state... (Rapoport 1999: 671)

Rapoport’s comment is based on a causal (see below) analysis of ‘proper’ RCs (see also Goldberg 1995; Goldberg & Jackendoff 2004 inter alia). That is, ‘proper’ RCs are analysed as stemming from the conflation of two subevents, a causing subevent, e.g. talking in (1b), and a caused (or resultant/resultative) subevent, e.g. somebody becoming hoarse in (1b). Since *cut* entails a change of state, or to put it differently, since *cut* denotes an accomplishment, *cut* cannot be said to refer to a causing event (alone). *Cut* implies reference to both a causing and a caused event. Hence, the adjective *thin* in (2a) and the PP *into thick slices* (cf. Rapoport’s example) are viewed as what can be called *specifiers*. They specify the change of state entailed by the verb. A similar analysis applies to *paint* in (2b) since this verb also entails a change of state.

However, a distinction should be drawn between what I will call causativity, i.e. the property by which a verb can be classified as causative, and what I will call causality, i.e. whether a construction depicts a causal chain of events, in the sense of Talmy (2003); see also Ungerer & Schmid (2006: 226–9). For example, the fact that *cut* is a causative (accomplishment) verb does not mean that it does not depict a causal chain of events: quite the opposite, of course. Hence both ‘proper’ RCs and pseudo-RCs are similar in that they both evoke a causal scenario but differ in that, in the former type,

the verb only symbolises the causing event in the causal chain, while in the latter type the verb symbolises both the causing event and the caused event in the causal chain.

In fact, the relation between causativity, a verbal property, and causality, a constructional property, is a matter of degree. Consider the following examples:

- (3) (a) The police kicked him black and blue.
 (b) He wiped the table clean.
 (c) He cut the bread thin.

Kick neither entails nor probably implicates a change of state; hence we say that *kick* is not a causative verb and this example would count as a ‘proper’ RC, *kick* symbolising the causing event in the causal sequence (roughly) ‘the police caused him to become black and blue by kicking him’. (3c), which reproduces (2a), can be analysed as a pseudo-RC because *cut* is a causative verb. But we still have a causal chain. *Cut* symbolises both the causing and the caused subevents. *Wipe* in (3b) lies in the middle because it intuitively evokes a change of state more readily than *kick*, i.e. a change of state is probably an implicature for *wipe*, but not as readily as *cut*. That is, within the causal chain evoked by the construction in (3b), *wipe* symbolises the causing event and, to some extent, the caused event (a similar point concerning the continuous nature of the relation between verbs and constructions is also made by Langacker (2005) concerning the so-called Caused Motion Construction, e.g. *He kicked the football into the garden*).

The advantage of distinguishing between causativity and causality is also evident when we consider examples like (4):

- (4) (a) The clothes dried wrinkled.
 (b) The river froze solid.

The sentences in (4) are usually said to instantiate the so-called intransitive RC. It is a matter of debate, however, whether the examples in (4) can be analysed causally. Goldberg (1995), for example, argues against a causal analysis of intransitive examples. Broccias (2003), by contrast, contends that a causal analysis is possible. Consider (4a) first. *Dry* is an achievement verb, i.e. it entails a change of state (that of becoming dry), but the adjective *wrinkled* does not refer to/specify the state of dryness, i.e. *wrinkled* is not a specifier. Rather, *wrinkled* could be said to refer to the state achieved by the clothes as a result of the drying event. In other words, a causal paraphrase is clearly possible, ‘the fact that the clothes dried (too much) caused the clothes to become wrinkled’. In (4b), *solid* seems to simply specify that the freezing event was complete, i.e. affected the whole river; see also Broccias (2006). Nevertheless, one could claim that the example is still causal, the verb symbolizing only the caused subevent.² In sum, the classification of an example as a ‘proper’ RC, be it intransitive or transitive, simply depends on the conceptual distance between the event symbolised by the verb and the state referred to by the adjective. If the latter does not ‘paraphrase’ the former, then

² Of course, as pointed out by an anonymous reviewer, the causal chain for both events in (4a) and (4b) may include some (not linguistically overt) external agency, such as the sun and the cold weather, respectively. The point remains, however, that (4a) and (4b) differ in terms of the availability of the causal paraphrase.

we have a ‘proper’ RC. But the previous discussion has also shown that the distinction between ‘proper’ RCs and pseudo-RCs may actually be a matter of degree. Crucially, causality can apply across the board both to transitive and intransitive examples.

Some analysts (see Broccias 2003 in particular but also Talmy 2003 and Langacker 2005) have therefore focused on another notion, alongside that of causality (and that of causation). Broccias (2003) contends that (in general) the distinguishing factor between transitive and intransitive examples is not causality but rather force-dynamics, to use Talmy’s terminology, or energy transmission, in Langacker’s words (I use these two terms as well as ‘energetic interaction’ and ‘energy flow’, see below, interchangeably). Force-dynamics (see Ungerer & Schmid 2006: 178–81 for a more detailed introduction) has to do with our view of the world ‘as being populated by discrete physical objects’ (Langacker 1991: 13). These objects interact with one another by exchanging energy, that is by exerting forces onto one another, so that changes (of position/state) ensue. One obvious example is a ball which is set in motion because of forceful contact with another ball that was already in motion. Importantly, the force-dynamic model is reflected in (or ‘symbolised by’) linguistic structure. For example, the transitive clause *Tom broke the glass with a hammer* can be linked to the conceptualisation of Tom as an energy source (or Agonist, in Talmy’s words) acting, through the use of a hammer, upon an energy sink (or Antagonist, in Talmy’s terminology), the glass in the case at hand. The result of Tom’s exerting a force upon the glass is the glass’s change of state, i.e. its ending up in a broken state. The intransitive clause *The glass broke*, on the other hand, only depicts the result part (or ‘tail’ in Langacker’s words) of the action chain (see also the discussion above).

If we go back to the examples discussed so far, we notice that all the transitive cases symbolise an energetic interaction, either literal or metaphorical. For example, (1a), *He wiped the table clean*, describes a concrete energetic interaction (an energy flow) between, in Broccias’ (2003) terminology, a manipulator (*he*) and a manipulee (*the table*), resulting in a change of state of the latter. (1b), *He talked himself hoarse*, and (1c), *He ran his sneakers threadbare*, also involve energetic interactions. The subject referent can be described as a manipulator (not necessarily an intentional one, of course) who brings about some change of state in the manipulated entities, himself and his sneakers, respectively. The crucial point is that the verbal event can be construed metaphorically as a force or energy flow connecting the manipulator to the manipulee.

The force-dynamic analysis summarised here for transitive cases does not apply to intransitive examples. In (2a), for instance, *the clothes* cannot be described as a manipulator (rather, they are an affected entity). However, notice that, as was remarked above, a causal interpretation is still possible. It seems therefore that force-dynamics is a crucial notion for transitive examples, be they ‘proper’ RCs (the verb is not causative) or pseudo-RCs (the verb is causative).³ We will see later that the earliest occurrences

³ In fact, Broccias (2006) notes that there exist non-force-dynamic transitive examples such as:

(i) A series of Newcastle attacks at the start of the second half finally generated some optimism among supporters who had *booed* them *off* at the interval. (*The Observer*, electronic edition, 31.08.2003)

of adjectival RCs (in general, i.e. both ‘proper’ and pseudo-RCs) also evoke force-dynamics and that the history of this construction is one of expansion towards ‘proper’ (i.e. causative) RCs involving a metaphorical interpretation of verbal events, i.e. cases like (1b) and (1c).

1.2 Resultative adverbs

There is an important complication in the analysis of (adjectival) RCs, namely the fact that adverbs can sometimes be used in constructions which also have a resultative meaning. When this is so, such adverbs are usually called resultative adverbs (see e.g. Quirk et al. 1985: 560; Geuder 2000). Further, they cannot usually be replaced by adjectives (except in the colloquial register):

- (5) (a) She fixed the car perfectly/#perfect.
 (a') The car is perfect.
 (b) He grows chrysanthemums marvellously/#marvellous.
 (b') The chrysanthemums are marvellous.
 (c) He loaded the cart heavily/#heavy.
 (c') The cart is heavy. vs The load is heavy.
 (d) He cut the bread thinly/thin.
 (d') #The bread is thin. vs The slices are thin.

