

ENGLISH BENEFACTIVE NPS

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Proceedings of the LFG13 Conference

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2013

CSLI Publications

<http://csli-publications.stanford.edu/>

Abstract

English benefactive NPs pattern with arguments in some ways and with adjuncts in others. This paper proposes an analysis of benefactive NPs that accounts for this dual behavior. In particular, I argue that benefactive NPs are generally not included in the basic argument structure of verbs. Instead, they are added by an argument structure rule. In other words, English benefactive NPs are *derived arguments*, in the sense of Needham and Toivonen (2011).¹

1 Introduction: Benefactive NPs and argumenthood

English benefactives can be expressed with *for*-PPs as in (1) or with NPs (DPs) as in (2) (Fillmore 1965, Green 1974, Oehrle 1976, Allerton 1978, Larson 1988, Jackendoff 1990, Emonds 1993, Wechsler 1995, Shibatani 1996, and others).

- (1)
 - a. John baked cookies *for Mary*.
 - b. Sandy sang a song *for the children*.
- (2)
 - a. John baked *Mary* cookies.
 - b. Sandy sang *the children* a song.

This paper addresses the following question: Are benefactive NPs such as *Mary* in (2a) and *the children* in (2b) arguments or adjuncts of the verb? Consider some textbook definitions of arguments and adjuncts.

“Adjuncts are always optional, whereas complements are frequently obligatory. The difference between them is that a complement is a phrase which is *selected* by the head, and therefore has an especially close relationship with the head; adjuncts, on the other hand, are more like ‘bolt-on’ extra pieces of information and don’t have a particularly close relationship with the head.” (Tallerman 2005,98)

“This distinction between arguments and adjuncts is important, but not always easy to make. The basic difference is that arguments are closely associated with the meaning of the predicate itself, while adjuncts are not.” (Kroeger 2004,10)

“The arguments are the participants minimally involved in the activity or state expressed by the predicate.” (Haegeman 1994,44)

¹I want to thank Stephen Wechsler, Paul Melchin, Raj Singh, Liz Christie, Katie van Luven, Rob Truswell, Ash Asudeh, Dejan Milacic, Amir Anvari, the members of Carleton’s LLI Lab, and the participants of the LFG13 conference in Debrecen for valuable comments, questions and discussion. Several anonymous reviewers provided very helpful feedback on the abstract and the paper. I want to thank the Social Sciences and Humanities Research Council of Canada for financial support. Many errors and misunderstandings are sure to remain, and they are entirely my own.

These quotes illustrate that definitions of argumenthood tend to rely on intuitions that arguments have a close relationship with the predicate, or they are core or necessary participants in the event expressed by the predicate. Benefactives then do not seem to be arguments. Consider again examples (1–2): surely one can bake cookies without baking them for somebody, and one can also sing without an audience. Benefactives thus pattern with adjuncts in that they are not core participants of the predicate.

Another frequently cited criterion for argumenthood is obligatoriness: while adjuncts typically are optional, some arguments are obligatory (3a). However, many uncontroversial arguments are also optional (3b–c):

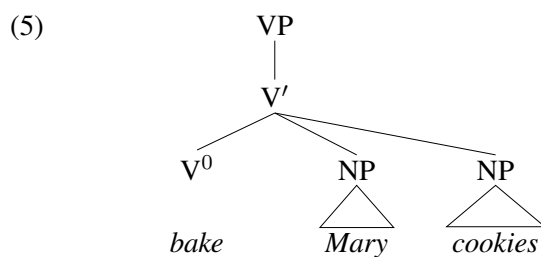
- (3)
- a. Sally was constructing *(an argument).
 - b. Sandy loves eating (cookies).
 - c. Susie is outside playing (ice hockey).

Benefactives are optional, compare (2a–b) to (4a–b):

- (4)
- a. John baked cookies.
 - b. Sandy sang a song.

We can conclude that benefactives pattern with adjuncts in terms of optionality, with the caveat that optionality as a criterion for testing argumenthood is questionable since many arguments are also optional.

The validity of the core criteria for argumenthood can be questioned, but they nevertheless indicate that benefactives are adjuncts and not arguments. However, benefactive NPs are naturally assumed to be complements of the verb in the phrase structure; that is, they appear in an argument position at c-structure:



Moreover, since benefactives are NPs that appear between the verb and the second object, they are normally treated as f-structure (first) OBJECTS (e.g., Bresnan 2001, ch 14), which is an argument function.² In short, it is not clear whether benefactive NPs should be treated as arguments or adjuncts.