(5a) is an instantiation of what can be called the adverbial RC. Its syntax is the same as that of adjectival RCs except for the occurrence of an adverb in place of an adjective. Importantly, it is still possible to envisage a relation of predication between the RP and the manipulated entity, i.e. the direct object in the examples in (5). Whereas in (1a), *He wiped the table clean*, the predication relation was direct in the sense that the adjective refers directly to a property of the manipulee, i.e. ‘The table is clean’, this relation is indirect in e.g. (5a) because it involves the base of the adverb (*perfect*) rather than the adverb itself. In (5a), the car can be said to be perfect, i.e. in a perfect state. Similarly, the chrysanthemums can be described as marvellous in (5b). More complex is (5c). Which element can *heavy* be predicated of? It could describe the cart itself but also, and perhaps more plausibly so (see Geuder 2000 for details), what Geuder (2000) calls the ‘resultant object’. Loading a cart results in the creation of a load. Similarly, in (5d), cutting a loaf of bread results in the creation of slices. These two resultant objects, load and slices, can be said to be heavy and thin, respectively. Hence, an adverbial RC involves a predication relation between a resultant object (if the verb can be construed as a verb of creation, as is the case for all verbs in (5) with the exception of *fix*; see (5a)) and the property to which the base of the adverb refers.

In (i), the event of the players’ leaving the pitch is clearly independent of the fans’ booing them (the players left the pitch because it was half-time, not because they were booed at). The booing event unfolds together with the players’ leaving the pitch and no causal interpretation is possible. It is beyond the scope of this article to account for such examples. The interested reader is referred to Broccias (2006) for a proposal couched in the cognitive linguistic paradigm.

But there is a complication. Observe that in (5d), contrary to what happens in the other examples in (5), an adjective (*thin*) is also possible (independently of considerations of register). However, notice also that the adjectival version of (5d) differs from the other adjectival RCs considered in the previous subsection in that it does not allow, strictly speaking, for a direct predication relation between object and RP: it is not the bread but rather the slices which are thin. By contrast, ‘The table is clean’, see (1a), is perfect. Why is this so? Related to this point is the more general question of what criteria, if any, explain the occurrence of adverbs in place of adjectives (or vice versa) in so-called adverbial RCs.

Broccias (2003, 2004) goes some way towards resolving this question by observing that some adverbial RCs involve subjective properties. The conceptualiser (i.e. the speaker), by using adverbs like *perfectly* and *marvellously*, as in (5a) and (5b) respectively, evaluates some resultant state. Perfection and beauty are, intuitively, more subjective properties than being clean, hoarse, thin and red, as in (1)–(2). Colour, for example, is naively regarded as being out there in the world independently of the conceptualiser (see also Fauconnier & Turner 2002: 79–81 for a similar point). Similarly, hoarseness implies well-defined, ‘objective’ physical effects. By contrast, perfection and beauty involve some subjective evaluation on the part of the conceptualiser. After all, as the proverb goes, ‘beauty is in the eye of the beholder’: the subject referent in (5b), for instance, may not find his chrysanthemums marvellous at all. The property of being marvellous is attributed to them by the speaker on the basis of her/his personal taste.⁴

Admittedly, it is more difficult to seek a justification along these lines for *heavily*, (5c), and *thinly*, (5d). The occurrence of an adverb may be justified by the fact that some notion like ‘instrument/manner’ is involved in the examples in question and adverbs are typically used with that function. For example, the adverb in (5c) may be paraphrased as ‘with a heavy load’ (e.g. with a lot of boxes). *Thinly* in (5d) does not simply refer indirectly to the state of the resultant object (‘The slices are thin’) but may also be taken to depict how the action of cutting is carried out: the knife is placed close enough to one end of the loaf so as to produce thin slices, i.e. the distance between the edge of the knife and end of the loaf is small. These observations may motivate why adverbs are employed. Still, an interesting contrast obtains between (5c) and (5d), on the one hand, and (6), on the other hand:

(6) He painted the door *redly/red.

(6) is fine with an adjective but not with an adverb. Nevertheless, some notion like ‘instrument’ may be said to be relevant. The door ends up red because red paint was used. But colours, in our naive view of the world, are regarded as objective properties;

⁴ The difference between subjective and objective properties may also correlate with that between abstract and concrete properties, beauty being intuitively more abstract than colour, for example. The exact details of this relation, however, go beyond the scope of this investigation. For our present purposes, it suffices to observe that *-ly* adverbs seem to correlate with subjective/abstract properties and adjectives with objective/concrete properties (see also footnote 5).

Objectivity: heavily/#heavy < thinly/thin < *redly/red



Figure 1. A possible objectivity scale

hence, the use of an adjective is expected. One way out of this paradox (we may expect an adverb because the notion of instrument is relevant but we may also expect an adjective because we are referring to an objective property) could be to claim that *heavily* and *thinly* are more subjective than *red*, and *heavily* is more subjective than *thinly* (this would capture the difference between *heavily* and *thinly* vis-à-vis their potential substitution by the related adjectives). Schematically, we would have the continuum in figure 1 vis-à-vis the resultative constructions considered here (objectivity increases as one moves to the right). I will not try to settle the question of the status of adverbs vs adjectives in RCs here. However, I have pointed out that one relevant dimension of analysis may be the difference between objective and subjective properties and that such properties may be arranged along a continuum.

It must also be remarked that the status of certain RPs in terms of an either/or distinction between adjectives and adverbs is not clear. This is so with *thin*, for example. *Thin*, as well as *small* (in examples like *She cut the sausage small*) for that matter, was originally an adverb (see their respective entries in the *Oxford English Dictionary, OED*). It may be the case that *thin* and *small* in RCs are actually represented fuzzily in the speaker's mind (see Aarts et al. 2004 on fuzziness in grammar and see e.g. Himmelmann & Schultze-Berndt 2005 on the relation between secondary predication, of which adjectival RPs are an instance, and adverbials). On the one hand, morphologically, they are not prototypical adverbs (if we accept that adverbs prototypically take an *-ly* suffix); on the other hand, they behave like adverbs in that they evoke notions like manner and they cannot be predicated of the constructional object (e.g. *bread*) but, rather, of the resultant object (e.g. *slices of bread*). Finally, one should note that, originally, non-*ly* adverbs tended to be more concrete than *-ly* adverbs (see Donner 1991, also quoted in Brinton & Traugott 2005).⁵ In other words, both the notion of objective vs subjective properties and word-class fuzziness may be relevant factors in the analysis of RCs. Since the historical analysis, especially in the older stages of the language, proves resistant to a clear-cut word-class analysis, I will be using the neutral label ARC to refer to an RC (either a 'proper' or a pseudo-RC) containing either an adjective or an adverb which is not marked with an *-ly* suffix (bearing in mind that a clear-cut distinction between the two is not always possible). Moreover, I will use the label A to refer to the relevant RP (irrespective of its word-class status).

⁵ Donner (1991: 4) offers some interesting pairs: '*foul* may refer to how pigs root, *fouly* to how men sin; *brightly* to how the moon shines, *brightly* to how anchoresses should see and understand God's runes; *heavy* to how prisoners are fettered with irons, *heavily* to how men are burdened with God's commands; *high* to how a sword is raised, *highly* to how ladies are attired ...'

To sum up, the discussion so far has highlighted the importance of the notions of causality (a constructional notion to be separated from that of causativity, which applies to verbs) and force-dynamics in the synchronic analysis of RCs as well as the ambiguous status of some examples in relation to the distinction between adjectives and adverbs.

In what follows, I will offer a corpus-based analysis of the history of the adjectival RC, from Old English (section 2.1) through Middle English (section 2.2) to Early Modern English (section 2.3). This topic is of some importance both descriptively, since it sheds light on a (diachronically) much neglected topic, and theoretically. As to the latter point, I will try to show that the notion of force-dynamics is not only relevant to the analysis of present-day RCs (as argued e.g. in Broccias 2003) but also plays a crucial role in the evolution of this construction. I will argue that the historical data can be interpreted as pointing to the expansion of the RC from very specific instantiations, involving a limited set of verbs and adjectives/adverbs, towards more and more general types. This evolutionary path correlates with the metaphorical interpretation of actions as forces and the emergence of ‘proper’ causative examples (i.e. the verb no longer symbolises both the causing subevent and the caused subevent). Further, the present study testifies not only to the importance of the notion of force-dynamics in language but also to the importance of the usage-based model in linguistic analysis (see e.g. Taylor 2002: 27–8 for a summary). RCs probably emerge out of specific instantiations (e.g. as analogical extensions) rather than being directly related to an abstract template or construction (e.g. the causative construction).

The focus of the present investigation will be on the transitive pattern because of the paucity of the data involving intransitive examples (see section 2). The analysis also considers only adjectival RPs because, at present, it is still very difficult to extract RCs containing PPs from the available historical corpora; adjectival instantiations are easier to retrieve. To be sure, the conclusions arrived at here, which are summarised in section 3, must be checked against future investigations which take the evolution of prepositional RCs into account as well as the development of RCs in other Germanic languages (as is pointed out in section 3).

2 ARCs from Old English to Early Modern English

2.1 *Old English*

2.1.1 *Previous analyses*

I will start my discussion of OE RCs by commenting on previous analyses, which include, to the best of my knowledge, only a fleeting reference in Mitchell (1985) and a more detailed examination in Visser (1963).