Previous work on benefactives has shown that these phrases display a number of interesting characteristics (Green 1974, Oehrle 1976, and others). The goal of this paper is to propose an explicit LFG analysis of benefactive NPs in English that captures their behavior and that also sheds light on the fact that they do not pattern

²But see Kibort (2007, 2008), Hudson (1992) and others for discussion of issues that arise when determining the grammatical function of “indirect objects”.

clearly with either arguments or adjuncts. The remainder of this paper is structured as follows: Section 2 applies a number of argumenthood tests to benefactive NPs. Section 3 provides a Lexical Mapping Theory analysis of English benefactive NPs. Section 4 discusses the strengths and weaknesses of the proposed analysis.

2 Argumenthood tests

Benefactive NPs pattern with adjuncts in that they do not seem to be core arguments and they are optional, as discussed above. This section subjects English benefactive NPs to a number of other argumenthood tests that have been previously proposed in the literature (see Pollard and Sag 1987, Dalrymple 2001, Needham and Toivonen 2011, and references cited in those works).

2.1 The adjunct island test

It is possible to extract out of arguments (6), but not out of adjuncts (7):

- (6) a. I told Mandy to fix the car.
b. What did you tell Mandy to fix?
- (7) a. Bill cried after annoying Susan.
b. *Who did Bill cry after annoying?

Adjuncts are ‘islands’ to extraction, in the terms of Ross (1967). Chomsky (1986), Johnson (2003), and others provide more examples and discussion of adjunct islands.

It is not possible to extract out of benefactive NPs:

- (8) a. I cooked the parents of the bride an amazing meal.
b. *Who did you cook the parents of an amazing meal?

The ungrammaticality of (8b) shows that benefactive NPs pattern with adjuncts with respect to extraction. However, extraction out of NPs is independently restricted (see Ross 1967, Huang 1982, Chomsky 1986, Bošković to appear). In (9), the NP *the parents of the bride* is not a benefactive, but extraction is still impossible:

- (9) a. I liked the parents of the bride.
b. *Who did you like the parents of?

Since extraction out of NPs is independently restricted, it is problematic to make use of the adjunct island test to gauge the argumenthood status of benefactive NPs.

2.2 The alternation test

Benefactive NPs can alternate with *for*-PPs:

- (10) a. John baked *Mary* cookies.
 b. John baked cookies *for Mary*.
- (11) a. Sandy sang *the children* a song.
 b. Sandy sang a song *for the children*.

By what Needham and Toivonen (2011) call the alternation test, PPs that alternate with subject or object NPs are arguments (Lewis 2004).³ However, the *for*-PP is not examined here, we are instead interested in the status of the benefactive NP. But if we appeal to the possibility of *for*-benefactives to alternate with benefactive NPs as evidence that the *for*-benefactives are arguments, we presuppose that benefactive NPs are clear arguments. It therefore seems that if the test shows anything at all, it gives evidence in favor of an analysis of the benefactive NP as an argument, not an adjunct.

2.3 The relative ordering test

The relative ordering of arguments in a sentence is generally stricter than the ordering of adjuncts; internal arguments (complements) are typically directly adjacent to the verb (Jackendoff 1977, Pollard and Sag 1987, Dalrymple 2001). This is illustrated with the adjunct *cheerfully* in (12) and the argument *an apple* in (13):

- (12) a. *Cheerfully*, Tobias ate an apple.
 b. Tobias *cheerfully* ate an apple.
 c. Tobias ate an apple *cheerfully*.
- (13) a. Tobias ate *an apple*.
 b. *Tobias *an apple* ate.
 c. *Tobias ate *cheerfully an apple*.

Benefactive NPs are not easily ordered anywhere except immediately beside the verb:

- (14) a. Nancy poured Kendra some milk.
 b. *Nancy *Kendra* poured ___ some milk.
 c. *Nancy poured ___ some milk *Kendra*.

The positioning of benefactive NPs is quite strict, so they are arguments by the relative ordering test.

Pollard and Sag (1987) point out that the relative ordering of adjuncts and other phrases can affect the truth-conditional meaning of the sentence. They illustrate this with sentences like (15); see also Dalrymple (2001):

³See also Van Valin and LaPolla (1997, 162, 382–384), who classify *for*-benefactives as ‘argument-adjuncts’, between arguments and adjuncts. They discuss examples where *for*-benefactives alternate with NPs, as illustrated in (10–11) here.

- (15) a. Kim ran twice a day reluctantly.
 b. Kim ran reluctantly twice a day.

When an argument is reordered, by topicalization for example, the truth-conditional meaning is not affected. In other words, the interpretation of an adjunct may depend on its relative position in the clause, but this is not true for arguments. It is then possible that the NP *Kendra* in (14) is, in fact, an adjunct, but the benefactive meaning is only available in the position between the verb and the second NP, *some milk*. Some support for this view comes from the observation that benefactive NPs cannot occur in intransitive clauses, even though *for*-benefactives can. The sentence *Shawn sang for Lisa* cannot alternate with **Shawn sang Lisa*, which is ungrammatical, at least with the intended reading where *Lisa* is a benefactive.

I conclude that the relative ordering test classifies benefactive NPs as arguments, but it is not clear that this test is appropriate here.

2.4 The *wh*-word conjunction test

Two *wh*-words that refer to arguments with different semantic roles cannot be conjoined (16). Two *wh*-adjuncts with different semantic roles can be conjoined (17). An argument *wh*-word cannot be conjoined with an adjunct *wh*-word (18).

- (16) a. Sam showed the picture to Kim.
 b. *What and to who(m) did Sam show?
- (17) a. Jolanda met a friend in Minneapolis on Friday.
 b. Where and when did Jolanda meet a friend?
- (18) a. Linus wrecked his car last year.
 b. *What and when did Linus wreck?

The generalizations illustrated by examples (16–18) grossly oversimplify data which are quite complex; for example, the coordination of adjunct and argument *wh*-words is sometimes allowed (see, e.g., Gračanin Yuksek 2007 and Larson 2013). I set these complications aside here.

Example (19) shows that a benefactive *wh*-word cannot be co-ordinated with another phrase:

- (19) a. I baked Tonya some cookies yesterday.
 b. *When and who did you bake cookies yesterday?
 c. *Who and when did you bake cookies yesterday?

Examples (19b–c) are infelicitous, and the benefactive *who* thus patterns as an argument, not an adjunct. However, even without *wh*-word conjunction, it is not possible to construct questions with a benefactive NP as a *wh*-word:

(20) *Who did I bake some cookies yesterday?

Since (20) is ungrammatical, (19b-c) cannot be expected to be grammatical, regardless of the argumenthood status of benefactive NPs. I conclude that *wh*-word benefactives pattern with arguments in that they cannot be coordinated with other *wh*-words, but since benefactive NPs cannot be *wh*-words at all, we cannot use this observation as evidence for argumenthood.

2.5 The VP-anaphora test

In sentences with VP-anaphora, adjuncts may be added to ‘do so’ phrases, but arguments may not (Lakoff and Ross 1966, Baker 1978, Jackendoff 1977).

(21) Susie sold her stocks yesterday and Pat did so today.

(22) *Susie washed her feet and Pat did so her hands.

Benefactive NPs cannot be added to ‘do so’ phrases:

(23) *Pete baked Linda a cake and Tom did so Susie some cookies.

Example (23) is ungrammatical, indicating that benefactive NPs pattern with arguments. However, independently of the benefactive NP, the second object (*a cake* and *some cookies* in (23)) will cause a problem: the second object is an argument and cannot be added to ‘do so’, which replaces a verb and its arguments. Examples similar to (23–25) but without benefactives are also not grammatical:

(24) *Pete baked a cake and Tom did so some cookies.

Example (23) includes two theme objects with different referents: *cake* and *some cookies*. It does not help to repeat the same second object, or to drop it completely:

(25) *Pete baked Linda a cake and Tom did so Susie (a cake).

The fact that the second object must be there in order to get a benefactive reading (see the discussion in section 2.2) is problematic: it does not seem possible to make use of the VP-anaphora test for benefactives without creating examples that are ungrammatical independent of the benefactive NP. I conclude that benefactive NPs pattern with arguments with respect to VP-anaphora, but the reasons for this may have nothing to do with the argumenthood status of benefactive NPs.

2.6 The pseudo-cleft test

Adjuncts can occur after *do* in a VP-focussed pseudo-cleft (26), arguments cannot (27–28); see Hedberg and DeArmond (2009):

- (26) a. Mia slept in her room.
b. What Mia did in her room was sleep.