Mitchell (1985: §129) observes that predicative adjectives (and participles) in the accusative are declined strong when they are declined. Still, he does not discuss resultative examples in any detail. The only ‘resultative’ example that he mentions

is *ÆCHom* i.10.18 *God hī gescēop ealle gōde* ‘God created them all good’.⁶ But it is debatable whether this example – which has an adjective declined strong – should be categorised as an instance of the resultative construction. Verbs of creation do not symbolise an energetic interaction between a manipulator and a manipulee (i.e. an affected entity) but, rather, a relation between a manipulator and a created (i.e. effected) entity.⁷

Visser (1963: §659) remains up to now the only scholar to have commented at some length on ARCs from a diachronic perspective by way of a list of examples (arranged alphabetically by verb), starting with Old English data. Visser does provide some noncreation verb resultative constructions for Old English. However, as will be shown below, it is difficult to say whether his examples contain (accusative marked) adjectives. An alternative hypothesis would be to regard A in (some of) these examples as an adverb because of the *-e* ending found in most As, which is not only a possible adjectival ending for e.g. strong accusative feminine singular and all accusative plural forms but also a possible adverbial suffix. Importantly, Visser does not explicitly say whether his Old English data contain adjectives or not. He simply claims that the examples provided contain predicative adjuncts. Still, with the exception of the Old English (and possibly some Middle English/Present-day English) data, the remaining examples provided in Visser seem to have adjectival As. The four Present-day English examples heading Visser’s §659 (*He slept himself sober, He roared himself hoarse, He shrove himself clean, I painted the door green*) are a case in point.

Before examining Visser’s examples in more detail, it should be pointed out that unambiguously adverbial cases can indeed be found in Old English. *Scēafmælum* in (7), for instance, can be regarded as an adverb (see e.g. the corresponding entry in Clark Hall 1960) which codes both manner and result (in the sense that bundles of corn-cockle are created as a result of the action of tying the corn-cockle).

- (7) *Gadriap ærest þone coccel and bindap scēafmælum tō forbærnenne*
gather first that corn-cockle and bind into-sheaves to burn
‘First collect the weeds and tie them into bundles to be burned’ (Matthew 13, quoted in Sweet 1953)

Keeping this example in mind, we can now move on to Visser’s examples, which are all reproduced below in alphabetical order:⁸

⁶ I have marked long vowels as such in all Old English examples even if vowel length is not marked in the sources.

⁷ For the sake of completeness and because such verbs may be relevant to the evolution of the resultative construction, they have nevertheless been given some consideration in the corpus analysis detailed below (see section 2.1.2 in particular).

⁸ The abbreviated references mentioned in Visser’s examples, as well as the other Old English and Middle English examples quoted below, are not explained here. The interested reader is referred to the sources used for this article for full details.

- (8) *āwascan* ‘wash’
 gif þū næbbe buteran genōge, āwæsc [hit] swīðe clāne
 if you not-have butter enough, wash [it] very clean
 ‘if you don’t have enough butter, wash it very clean’ (OE Charms, in Storms, Ags. Magic no. 19, p. 236)
- (9) *bindan* ‘bind’
 þæt þū mec þus fæste fetrum gebunde, æghwæs orwīgne.
 that you me thus firmly with fetters bound wholly powerless
 ‘so that you have thus bound me firmly with fetters, wholly powerless to resist’ (Juliana 434)
- (10) *feormian* ‘cleanse’
 (a) Feormige man þone pyt clāne
 cleanse man (i.e. one) that pit clean
 ‘Make someone clean the pit’ (Ancient Laws (Thorpe))
 (b) [Hē] mec [sc. a lance] fægre feormaþ
 he me fair cleanse
 ‘He polishes me fairly’ (OE Riddles 73, 21)
- (11) *gescearfian* ‘shred’
 þā wyrta ealla gescearfa swīpe smale
 the herbs all shred very small
 ‘shred all the herbs very small’ (OE Charms, in Storms, Ags. Magic no. 19, p. 236)
- (12) *gnīdan* ‘crumble’
 Geniman þā ylcan wyrte, scerfa h̄y þonne, and gnīd swīpe smale tō dūste
 take the same herb shred it then and crumble very small to dust
 ‘Take the same herb, then shred it and crumble it very small into dust’ (Leechdoms (Cockayne) I, 70, 14)

If we ignore (9) for the moment and take *fægre* in (10b) as being related to the notion of cleanness (see below), the remaining five examples can be divided into two types, as is shown in (i) and (ii) below (the verbs in small caps stand for classes of verbs which are semantically similar):

- (i) WASH + clean, e.g. *āwascan clāne*, *feormian clāne*
 (ii) CUT + small, e.g. *gnīdan smale*, *gescearfian smale*

Both types contain an RP which is to be interpreted as a specifier (see section 1.1) and evoke a force-dynamic scenario. Unfortunately, it is not possible to decide whether the RPs are adjectival or not. Let us consider *clāne* first. Whether declined (strong) or not, the expected form for *clāne* in (8) would be exactly that. Its referent, *hit*, is neuter and no case ending was used in the strong accusative singular of the adjectival declension. Further, this form, ending with an *-e*, can also be that of the corresponding adverb. By contrast, *clāne* in (10) seems to be unmarked for accusative case. The case ending for the strong accusative singular of masculine adjectives – the referent of *clāne* in (10) is the masculine NP *þone pyt* – is *-ne*. But here *clāne*, rather than *clāenne*, is used. Of course, this does not necessarily imply that *clāne* is not an adjective since it could have been left undeclined (or the scribe could erroneously have used one *n* instead of two). Importantly, however, *clāne* in this example (as well as other similar ones with WASH verbs) is categorised as an adverb in the *Dictionary of Old English (DOE)*, s.v. *clāne*

adv.). Further, this use of *clāne* is listed in the *DOE* as a subsense of adverb *clāne* meaning ‘utterly, entirely, completely, altogether, with nothing remaining or omitted’. Some examples of this use (mentioned also in Bosworth & Toller 1898/1921, BT for short, and Mitchell 1985) are given below for the sake of completeness:

- (13) Ne rīpe ge ðæt land tō clāne
not reap you the land too clean
‘Do not reap the land too clean’ (Lev. 23, 22; quoted in BT)
- (14) Clāne biþ beorhtast nesta bāle forgrunden
entirely is (the-)brightest of-nests by-fire destroyed
‘The brightest of nests is entirely destroyed by fire’ (Exon. 59a; quoted in BT)
- (15) Ðæt mīn cynn clāne gewīte
that my race clean be-gone
‘That my race be clean gone’ (Cod. Dipl. 235; quoted in BT)
- (16) we habbað Godes hūs inne & ūte clāne berȳpte ælcra gerisena.
we have God’s house in and out clean stripped of-each of-fitting-things
‘We have completely stripped God’s house, inside and outside, of all fitting things.’
(WHom 20; referred to in Mitchell 1985: 481)

(10b) also seems to be an adverbial RC. *fægre* is analysed in this example as an adverb in the *DOE* (s.v. *fægere*, sense 3, ‘so as to be free from blemish or impurity’). It occurs in a riddle whose solution is ‘spear’. The preceding lines in the riddle make it clear that the intended referent is masculine (see lines 2–4, *oþþæt me onhwyrfdon gēarum frōdne of. . .* ‘until [they] turned me, old with years, from. . .’, where *frōdne* ‘old’ is an accusative masculine adjective). Hence, if an adjective were used in (10b), we would expect either undeclined *fæger* or declined *fægerne*, rather than the form *fægre*. The latter is, therefore, perhaps best analysed as an adverb, as in the *DOE*. This use would be similar to the one which was commented on with reference to (5b) above, *He grows chrysanthemums marvellously*, where a resultative adverb (used to convey a subjective evaluation of the resultant object) is employed.

Similar considerations about the categorial ambiguity of A in OE ARCs apply to what can be glossed as Present-day English *small*, which is found in conjunction with verbs of cutting. Since feminine *wyrta* – or more correctly, the parts of the plant resulting from the action of cutting (see the discussion of (5d) above) – is the entity of which smallness is intended to be predicated, the (strong feminine) *-e* ending is indeed expected if *small* is an adjective. But this form is syncretic with the corresponding adverb, so the issue concerning the status of *small* in (11) and (12) cannot be settled.