- (27) a. Claire discussed the problem.
 b. *What Claire did the problem was discuss.
- (28) a. Francis trusted in his mentor.
 b. *What Francis did in his mentor was trust.

Benefactive NPs cannot occur after *do* in pseudo-clefts:

- (29) a. Lance cooked Dorothy a lovely meal.
 b. *What Lance did Dorothy was cook a lovely meal.

By this diagnostic, benefactive NPs pattern with arguments.

2.7 Summary

English benefactive NPs are adjunct-like in that they are not core participants of the verb, and they are not obligatory. However, benefactive NPs are nevertheless c- and f-structure arguments: they are complements of the verb at c-structure and objects at f-structure. This section has explored benefactive NPs in the light of a number of previously proposed argumenthood tests. Very few (if any) of the diagnostics can be applied unproblematically to benefactives, so it could be argued that the traditional argumenthood tests cannot be used to test the status of benefactives. It is important to keep this in mind, but the table in (30) is nevertheless included here to give an overview of the results:

(30)

Argumenthood test	Result
The core participant test	adjunct (section 1)
The optionality test	adjunct (section 1)
The adjunct island test	adjunct (section 2.1)
The alternation test	argument (section 2.2)
The relative ordering test	argument (section 2.3)
The <i>wh</i> -word conjunction test	argument (section 2.4)
The VP anaphora test	argument (section 2.5)
The pseudo-cleft test	argument (section 2.6)

A generalization emerges if the relative ordering test, the *wh*-word conjunction test, the VP anaphora test and the pseudo-cleft test are considered together: the benefactive NP must occur immediately beside the verb. In fact, it must occur between the verb and the direct object.

Previous researchers have noted that some classes of phrases, for example, passive *by*-phrases and instrumentals, are difficult to classify as clear arguments or clear adjuncts (Grimshaw 1990, Whaley 1993, Larson 1998, Croft 2001, McKercher 2001, Needham and Toivonen 2011, Williams 1994,25, Schütze and Gibson 1999, Dowty 2003, Donohue and Donohue 2004, Koenig et al. 2003, Van Valin and LaPolla 1997,

Rákosi 2006b, Bosse et al. 2012 Asudeh and Toivonen 2012, Ágel and Fischer 2009, Schütze 1995, Larson 1998). The English benefactive NP is also difficult to classify. In LFG, as in many other frameworks, it is important to determine whether or not a participant is an argument or an adjunct. In the lexicon, adjuncts are not included on the argument structure list of lexical entries. At a-structure, Lexical Mapping Theory handles the mapping to argument functions only (Levin 1986, Bresnan and Kanerva 1989, Alsina and Mchombo 1989). At f-structure, the classification of grammatical functions is partially dependent on whether or not they are argument functions. At c-structure, arguments and adjuncts appear in different phrase-structural configurations. In what follows, I attempt to develop an explicit analysis in LFG that sheds light on the unclear argumenthood status of benefactive NPs.

3 An LMT analysis of English benefactives

Native speakers typically do not intuit that benefactive NPs are core arguments of the verb. This was already discussed above, but let us nevertheless consider a few additional examples here:

- (31) a. Liz carved a statue for Tom.
 b. Liz carved John a statue.
- (32) a. We built a playhouse for the kids.
 b. We built the kids a playhouse.
- (33) a. Cassie drew a picture for Emily
 b. Cassie drew Emily a picture.

The verbs *carve*, *build* and *draw* can occur with benefactive PPs and NPs, but the verbs do not call for such participants. The activities can easily be performed without any actual or intended benefactor. There seems to be no reason to include benefactives as members of the original argument structure lists of these verbs.

As part of an overview of Lexical Mapping Theory, Bresnan (2001) considers some examples with benefactives, including (34):

- (34) Both parents cooked the children supper.

She remarks: “The ditransitive of *cook* has an added beneficiary role, which is a patientlike internal argument” (Bresnan 2001, 315). She does not discuss in detail exactly how this beneficiary is added, but, given the rest of the discussion in the chapter, there seem to be two possibilities: 1) The beneficiary is not really added, it is just there in an alternative lexical entry. We then have two lexical entries for *cook*; one with and one without a beneficiary argument. 2) The beneficiary is added by a lexical rule.⁴ As we will see, there is actually reason to assume that a limited number

⁴But see the discussion in section 4 below: if lexical rules are conceptualized as lexical redundancy rules, there is no clear distinction between option (1) and (2).

of verbs have an alternative lexical entry with a beneficiary. However, we want to account for the productivity of these ditransitives: beneficiary NPs can occur quite freely with a large set of verbs.