Two more examples with *small* from the *Old English Herbarium* (De Vriend 1984)⁹ are worth considering at this juncture (the remaining examples with *small* in the *Old English Herbarium* are inconclusive because the intended object referent is always

⁹ I have decided to also consider the *Old English Herbarium* because one may expect numerous RCs to be used there. Since it deals with herbal medicine, it describes actions performed on plants.

feminine *wyrta*, as in (11)–(12) above):

- (17) *cnuca hȳ swīðe smæl on dūste*
 pound it-FEM very small on (i.e. into) dust
 ‘pound it very small into dust’ (De Vriend 1984: 72/2)
- (18) *genime of þysse wyrte wyrtruman þæs dūstes smæle*
 take from of-this herb roots of-the dust small
gecnucudes tȳn penega gewihte
 pounded ten of-pennyweights weight
 ‘take from the roots of this herb a weight of ten pennyweights of the finely pounded dust’ (De Vriend 1984: 202/3)

Smæl in (17) has no ending. If it were declined as a strong adjective, the strong feminine ending *-e* would have been appended. (This ending, however, would make the lexical item in question morphologically indistinguishable from the corresponding adverb.) Still, *smæl* could be an undeclined adjective or an *-e*-less variant of the adverbial form. *Smæle* in (18) is perhaps best analysed as an adverb. Mitchell’s observation concerning undeclined predicative adjectives does not apply here because the alleged adjective *smæle* is not in an accusative position (unless, of course, undeclined forms were also possible when the intended referent was not found in a direct, i.e. nominative or accusative, case position). Hence, if this lexical item were used as an adjective, we might expect the genitive form *smæles* to be used.

It must be pointed out that the issue of the categorisation of *clāne* and *smæle* is further complicated by the fact that (at least) *clāne* is found in OE as the object complement of complex transitive (causative) *dōn* ‘do’ (roughly corresponding in meaning to Present-day English *make*),¹⁰ as in (19):¹¹

- (19) *gedō ealle þā wyrta swīðe clāne*
 do all the herbs very clean
 ‘make all the herbs very clean’ (colaece, Lch II [3]: 41.1.19.3944)

Cases like (19) support an adjectival analysis for *clāne* since *dōn* is a complex transitive verb (i.e. it requires an object complement, and object complements are not usually realised as adverbs). Consequently, one might view (at least some of) the examples discussed above as elaborations of the causative construction associated with *dōn* (i.e. a construction describing an interaction between a manipulator and a manipulee resulting in the latter’s change of state). In other words, the causative construction with *dōn* can be viewed as a schematic RC. It is schematic because the verb does not specify, for example, the manner in which the change of state took place. Conversely, the verb in an elaborated ARC would specify the manner in which the resultant state was brought about, so that such specific ARCs can be called ‘manner’ RCs in order to distinguish them from ‘schematic’ resultatives with verbs of making (e.g. *dōn*). For example, in (8),

¹⁰ I have usually glossed Old English lexical items by providing the corresponding (i.e. cognate) Present-day English forms even if the two items are not used identically. Old English *dōn* and Present-day English *do* are a case in point.

¹¹ The examples extracted from the York–Toronto–Helsinki Parsed Corpus of Old English Prose (see below in the text for more details) have been edited so as to improve readability (e.g. <+t> has been replaced with <þ>).

something is made clean by washing it; hence, (8) would count as a specific, manner RC relative to the general, schematic causative (or resultative) construction. Still, it must be pointed out that this analysis is not necessarily on the right track (or, at least, it is not necessarily viable in all instances), because a case language like Latin, for example, would use adjectives in sentences like (19) but adverbs in manner-specific instances like (17) (if a prepositional phrase, apparently the preferred option in, for example, the Latin source of the *Old English Herbarium*, is not used). This is shown in (20):¹²

- (20) (a) *cnuca tō smælon dūste*
 pound to small dust
 ‘pound into fine dust’ (DeVriend 1984: 74/2)
- (b) *in pulverem redacta mollissime* (Latin source)
 in dust reduced very finely
 ‘pounded finely into dust’ (DeVriend 1984: 74/2)

While the OE version has a PP, *tō smælon dūste* (‘into fine dust’), the Latin source combines a PP (*in pulverem* ‘to dust’) with an adverb in the superlative (*mollissime* ‘very finely’).

The only unambiguously adjectival ARC example mentioned in Visser (1963) was given in (9) above, which is reproduced below for the sake of convenience:

- (9) *bindan* ‘bind’
 þæt þū mec þus fæste fetrum gebunde, æghwæs orwīgne.
 that you me thus firmly with fetters bound wholly powerless
 ‘so that you have thus bound me firmly with fetters, wholly powerless to resist’
 (Juliana 434)

Orwīgne is clearly accusative marked (it has the ending *-ne*). It should be noted, however, that Visser does not place a comma after *gebunde*, while the quotation in (9) does. This is an important point because *æghwæs orwīgne* may be an appositive AP as the translation in (9) suggests (i.e. ‘you have bound me, wholly powerless to resist, firmly with fetters’ rather than ‘you have made me wholly powerless by binding me firmly with fetters’). The difference may be relevant to the analysis of this example and could make (9) a dubious instance of the adjectival ARC.

All in all, the issue of the categorial status of A in the Old English ARCs considered above cannot be solved satisfactorily – in fact, it may even point to a ‘fuzzy’ categorisation of A in ARCs in the Old English speaker’s mind, as was observed in section 1.2.

2.1.2 *Corpus evidence*

The obvious question is therefore whether unambiguously adjectival ARCs can be found in Old English. In order to try to answer this question, a corpus search was carried out by using the 1.5 million word York–Toronto–Helsinki Parsed Corpus of Old English Prose (YCOE, Taylor et al. 2003) and the 71,490 word York–Helsinki Parsed

¹² Interestingly, Italian uses adjectives rather than adverbs with verbs of cutting (e.g. *Li ha tagliati sottili*, lit. ‘them (s/he) has cut thin’, where *sottili* ‘thin’ is marked for plurality).

Corpus of Old English Poetry, known as the York Poetry Corpus for short (Pintzuk et al. 2001).¹³ These two parsed corpora allow the user to search for all predicative nouns and adjectives (or, at least, all lexemes parsed as such in the corpora). The search returned a total of 2,620 hits in the YCOE and 138 in the York Poetry Corpus. The hits had to be inspected manually so as to distinguish depictive from resultative examples and nominal from adjectival cases (cases where the adjective was in the nominative were also returned and they have been included in the present analysis since they can result from the passivisation of a complex transitive sentence, e.g. *hē mihtig wæs gesceapen*, lit. ‘he mighty was created’).

In the analysis summarised in tables 1 and 2,¹⁴ I also considered, alongside ‘manner’ ARCs (i.e. examples which specify the manner in which the result was brought about), examples with verbs of making (*dōn, fremman, macian, wyrcan*), which can be viewed (see also above) as instantiating the schematic meaning shared by all resultative examples (i.e. an energy flow between a manipulator and a manipulee resulting in the change of state of the latter, as specified by the RP). I also included verbs of creation (*scieppan, timbrian*) even if they take an *objectum effectum* rather than an *objectum affectum* because of the similarity between the two cases – both involve a manipulator – and because the verb *scieppan* is given as an example of a verb taking a predicative complement in Mitchell (1985: §129). For the sake of completeness, I

¹³ The two corpora can be searched using CorpusSearch (see corpussearch.sourceforge.net/), which relies, among other things, on a command file (i.e. a file which tells the program what parsed structures to look for). The command file employed in this investigation searched for all instances of small clauses (labelled SMC) in the corpus. For those familiar with CorpusSearch, the command file read as follows:

```
node: IP*
query: (*SMC* exists)
```

The data thus obtained must be taken with a pinch of salt, however. As might be expected, the parsing accuracy is not 100 per cent and, hence, some small clause examples may have been lost in the analysis. For instance, if one creates a different command file which searches for all accusative-marked NPs which immediately precede accusative marked adjectives (i.e. *query: (NP-ACC iPrecedes ADJ-ACC)*), the following two examples are returned which are not parsed as having SMCs and, hence, are not found using the more general searching procedure detailed above (for the sake of brevity I have not provided glosses for these examples but I have included their translation and put in bold the Old English accusative-marked masculine adjectives as well as their equivalents in Present-day English):

- (i) *hī woldon wircan āne burh and ænne stypel binnan þære byrig swā **hēahne** þæt his hrōf āstige up to heofonum*
‘they wanted to build a town and a tower in that town so **high** that its roof would reach up to the heavens’ (cocathom1, ÆCHom I, 1: 185.204.212)
- (ii) *On þære tīde Scīpia . . . mǣnde his earfoða tō Rōmāna witum . . . hwȳ hīe hiene swā **unweorðne** on his ylde dyden*
‘At that time Scipio . . . complained of his troubles with the Roman senators . . . why they considered him so **worthless** because of his age’ (coorosiu, Or 5: 4.118.24.2489)

¹⁴ The total number of examples given for each verb (which immediately follows the verb entries in the tables) can be less than the sum of the various adjectives occurring with them because two or more adjectives can be used with the same verb in the same example. That is, the number immediately following each verb refers to the number of examples containing that specific verb. The number following the adjectives refers to the number of times the adjectives are used with a specific verb. The reader should also remember that the translation of the lexemes in the tables is just a convenient approximation.

also took into consideration intransitive verbs of change, of which only one instance (involving *wendan* ‘turn, become’ in the York Poetry Corpus) was found.

There are two points which are worth commenting on in connection with the data from the YCOE. First, only two ‘manner’ (i.e. nonschematic, noncreation verb) resultative examples have been found, namely:

- (21) *Ælces mannes miht þe on mōdignysse færð is sōðlice þām gelīc swilce*
 each man’s power who on pride goes is truly to-that like such
man sīwige āne bytte, and blāwe hī fulle windes
 man sew a bottle and blow it full of-wind
 ‘The power of every man who behaves proudly is truly similar to the way one sews a
 bottle and blows it full of air’ (coaelive, *ÆLS* [Cecilia]: 315.7296)
- (22) *þēah ðū hī smale tōdāele swā dūst*
 though you it small cut-up as dust
 ‘although you cut it up as small as dust’ (coboeth, Bo: 13.28.21.487)

However, the classification of (22) as containing an adjective complement (i.e. *smale*) can be questioned since similar examples are all classified as having an adverbial A in the YCOE (see also the discussion above concerning the *-e* ending).¹⁵ (21), by contrast, is a genuine adjectival example (and is classified as such in the *DOE*, s.v. *full* adj.). The corresponding adverb (meaning ‘completely’) was *full* (without an *-e*). Further, the occurrence of the genitive noun *windes* points to the classification of *fulle* as an adjective (*windes* being its complement).

The second point that emerges from the analysis of the YCOE data is that most examples with making/creation verbs are of an abstract nature (see table 1, below). Of course, there are exceptions, such as the combinations with e.g. *blæc* (‘black’), *clāene* (‘clean’), *sinewealt* (‘concave’). This observation may turn out to be of some importance with respect to the analysis mentioned above of manner resultative constructions as possible elaborations of the schematic (e.g. *dōn*) resultative construction. If this analysis were correct, it could be hypothesised that the schematic resultative construction was actually the primary input for the rise of (manner) resultative constructions. Speakers possibly replaced the schematic verb (e.g. *dōn*) with manner-specific verbs. Unfortunately, at the present stage of our knowledge it is difficult to decide whether this was indeed the case. Potentially against it are: (i) the finding that complex transitive *dōn* is used, more often than not, with abstract predicates, while resultative constructions often involve concrete interactions (and refer to ‘objective’ properties like size and the absence of dirt on a surface); (ii) the crosslinguistic observation that languages like Romance ones have schematic resultative constructions but lack productive manner resultatives. Potentially in favour of complex transitive *dōn* as the main source for the manner resultative construction are: (i) the fact that, after all, objective properties related e.g. to colour (which is recorded in resultative constructions from the Middle English

¹⁵ It goes without saying that the same problem concerning the dubious categorisation of *smale* as an adjective can affect other examples in the corpus. However, I have ignored this problem when ‘proper’ resultative examples are not involved and have, therefore, classified complements as being adjectival if they are parsed as such in the corpora.

Table 1. *Verbs and As occurring in resultative (and related) constructions in the YCOE*

blāwan ('blow') 1: full ('full') 1

dōn ('make') 178: ānēage ('one-eyed') 2, āstyred ('agitated') 1, bearnlēas ('childless') 3, betera ('better') 3, gebēogol ('obedient') 1, biter ('bitter') 1, blæc ('black') 1, blīþe ('blithe') 2, clāne ('clean') 5, gecnāwe ('conscious') 1, crīsten ('Christian') 2, cūþ ('known') 5, dēad ('dead') 2, ēadig ('wealthy') 1, earm ('poor') 3, ēaþe ('easy') 1, foreþancful ('prudent') 1, fracop ('bad') 1, fremde ('foreign') 2, frēo ('free') 2, fullfremed ('perfect') 1, gearu ('ready') 2, geornful ('eager') 2, glæd ('glad') 3, gōd ('good') 2, hāl ('whole') 22, hālig ('holy') 1, hæfenlēas ('poor') 1, hēah ('high') 2, hīersum ('obedient') 2, hlīsēadig ('renowned') 1, hlūttor ('pure') 1, hogelēas ('free from care') 1, hrēoflig ('leprous') 1, hundfeald ('hundred fold') 1, hwīt ('white') 2, lāþe ('loathsome; hostile') 2, lāssa ('less') 1, lēafleoht ('easy to believe') 1, lēofæle ('lovable') 1, lēoht ('light') 1, gelic ('like') 6, līþe ('kind') 1, gelimpful ('fitting') 1, lufiende ('loving') 1, lustbære ('pleasant') 1, gemæne ('common') 3, mære ('famous') 1, medeme ('proper') 1, gemetfæst ('moderate') 1, manigfeald ('manifold') 1, micel ('great') 2, mihtig ('mighty') 1, nytt ('useful') 3, nytwierþe ('useful') 2, ondrysne ('venerable') 1, onfunden ('experienced') 1, onlīesendlic ('absolvable') 2, orsorg ('unconcerned') 2, prūd ('proud') 1, rīce ('strong') 1, right ('right') 6, rightwis ('righteous') 2, gesælig ('happy') 3, gescēadwis ('wise') 1, scyldig ('sinful') 1, sēfte ('pleasant') 1, siextigfeald ('sixty-fold') 1, sintryndel ('circular') 1, sorglēas ('free from sorrow') 2, stille ('quiet') 1, strang ('strong') 2, sweotol ('clear') 2, synlēas ('sinless') 1, þrītigfeald ('thirty-fold') 1, þyldig ('patient') 1, unālæfed ('unlawful') 1, unbecēas ('incontestable') 1, unhrēoflig ('not leprous') 1, ungeornful ('indifferent') 1, ungelic ('unlike') 2, unmodig ('humble') 1, unnyt ('useless') 1, unweorþ ('unworthy') 2, wac ('weak') 2, wæstmbære ('fruitful') 1, wealdende ('powerful') 4, wearm ('warm') 1, welig ('prosperous') 15, weorþ ('worthy') 15, wēste ('barren') 1, wīdmære ('celebrated') 1, gewielde ('powerful') 1, wiersa ('worse') 1, (ge)wīs ('wise') 2, gewiss ('certain') 1

fremman ('make') 3: dēad ('dead') 1, fægen ('glad') 1, hefig ('heavy') 1

macian ('make') 6: gearu ('ready') 1, mihtig ('mighty') 1, ranclīc ('bold') 1, rīce ('strong') 1, undēadlic ('immortal') 1, wāclīc ('weakly') 1, welig ('prosperous') 1

scieppan ('create') 17: bilewit ('pure') 1, blind ('blind') 1, gebyrdlic ('harmonious') 1, efenæþele ('equally noble') 1, fæger ('fair') 3, gōd ('good') 4, gelic ('like') 1, hwilc ('what') 1, mihtig ('mighty') 1, right ('right') 2, gesōm ('unanimous') 1, þyllic ('such') 1, wlitig ('beautiful') 1

timbrian ('build') 4: hēah ('high') 4

tōdælan ('divide') 1: smæl ('small') 1

wyrca ('make') 16: fæger ('fair') 1, feþorbyrste ('split into four') 1, gōd ('good') 4, hwilc ('what') 2, þyllic ('such') 1, sinewealt ('concave') 1, unsæpig ('sapless') 1, unwæstmbære ('unfruitful') 1, wuldrful ('glorious') 2, yfel ('evil') 1

period, see below) and cleanness are also found in conjunction with making/creation verbs; (ii) the fact that it is not clear to what extent the YCOE can be taken as representative of the language at large and not of the written/formal register only. The higher percentage of abstract predicates may simply be due to the choice of abstract subject matter (e.g. notions like poverty, the purity of the soul, etc.). Since, however, the issue cannot be settled satisfactorily, it is advisable to exert caution and view the analysis of causative *dōn* as the primary source for the (manner) resultative construction at least suspiciously.

Table 2. *Verbs and As occurring in resultative (and related) constructions in the York Poetry Corpus*

dōn ('make') 4: beorht ('bright') 1, efenmære ('equally famous') 1, sēoc ('sick') 1, weorþ ('worthy') 1
fremman ('make') 1: ēaþe ('easy') 1
wendan ('turn') 1: sweart ('swarthy') 1

There are very few comparable examples in the (rather small) York Poetry Corpus. Still, they confirm the trend observed in the YCOE. Most adjectival complement examples are found in conjunction with the verb *dōn*.