Following Bresnan's discussion, I propose that benefactive NPs may be added by a benefactive lexical rule at argument structure. Benefactive NPs are thus what Needham and Toivonen (2011) call *derived arguments*. They are then neither core, initial arguments nor adjuncts. This accounts for their mixed argumenthood characteristics.

The rule for adding benefactives is productive but cannot apply completely freely. It does not apply to all verbs. First of all, it cannot apply to intransitive verbs (as also noted in section 2.3 above):

- (35) a. Molly danced/died/tidied for her friends.
 b. *Molly danced/died/tidied her friends.

Beneficiary NPs can only be added to transitive verbs, but not to all transitive verbs:

- (36) a. Gordon changed his hairstyle for Rex.
 b. *Gordon changed Rex his hairstyle.

These observations are explained by the following generalization (Green 1974, Allerton 1978, Shibatani 1996, and others): *Beneficiary NPs are only allowed where they can be interpreted as the actual or intended recipient of the second object (the theme)*. Example (35b) above is ungrammatical because there is no second object theme. In (36), it is not possible to construe Rex as the recipient of the hairstyle. A benefactive NP is permitted in (37b), but only with a recipient interpretation:

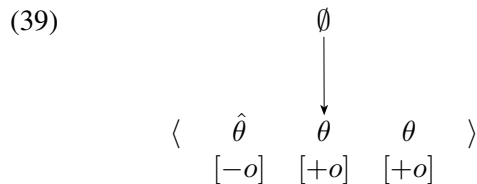
- (37) a. Cleo boiled some eggs for Patrick.
 b. Cleo boiled Patrick some eggs.

There are several different possible interpretations of *for Patrick* in (37a): Cleo could have intended for Patrick to have the eggs (presumably in order to eat them), or she could have boiled eggs for somebody else on Patrick's behalf (instead of Patrick), or she might have done it in order to make Patrick happy but with the intention of giving the eggs to someone else as a present. These different interpretations have been discussed in several of the works cited above, for example in Allerton (1978). *Patrick* in (37b), in contrast, has only one possible interpretation: Cleo intended to give Patrick the eggs. Some transfer of possession was intended, the eggs were to become Patrick's. The rule that introduces benefactive NPs must indicate that the benefactive is also a recipient. When the *for-PP* is not a recipient, the benefactive NP and the *for-PP* can co-occur:

- (38) I cooked the happy couple some food for my mother.

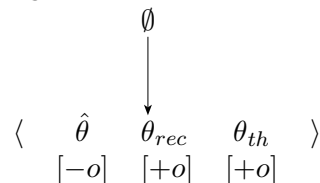
In (38), the happy couple will receive the food, but the mother will benefit in some other way; perhaps the cooking was done for her sake, or on her behalf.

English ditransitives are similar to applicatives, and they are sometimes treated as a kind of applicative. The beneficiary rule is therefore modelled on applicative rule of Bresnan and Moshi (1990):



The applicative rule adds an “applied” object; an argument which is otherwise typically expressed as an adjunct PP. With (39) as a model, I propose the following rule for benefactives in English:

(40) English benefactive NP rule:



The arguments on the argument list will map to SUBJECT, OBJECT and OBJECT_θ, according to the mapping principles of Lexical Mapping Theory, which I will not review here.

Rule (40) is formulated so as to allow a recipient to be expressed together with any transitive verb. So far, the discussion has been centered around recipient/benefactive NPs that can also be expressed as *for*-PPs, but the formulation of the rule in (40) raises the question of whether recipient NPs that correspond to *to*-NPs are also products of the same rule:

- (41)
- a. Joe gave a gift to Pete.
 - b. Joe gave Pete a gift.

Recipient NPs that correspond to *to*-NPs have previously received much more attention in the literature than the ones corresponding to *for*-NPs, but I set them aside here.