2.1.3 Conclusion

On the basis of the examples in Visser (1963) and the data retrieved from the YCOE and the York Poetry Corpus, it can be concluded that ARCs are seldom found in Old English texts. If we ignore schematic verbs of making and verbs of creation, the few ARC examples occurring in Old English texts evoke a force-dynamic scenario: they usually involve CUT and WASH verbs. Further, the verbs employed symbolise both the causing subevent and the caused subevent (i.e. they are not 'proper' RCs in the terminology of section 1). But it should be noted that *blow*, see (21), which is neither a verb of cutting nor a verb of washing, also qualifies as a force-dynamic verb and is more amenable to an analysis where it is taken to symbolise the caused subevent to a lesser extent (remember the discussion of (1a) above, *He wiped the table clean*, where a change is implicated rather than entailed). I have also pointed out that it is difficult to establish whether A is to be categorised as either an adverb or an adjective. Admittedly, however, an adverbial classification may sometimes be preferable despite the fact that A items, which are of a concrete nature, occur in complex transitive sentences with schematic verbs (remember that such schematic verbs may have been one of the inputs for the rise of the resultative construction). At worst, it may be the case that resultative As were linked to a 'fuzzy' part-of-speech representation in the Old English speaker's mind. Finally, it can be observed, as was originally pointed out by Visser (1963), that A items are, more often than not, of an 'epexegetical character' (Visser 1963: 582), that is they further specify the result implied by the resultative verb. This is so precisely because the verb also symbolises the resultant subevent in the causal chain (i.e. causative verbs are used).

2.2 Middle English

Insofar as the paucity of OE ARCs is not a by-product of the limited number of texts and restricted range of styles which have come down to us from the Old English period, one can observe an increase in the tokens and types of ARCs occurring in the Middle English (ME) period (which is identified here, for the sake of convenience, with the time span from 1150 to 1500). If the rise of ARCs in ME does not simply reflect a

wider spectrum of texts and text types, one can speculate that among its causes are the loss of inflections (which often rendered adverbs and adjectives indistinguishable from each other), analogical processes (by which e.g. the set of adjectives referring to the notion of removal, see below, could have been expanded), and the development of phrasal verbs (since phrasal particles may often be said to convey a resultative meaning; see Fischer et al. 2001: ch. 6, among others, on the development of phrasal verbs and Broccias 2003 on the relation between phrasal particles and resultative phrases).

Visser (1963) provides the following combinations (reproduced here in PDE orthography) as being first recorded in the ME period:

beat small (1399), *beat black and blue* (1460), *burst (a door) open* (1464), *chew small* (1425), *chop small* (1410), *cleanse clean* (1350), *dye either green or blue* (1486), *eat bare* (1300), *flobber* ('soil') *foul* (1378), *grind small* (1450), *hew small* (1420), *paint bloody* (1377), *paint black* (1400), *rub rody* ('rosy') (1377), *searce* ('sift') *smooth* (1440), *shave smooth and clean* (1412), *shrive clean* (1390), *strike dead* (1375), *strip naked* (1225), *sweep clean* (1325), *wash clean* (1200), *wash white and fair* (1225), *wipe clean* (1200)

In order to check whether Visser's list was sufficiently representative, as was the case for Old English, I also conducted a corpus search using the Penn–Helsinki Parsed Corpus of Middle English, second edition (PPCME2). By way of the same search procedure (see footnote 13), I obtained 3,667 small clause tokens, which had to be inspected manually for ARC examples. Since the majority of dynamic examples (i.e. both 'manner' resultatives and schematic resultatives) contain the schematic verb *make* (which replaced Old English *dōn* as the most common causative verb; see Hollmann 2003: 170–1 *inter alia*) and they are similar to the Old English examples discussed above, I will not provide a list of the adjectives found with them. My focus will be solely on the 'manner' ARCs occurring in the corpus. They are all reproduced below in alphabetical order. (Each verb, glossed into Present-day English, is followed by the As occurring in the retrieved examples in Present-day English orthography. A translation is offered only when deemed necessary. If a translation is not provided, potentially difficult or confusing words are explained in the glosses.)

(23) *bake (hard and stark)*

itt bakenn was full harrd and starrc inn ofne
it baked was full hard and stark in oven
'it was baked completely hard and firm in the oven' (CMORM, I, 32.360)

(24) *break (smaller)*

Ac þise him tobrekeþ smaller
but these to-him breaks small
'but [he] breaks these [bones] of his small' (CMAYENBI, 64.1204)

(25) *burst (open)*

and brast þe dores ope
and burst the doors open (CMCAPCHR, 98.2026)

(26) *colour (blue)*

And his bak is coloured blew as ynde
and his back is coloured blue as inde (i.e. indigo) (CMMANDEV, 31.760)

- (27) *cut (small; full of small holes; short)*
 (a) and cotte it as smale as he myzt
 and cut it as small as he might (i.e. could) (CMBRUT3, 51.1513)
 (b) this litel cercle shal be perced ful of smale holes
 this little circle shall be pierced full of small holes (CMEQUATO, 22.74)
 (c) They cuttyd hir gown so schort
 they cut her gown so short (CMKEMPE, 62.1390)
- (28) *delve ('dig') (deeper and deeper)*
 heo delueð deihwamliche heore put deoppre and deoppre
 they dig everyday their pit deeper and deeper (CMLAMBX1, 49.640)
- (29) *dight ('make') (fair)*
 Dyght þi sawle fayre
 dight thy soul fair
 'Make your soul fair' (CMROLLEP, 79.285)
- (30) *drink (full of water)*
 And þen ryght as a man leneth to a well and dryngketh his body full
 and then right as a man leans to a well and drinks his body full
 of watyr
 of water (CMMIRK, 32.907)
- (31) *eat (full of this colt)*
 and saide eme wil ye ete your bely ful of this
 and said eme (i.e. friend) will you eat your belly full of this
 colte
 colt (CMREYNAR, 59.589)
- (32) *fill (full of powder/hards/pains/fish/wisdom/wheat)*
 (a) and fille ful þe holes of podur of bremston riȝt to þe
 and fill full the holes of (i.e. with) powder of brimstone right to the
 grounde
 ground (CMHORSES, 95.118)
 (b) and when þe corn is oute þen schalt þou eury day onus fille þe
 and when the corn is out then shalt thou every day one fill the
 hole ful of herdes wel y-clensid of hempe or of flexe y-hewe
 hole full of hards well cleansed of hemp or of flax hewn
 nameliche smale
 namely small
 'and when the corn (i.e. 'horny induration of the cuticle', OE s.v. *corn*, n.²) has
 come out, then every day you shall fill the hole full with hards (i.e. the coarser
 parts) of well-cleansed hemp or flax cut especially small' (CMHORSES, 121.353)
 (c) This schewynge of criste paynes fillyd me fulle of
 this showing of Christ's pains filled me full of
 paynes
 pains (CMJULNOR, 54.126)
 (d) and filled all the nett full of gret fishes
 and filled all the net full of great fishes (CMMANDEV, 78.1964)
 (e) and fulled hys sowle so full of gostly
 and filled his soul so full of ghostly (i.e. spiritual)
 wysdome
 wisdom (i.e. knowledge) (CMMIRK, 32.908)
 (f) and filled it ful of whete
 and filled it full of wheat (CMPOLYCH, VI, 451.3312)

- (g) filde ful þat hus þere hie inne seten
filled full that house there (i.e. where) they in sat (CMTRINIT, 117.1589)
- (33) *grind (small)*
(a) and aftur grynde euereche bi him-silf riȝt smale
and after grind ever-each by itself right small
'and afterwards grind each one, separately, very small' (CMHORSES, 125.396)
(b) and grynde it smalle
and grind it small (CMTHORN, 6.14)
- (34) *hew (small)*
(a) and hew it al smale
and hew it all small (CMHORSES, 107.234)
(b) and when þe corn is oute þen schalt þou euery day onus fille þe hole ful of herdes
wel y-clensid of hempe or of flexe y-hewe nameliche smale (CMHORSES, 121.353) [see (32b)]
(c) I wolde for þi lofe and for magnyfyng of þi name ben hewyn
I would for thy love and for magnifying of thy name be hewn
as smal as flesch to þe potte
as small as flesh to the pot
'I would, for the love I have for you and to glorify your name, be hewn as small
as flesh to pot'¹⁶ (CMKEMPE, 142.3288)
- (35) *pinch (small)*
thow hast by cloþe raggyd and pynchyt smale
thou hast thy clothes ragged and pinched small
'you have your clothes ragged and worn thin' (CMMIRK, 113.3120)
- (36) *purge (clean)*
and purge þi sawle of al fylth, als clene as þe golde þat es
and purge thy soul of all filth as clean as the gold that is
proved in þe fournes
proved (see *OED* s.v. *prove*, v. B.1.1.b) in the furnace (CMROLLEP, 80.303)
- (37) *purify (clean)*
and nedis for to be puryfiede full clene
and needs for to be purified full clean (CMROLLTR, 17.418)
- (38) *shear (honest)*¹⁷
for, in old fadyrs dayes, men wold
for in old fathers' days men would
þat day make scher hom honest
that day make shear them(selves) honest (CMMIRK, 125.3366)
- (39) *shrive (clean (of your sins))*
(a) tyll he be schrevyn clene
till he be shriven clean (CMMIRK, 20.594)
(b) ȝyf þay werne clene schereven
if they were clean shriven (CMMIRK, 45.1302)
(c) and so schryue hym clene
and so shrive him(self) clean (CMMIRK, 74.1997)
(d) but schryuyth you clene
but shrive you clean (CMMIRK, 90.2413)
(e) but schryue you clene of your synnes
but shrive you clean of your sins (CMMIRK, 92.2486)

¹⁶ On the idiom 'as small as flesh to pot' see Robinson (1969).

¹⁷ As is explained in the electronic Middle English Dictionary (ets.umdl.umich.edu/m/med/), *shere honeste* means 'to cut the hair and beard so as to make oneself seemly for Easter' (s.v. *shere*).

- (f) For he þat woll schryue hym clene
for he that will (i.e. want) shrive him(self) clean (CMMIRK, 103.2808)
- (40) *shut (fast)*
but þe men of þe toune shitten faste here 3ates
but the men of the town shut fast their gates (CMBRUT3, 71.2137)
- (41) *spread (wider)*
and sprad þe endes of his kyngdom
and spread the ends of his kingdom
wydder þan dede his fader
wider than did his father (CMPOLYCH, 399.2927)
- (42) *stamp (small)*
and stamp þam samen full small
and stamp them together full small (CMTHORN, 70.525)
- (43) *stop (full of hards)*
And þen stoppe þe holes ful of herdus
and then stop (i.e. fill up) the holes full of hards (see (32b))
of hempe or of lynne
of hemp or of line (i.e. flax) (CMHORSES, 115.300)
- (44) *strike (almost blind)*
tyll God stroke hym allmoste blynde
till God struck him almost blind (CMMALORY, 660.4643)
- (45) *strip (naked)*
- (a) istruped hire steortnaked
stripped her start-naked (i.e. stark-naked) (CMANCRIW-1, II.119.1489)
 - (b) Ant swiðe heatterliche strupen hire steort-naket
and very wrathfully stripped her start-naked (CMJULIA, 101.92)
 - (c) and het his heaðene men strupin hire steort-naket
and ordered his heathen men strip her start-naked (CMJULIA, 103.128)
 - (d) Het o wodi wise strupen
ordered on mad wise (i.e. furiously) strip
hire steort-naket
her start-naked (CMKATHE, 37.298)
 - (e) strupeð hire steort-naket
strip her start-naked (CMMARGA, 61.107)
 - (f) Strupeð hire steort-naket
strip her start-naked (CMMARGA, 84.470)
 - (g) and aftyr striput hym naked
and after(wards) stripped him naked (CMMIRK, 121.3287)
- (46) *sweep (clean)*
and fint hit emti and mid beseme clene swopen
and finds it empty and with (a) broom clean swept (CMTRINIT, 87.1156)
- (47) *wall ('boil') (walm-hot ('boiling-hot'))*
and wallen hit walm-hat
and boil it boiling-hot (CMJULIA, 122.479)
- (48) *wash (white and fair/white and clean/clean)*
- (a) for to weschen hire inham se
for to wash her(self) in-them so
hwit and se feizer
white and so fair (CMANCRIW-2, II.290.4301)
 - (b) han wasshen hor soules so whyt and clene
have washed their souls so white and clean (CMMIRK, 132.3514)
 - (c) and so clene wasschen hor sowles
and so clean washed their souls (CMMIRK, 132.3518)

- (d) Sume bereð sole cloð to þe watere
 some bears soiled cloth to the water
 forto wasshen it clene
 for-to wash it clean (CMTRINIT, 57.786)
- (e) þe clene ben wasshen of þe
 that clean is washed of the
 embeþonke of fleshliche lustes
 thought of physical lust (i.e. desire) (CMTRINIT, 87.1149)

As was the case with the Old English data, some As are not necessarily adjectival but could also be categorised as adverbs. They include, for instance, *small* and *wide* (see also their ambiguous classification in the *OED*). One more example, not attested either in Visser or the PPCME2, is *brode* (i.e. PDE *broad(ly)*) as in (49):

- (49) he kembeth his lokkes brode
 he combs his locks broad
 (Chaucer, *Canterbury Tales*, *The Miller's Tale*, l. 3374)

Be that as it may, what is of crucial importance here is that both Visser's list and the data from the PPCME2¹⁸ point to much the same conclusion regarding the type of scenarios activated by the ARC. We find both the 'cutting small' and 'washing clean' scenarios as in Old English but there are important additions. In general, the following scenarios can be discerned:

- (i) the removal scenario: it includes both concrete and abstract events, e.g. *wash/wipe clean* and *strip naked*, which are concrete in character, and *purge/purify/shrive clean*, which are abstract;
- (ii) the filling scenario: it is the opposite of (i) and includes cases like *fill full* (and *stop full*), *colour/dye/paint* + colour adjectives;
- (iii) the destruction scenario: it includes verbs like *break*, *chew*, *chop*, *grind*, etc. One could also include verbs of food consumption, i.e. *drink* and *eat*, here;
- (iv) the hitting scenario: it is obviously related to (iii) in that an energetic interaction in also involved here. It includes verbs of impact such as *beat*, *strike* and *stamp*;
- (v) the change of shape scenario: it includes cases like *comb broad*, *spread wider*, *burst open*, *pinch small*;
- (vi) the food preparation scenario: it is related to (iii) in that (iii) also often has to do with the manipulation of edible substances (see e.g. the Old English examples involving weeds). The difference is that no 'destruction' of the affected substance is implied. It includes *bake* and *wall* (i.e. 'boil').

Similarly, the As also set up a coherent network:

- (i) configuration: small, short; open, deep, fast, wide
- (ii) full vs empty: full vs clean, smooth, dry, bare, naked
- (iii) moral evaluation: fair, honest vs foul (cf. clean)
- (iv) colour

¹⁸ Observe that the two lists complement each other. Many examples mentioned in Visser are not found in the PPCME2, e.g. *beat small/black and blue*, *chew/chop small*, *cleanse clean*, *dye either green or blue*, *eat bare*, *flobber foul*, *paint bloody/black*, *rub rody*, *searce smooth*, *shave smooth and clean*, *strike dead*, *wipe clean*.

However, admittedly, there are some cases (*hard, stark, warm/hot, blind*) which are difficult to group with the others. It is also worth observing that a group of As, (iii), involves moral evaluation, which can count as subjective, of course. Hence, on the basis of the discussion in section 1.2, we may expect an adverb to be used. However, insofar as an adverbial categorisation is not feasible for such cases, one may notice that an A like *foul* is the opposite of *clean*, whose moral evaluation sense is clearly metaphorical in nature. Hence, at least some of the As in (iii) may be regarded as stemming from a metaphorical interpretation of As referring to concrete properties, which are compatible with adjectives.

Needless to say, classifications like the ones above are a convenient simplification. For instance, one could create more fine-grained categories so that verbs of food consumption, for example, are distinguished from what I referred to as the destruction scenario. Still, their epistemological value should be obvious. They make it evident that all ARCs are related to one another in a coherent way. All the scenarios identified above involve an energetic interaction of some sort, be it concrete (e.g. *beat small*) or abstract (e.g. *purge clean*).

In ME we therefore find, for the first time, RC examples which involve the metaphorical interpretation of actions as forces (see e.g. *shear honest*¹⁹ and *purge clean*) as well as ‘proper’ RCs (see e.g. *shear honest* itself, *beat black and blue*, *strike dead*). Further, in ME we also find the first unsubcategory object RCs, reproduced in (30) and (31):

(30) *drink (full of water)*

And þen ryght as a man leneth to a well and dryngketh his **body** full of watyr
(CMMIRK, 32.907)

(31) *eat (full of this colt)*

and saide eme wil ye ete your **bely** ful of this colte (CMREYNAR, 59.589)

Observe that these two examples are similar to the fake reflexive one reported in (1a), *He talked himself hoarse*. Reflexive forms like *himself* of course originate from the merger of the personal pronouns and the noun *self*. In the examples above, instead of the generic noun *self*, we have the more specific body-part terms *body* and *belly*, respectively. It is also important to point out that, although a historical analysis of prepositional RCs is at present very difficult to conduct, a search in the *OED* (based on verbs used frequently in RCs; see e.g. Boas 2003) did not provide any instances of unsubcategory objects in prepositional RCs before the ME period. The two, relatively early, examples I found are both with the verb *laugh*:

(50) (a) Men **laughe hem selve to deap**.

men laugh themselves to death (1387; Trevisa, *Higden* (Rolls) I. 305)

¹⁹ *Shear* is of course a force-dynamic verb by itself. But the point here is that this verb is used, metaphorically, as a force which brings about the resultant state of being *honest*. In other words, *shear* only refers to the causing subevent in the causal chain ending with the property of being *honest*. Hence this example counts as an instance of the ‘proper’ RC and relies on the construal of the caused event as a force.