The very general rule in (40) does not restrict its input to a specific type or class of verb. In other words, the rule can apply freely to transitive verbs with an expressed theme/patient object, where that object can be construed as a gift for the beneficiary. The effect of the rule then is quite similar to a *construction* in the sense of Construction Grammar (Fillmore 1988, Kay and Fillmore 1999, Goldberg 1995, 2006, Boas and Sag 2012): when an NP appears as the first object in a double object frame in English, that NP will be interpreted as the recipient of the second NP. This generally holds, unless the double NPs occur with a small number of specific verbs, e.g., *call* (‘I call my husband Bubs’). Examples like (42b), or (36b) above, are infelicitous because *Rex* and *her* cannot be interpreted as recipients:

- (42) a. He sailed the seven seas for her.
 b. *He sailed her the seven seas.

The following examples, all retrieved from the internet, are only felicitous with a recipient interpretation (figurative or literal) of the first VP-internal NP:

- (43) a. I'll butter you some bread.
 b. Three weeks before, when Boston was in Raleigh, Carolina stole them a point by getting a tie
 c. We serve breakfast all day, so no matter what time you get here we'll scramble you some eggs, fry some bacon, or...

In (43a), the first object will receive (and presumably eat) the bread. In (43b), the point will go to the referent of *them*. In (43c), the referent of *you* will get the eggs.

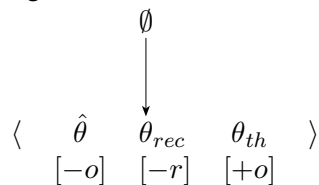
Wechsler (1995), Kay (2005) and others have noted that benefactive-recipient NPs cannot passivize.⁵ Kay (2005) marks (44) as ungrammatical:

- (44) *My sister was carved a soap statue of Bugs Bunny (by a famous sculptor).

Under the present analysis, the recipient-beneficiary cannot passivize because it is a [+o] argument. If the first argument is suppressed in a passive, the second argument should automatically become the passive subject. However, the [+o] specification is incompatible with the subject grammatical function by Lexical Mapping Theory. Therefore, the beneficiary marked [+o] cannot passivize.

Schnoebelen (undated) takes issue with the judgements given by Kay and others. He shows that many speakers allow passivization of benefactives quite freely. I propose that speakers that allow passivization have the rule in (45), which differs from (40) in that the second role is specified as [-r].

- (45) English benefactive NP rule, dialect 2:



Speakers who allow passivization of beneficiary-recipients have the rule in (45), and speakers who do not allow passivization have the rule in (40), given above.

To complicate matters further: the literature indicates that all speakers allow passivization of benefactive NPs for a subset of verbs, such as *cook* (cf. (8)); see Bresnan's (2001) example (48b), repeated here as (46):

- (46) The children were cooked supper by both parents.

⁵Benefactive NPs corresponding to *for*-PPs differ in this way from recipient NPs corresponding to *to*-PPs that passivize easily: *you were given a second chance*; *you should have been sent a message*.

In order to account for this, I follow Wechsler (1995, 90–91) in assuming that the speakers with rule (40) also have a lexicalized ditransitive variant of certain verbs, e.g., *cook* and *bake*. This is a regular ditransitive and the object can passivize.

The analysis of benefactive NPs proposed here is consistent with the observation that they display characteristics of both arguments and adjuncts. Benefactive NPs are not original, basic arguments of the verb, instead they are optionally added as arguments in a-structure by a lexical rule. In other words, recipient-benefactives are arguments, but they are not core arguments.

4 Discussion

Benefactive NPs fall in between arguments and adjuncts. Section 3 presented an explicit Lexical Mapping Theory analysis of benefactive NPs. The analysis made use of a lexical rule, or rather two different lexical rules, in order to account for various characteristics of recipient-benefactives that have previously been noted in the literature. The second lexical rule was posited in order to account for speaker variation regarding the possibility to passivize benefactives. According to the analysis presented here, the mixed argumenthood status of benefactive NPs follows from the fact that they are not original arguments, but instead added or derived arguments, in the sense of Needham and Toivonen (2011). This analysis raises a number of questions and introduces some potential problems, which I will discuss here.

4.1 Some remaining questions

The idea behind my proposal is that the mixed argumenthood characteristics follow from the fact that benefactive NPs are not core arguments closely tied to the basic meaning of the verb, but instead, they are added by a rule. However, do the exact characteristics in fact follow? I believe they do. Native speakers do not classify benefactives as necessary participants of verbs like *butter*, *carve* and *build*. Benefactive NPs are also optional. These two observations are consistent with the analysis proposed here: benefactives are not part of the original lexical entries. In other respects, the benefactive behaves as an argument, which is expected, since the benefactive NPs, when present, are analyzed as arguments. The adjunct island test yields an unexpected result, as it classifies benefactive NPs as adjuncts. However, as noted in section 2.1, there are independent restrictions on extraction out of NPs, so this test does not reveal much about the argumenthood status of benefactives. In general, the analysis proposed in section 3 captures the argumenthood generalizations pertaining to benefactive NPs described in section 2.