- (b) Hwon þet 3e habben herdi bileaue nule
 when that you have hard (i.e. strong) belief (i.e. faith) not+will
 3e buten **lauhwen** him lude **to bismare**.
 you except laugh him loudly to scorn
 ‘When you have a strong faith, will you not laugh him loudly to scorn?’
 (a.1225 *Ancr. R.* 270)

The example in (50a) is a true fake-reflexive instance (although one could argue that *self* was still categorised as a noun at the time) and (50b) contains the unsubcategory object *him*.²⁰

Summing up the status of ME ARCs, first one can say that they clearly involve force-dynamics. This is also evident when we consider the fact that ARCs often contain conjoined As and that As are often preceded by intensifiers such as *all*, *stark*, *right*. Both strategies probably aim to highlight the complete affectedness of the manipulated entities (see Broccias 2004 on the importance of the notion of complete affectedness for the semantic characterization of adjectival RCs). Some examples, where the intensifying mechanisms have been underlined, are provided below (from Visser 1963):

- (51) (a) uorto wasshen hire . . . so **hwit** and so **ueir** [see (48a)]
 for-to was herself so white and so fair
 (b) bett him **blak** and **bloo** (1460)
 beat him black and blue
 (c) It hade need to be died other **green** or **blwe** (1486)
 it had need to be dyed either green or blue
 (d) Pieres þe plowman was painted al **bloody** (1377)
 Piers the plowman was painted all bloody (i.e. blood-red)
 (e) þus sone þis doctour, As **rody** as a rose rubbed his chekis. (1377)
 thus soon this doctor as red as a rose rubbed his cheeks
 (f) He het hatterliche strepen hire steort **naket** (c.1225) [see (45)]
 he ordered wrathfully strip her start-naked (i.e. stark-naked)
 (g) Hir berdes shauen he right **smothe** and **clene** (c.1412)
 their beards shave he right smooth and clean

Second, ME ARCs can be both adverbial and adjectival and are still mostly of an ‘epexegetical character’ (but see e.g. (51b)). Third, unsubcategory object examples are found for the first time. Finally, the notion of force can be metaphorical. All in all, we observe an expansion of RCs in both types and tokens but RCs can be related coherently to one another by virtue of extension and analogical mechanisms (see the discussion of the various possible scenarios evoked by ME RCs above).

²⁰ However, notice that *hem selve* (‘themselves’) and *him* were actually in the dative (at least originally) and the construction came to be categorised as transitive only later (as observed in the *OED*, s.v. *laugh* 3). This idiom is also found in Old English but the available examples are not conclusive (see *DOE*, s.v. *bysmor* 3.b.i). The preposition *on* (i.e. *on bysmor*) may be found instead of *to*, and hence *on bysmor* may not necessarily be classified as a dynamic prepositional phrase; rather, it may have had a static meaning, such as ‘in a scornful manner’. Further, the example quoted in the *DOE* with *to* (i.e. *and his tō bismere lōh*, lit. ‘and him to scorn laughed’) codes the object of scorn in the genitive (*his*).

2.3 A note on Early Modern English

I won't have much to say about the later development of RCs in the Early Modern English (EModE) period except that by Shakespeare's time the types of possible RCs seem to be similar to the Present-day ones (as had already been noted by Visser). It will suffice here to report some examples, mostly from Shakespeare (quoted in Visser 1963), which show that unsubcategoryed-object examples are found regularly from the sixteenth century onwards (Present-day English spelling has been used):

- (52) (a) they drink themselves so drunk (1522)
- (b) you shall see him suck himself asleep (1530)
- (c) a lover's eyes will gaze an eagle blind (1588)
- (e) . . . would all themselves laugh mortal (1603)
- (f) weep our sad bosoms empty (1605)
- (g) he drinks you with facility your Dane dead drunk (1604)²¹
- (h) cry myself awake (1611)
- (i) cri'd their throats dry (1674)

Of particular interest are examples (52c) and (52g), because the unsubcategoryed objects *an eagle* and *your Dane* do not refer to body parts (or the whole self) as is the case in the other instances reported in (52). These two examples seem therefore to testify to a further stage in the evolution of RCs in that, contrary to what one finds for ME, the unsubcategoryed object is no longer restricted to a (pro)noun coreferential with the subject. By the EModE period, both 'proper' and pseudo RCs are possible with a variety of subcategoryed and uncategoryed objects. Crucially, however, the notion of force, be it literal or metaphorical, still applies. Gazing and drinking, for example, as in (52c) and (52g), can be understood metaphorically as forces bringing about a change of state of the metaphorically manipulated entity.

3 Conclusions and complication

The present investigation has revealed that ARCs originally (i.e. in OE) seem to occur with a restricted set of verbs, i.e. CUT and WASH verbs, and employ As like *small* and *clean*, which specify or intensify the verbal event (i.e. a causative paraphrase is not necessarily possible for such examples) and whose word-class status is not clear. Crucially, however, both CUT and WASH verbs are force-dynamic verbs and, as I have pointed out in section 1.1, the notion of energetic interaction is of great importance in the (synchronic) analysis of RCs. The energetic characterisation of RCs seems therefore to be also applicable to the earliest recorded stage of the English language. Later, ARCs apparently expanded so as to encompass other verb and adjective types (see Israel 1996 for a similar point on the growth of the *way*-construction) as well as transitivity patterns (e.g. uncategoryed objects). By the EModE period, ARCs appear to be as flexible as they are nowadays.

²¹ As is pointed out by an anonymous reviewer, *you* in (52g) is an ethic dative. The whole sentence can be rendered as 'he'll easily drink you your Dane dead drunk'.

This evolutionary path accords well with a bottom-up (or usage-based) model of language such as Langacker's (1999) (see also Boas 2003 on the need for a maximalist and bottom-up approach to RCs). Language grows out of specific examples as generalisations over such specific usage events. The existence of a 'schematic' RC (i.e. the causative pattern with e.g. OE *dōn* and an adjectival object complement) may not, for example, be a strong enough trigger for the development of the RC. (Most of the adjectival *dōn* examples were abstract in nature and one should also remember that Romance languages have similar 'schematic' RCs but lack productive RCs, or rather, RCs which are as productive as the English ones.) The ME examples set up a coherent network of analogical extensions based on the *CUT* and *WASH* scenarios identified for OE. Consequently, we may take their evolution to have been triggered by other factors such as the indeterminate word-class status of A and the parallel expansion of phrasal verbs. To be sure, this line of enquiry should be investigated in more depth in future research, which should expand the diachronic analysis of RCs so as to encompass prepositional cases as well as other Germanic languages. The latter point is especially worth stressing because a quick look at other Germanic languages reveals a serious complication for the analysis advanced here.

I have remarked that unsubcategory object cases do not seem to be recorded before the ME period. One could therefore take them to be a development subsequent to the OE period. The problem with this conclusion is that unsubcategory object cases are also found in other Germanic languages (see Oya 2002 and Boas 2003 for German, Whelpton 2006 for Icelandic), as shown in (53):

- (53) (a) cry oneself hoarse
 (b) sich heiser schreien (German)
 (c) garga sig hásan (Icelandic)
 (d) skrike seg hás/hes (Norwegian)

It is difficult to believe that this pattern was not possible in OE and that it developed (possibly after the Norman invasion) independently of the other Germanic languages. The fact that no examples of this pattern have been found in OE records may simply be a historical accident related to the restricted range of texts and text types which have come down to us (as was underlined at the beginning of section 2.2). Still, I would like to contend that the availability of fake-reflexive examples in other Germanic languages does not necessarily invalidate the present analysis, because an evolutionary path like the one sketched above may still have taken place. Significantly, ARCs of the *cut something small* type seem to be more 'basic' than others in that they are also found in Romance languages such as Italian (which, like the other Romance languages, generally lacks ARCs):

- (54) Li ha tagliati sottili.
 them has cut thin-PLUR
 'S/he has cut them thin.'

It may be that the diachronic details need revising, but the overall picture of a progressive extension from basic force-dynamic interactions symbolised by *CUT* and *WASH* verbs

to more general types (both causatively and metaphorically) may still be on the right track. To be sure, force-dynamics turns out to be a notion to be reckoned with both synchronically and diachronically.

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