The verbs *cook* and *bake* deserve special mention, as they can passivize even though many speakers generally dislike passives where the subject is a benefactive. Following Wechsler (1995), I posited that some verbs have an alternative lexical entry with a benefactive NP on the original argument structure list. For the relevant

speakers,⁶ the benefactives of these verbs should then show only argument-like characteristics. Benefactives should still be optional, since there is a transitive lexical entry in addition to the ditransitive one. However, what about the core participant intuition? The present analysis predicts that speakers with rule (40) should have the intuition that *cook* and *bake* are different from, e.g., *carve* and *sand* in that it is intuitively natural to think that baking something is done with a benefactive-recipient in mind. I am not sure that there are data to show that the prediction is accurate.

As noted in section 2.4, it is not possible to *wh*-question benefactives:

- (47) a. I baked Linda cookies.
 b. *Who did I bake cookies?
- (48) a. The kids drew their teacher a picture.
 b. *Which teacher did the kids draw a picture?

The analysis presented in section 3 neither predicts nor conflicts with the data in (47–48). I cannot explain these facts, but they form part of a larger generalization, already noted at the end of section 2: benefactive NPs must appear between the verb and the second object. The manipulations involved in several of the argumenthood diagnostics involve breaking up the basic word order. The manipulations that involve the word order consistently render the examples ungrammatical; see section 2.3 for the relative ordering test, section 2.4 and examples (47–48) for *wh*-extraction, section 2.5 for VP anaphora, and section 2.6 for pseudo-clefts. The distribution of benefactive NPs is thus very limited: it can only occur in the frame given in (5). This does not directly follow from the analysis given in section 3, and I will not attempt to offer an explanation for these intriguing facts here. However, it is perhaps possible to adopt an analysis similar to the one Asudeh et al. (2013) propose for the Swedish directed motion construction (Toivonen 2002). Asudeh et al. (2013) posit a template that is directly associated with a construction-specific phrase structure rule.

Lexical rules in LFG are not thought of as derivational rules with a defined input and an output. Instead, they are Lexical Redundancy Rules, in the sense of Jackendoff (1975). These rules relate lexical entries and state the regularities between them to avoid redundancy in the lexicon. The following is a quote from Kaplan and Bresnan (1982), discussing the f-structural lexical rules that were commonplace in LFG before the explicit proposals were developed for handling “relation-changing” phenomena with Lexical Mapping Theory at a-structure:

“It is important to note that these relation-changing rules are not applied in the syntactic derivation of individual sentences. They merely express patterns of redundancy that obtain among large but finite classes of lexical entries and presumably simplify the child’s language acquisition task [...]”

⁶Recall that some speakers can passivize all (or most) benefactives. That dialect is captured by the rule in (45) and no alternative lexical entries are needed.

This conceptualization of lexical rules is very natural in a lexicalist, non-transformational, constraint-based framework like LFG. Consider, for example, the passive rule in LFG. The passive rule states that the most prominent role on the a-structure is suppressed and therefore cannot be mapped to a syntactic function. If the most prominent role is in some sense there in some ‘basic’ input (either in the passive verb or in the active counterpart), and the passive rule actually suppresses it in a less basic version of the form, then the mapping is non-monotonic. However, a lexical redundancy rule simply relates two lexical entries, neither one more basic than the other, and they have different argument structures. Monotonicity is a fundamental computational constraint on LFG grammars.

The notion of derived arguments, discussed above and in Christie and Toivonen (2013) and Needham and Toivonen (2011), relies on the intuition that predicates have a basic argument structure. Even though *kick* can occur in a number of argument frames, one of those frames is basic: *kick* is a transitive verb which takes a subject (a kicker) and an object (something that gets kicked). This intuition is clear and widely shared; see, for example, Tesnière (1959, Ch. 111, §6), Levin and Rappaport Hovav (1995), Ágel and Fischer (2009, 243) and Goldberg (1995). Nevertheless, it is important to recognize that an appeal to basic and derived arguments or verbs will lead to non-monotonic mappings in Lexical Mapping Theory. The specific benefactive rule, as formulated above, is not directly problematic: the rule adds an argument and so the mapping is monotonic.⁷ However, it is problematic for other relation-changing correspondences; for example, the passive and unspecified object deletion. We could posit that lexical rules that *add* arguments can appeal to basic and derived lexical entries, whereas rules that delete or change argument structures cannot. However, this does not seem to be independently motivated. A better alternative is to explore other proposals for how to understand phrases that fall between arguments and adjuncts.

4.2 Alternative views on arguments and adjuncts

Györgi Rákosi has proposed that what he calls *non-core participant PPs* should be treated as thematic adjuncts (Rákosi 2006a,b, 2012). The analysis is cast within Reinhart’s (2002) Theta System, and the basic intuition is that non-core participants are adjuncts that bear a thematic role. Benefactive NPs are not good candidates for thematic adjuncts, as they are c-structure complements and f-structure OBJECTS. In fact, Rákosi (2012, 525–526) classifies benefactive NPs as syntactic arguments of the verb, and does not include them on the list of expressions that are thematic adjuncts.

Asudeh and Giorgolo (2012) and Giorgolo and Asudeh (2012) argue that different types of dependents differ in how they compose with the verb semantically. The analysis in Asudeh and Giorgolo (2012) is cast in LFG with Glue Semantics. The analysis of Giorgolo and Asudeh (2012) uses monads in the meaning language, drawing upon a proposal by Blom et al. (2012) for Categorical Grammar. Asudeh and Giorgolo mainly focus on optional arguments, like for example the object of *eat*, but they

⁷ Kibort (2007) provides further discussion of dative shift and monotonicity.

also discuss other types of examples, such as the passive *by*-phrase. An exploration of the semantic composition of verbs with benefactives might shed light on the behavior of benefactive NPs.

Manning (2003) proposes that the distinction between arguments and adjuncts is gradient. Some previous work in OT-LFG incorporates gradient constraints. Also, Joan Bresnan and collaborators have in a number of recent papers explored gradience in the grammar using statistical models compatible with LFG (Bresnan et al. 2007, Bresnan and Hay 2008, and others). This work focusses on what words or senses are compatible with particular constructions or phrase structure configurations. The issue of a potentially gradient distinction between arguments and adjuncts is a different type of question, as it concerns how classes of expressions (e.g., benefactive NPs, passive agent PPs) should be classified in terms of argumenthood. For example, we are not asking whether definite NPs are more or less likely to be arguments than adjuncts, and we are not considering gradient grammaticality. The research questions thus seem quite distinct, but it might still be worthwhile to pursue Manning's proposal in light of previous LFG-compatible work on gradience in the grammar.

Dowty (2003) proposes a dual analysis within the framework of Categorical Grammar, and he states that "virtually all" complements can be analyzed as adjuncts, and adjuncts can be analyzed as complements. This does not seem like a promising venue within a framework like LFG, where the argument-adjunct distinction is relevant at all levels of grammar.

I conclude that there are a number of other proposals that are concerned with expressions that are difficult to classify as arguments or adjuncts. Some proposals seem more compatible with the LFG framework than others. I leave it to future research to determine whether one of them can help shed light on the characteristics of benefactives, including their mixed argument-adjunct behavior, without running into the problems of the derived arguments proposal of the present paper.

5 Conclusion

English benefactive NPs display a number of interesting properties, and there is some disagreement in the literature about the basic data concerning their passivization. This paper has proposed an explicit Lexical Mapping Theory analysis of benefactive NPs. The analysis is consistent with the mixed argumenthood characteristics of benefactives, and relies on the intuition that some arguments are basic and others are added.

Needham and Toivonen (2011) suggest that phrases that fall in between arguments and adjuncts are best analyzed as derived arguments in LFG. This paper is a case study of a specific type of derived arguments, benefactive NPs. This more detailed examination of a specific case shows that the argumenthood diagnostics reviewed in Needham and Toivonen (2011) are in fact often difficult to apply. In addition, the discussion section points to some potential theoretical problems for the treatment of benefactives as derived arguments. However, it seems natural in LFG to treat benefactive NPs as added first objects (or "applied" objects), and this analy-

sis straightforwardly identifies benefactives as a member of Needham and Toivonen's class of derived arguments.

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