Abstract

This paper is a diachronic study of post-adjectival infinitive constructions with adjectives denoting goodness, fitness, or necessity. Traditionally these constructions are analysed as *tough*-constructions. They can be divided into two semantically and syntactically distinct types, viz. activity-oriented and characteristic-oriented constructions. This distinction can be used to explain the variation in clausal voice type that is found with the post-adjectival constructions from the Late Middle English period onwards. In addition, a distinction needs to be made between adjectives expressing necessity, which only occur in activity-oriented constructions, and those expressing goodness or fitness, which may occur in the two construction types. Voice variation is only meaningful for the latter type of adjectives: in characteristic-oriented constructions they tend to be construed with an active infinitive, whereas in activity-oriented constructions they appear with a passive infinitive. As such, the distinction between these construction types helps to explain formal properties of the post-adjectival infinitive construction.
Activity-oriented and characteristic-oriented constructions:

The distribution of voice in the history of the post-adjectival infinitive*

1 Introduction

Throughout the history of the English language, adjectives denoting goodness, fitness, or necessity have occurred in various infinitival constructions. In this paper, I will focus on constructions that have traditionally been analysed as tough-constructions. I will argue that these can be divided into two basic types, and I will show that this distinction is useful to explain the distribution of voice in these constructions during the rise and spread of the passive to-infinitive, from Late Middle English onwards. Examples of these constructions in post-predicate and post-nominal position are given in (1)–(2) and (3)–(4) respectively.

(1) Too much enthusiasm when washing your hair may dry it out. One wash shampoos are an ideal protection against this and are also convenient to take on holiday (who wants to spend too much time in the bathroom when there is the nightlife to explore?). (CB)

(2) Erm what I have done is to keep my eye on the ball and when things are necessary to be done I’ve done them. (CB)

(3) ‘Claud he eats all he wants to and never weighs over one hundred and seventy-five pounds, but me I just look at something good to eat and I gain some weight’ (CB)

(4) “I thank you for these marks of your esteem and confidence,” said Edmund; “be assured that I will not abuse them; nor do I desire to pry into secrets not proper to be revealed.” (CLMETEV 1710–1780)

In these examples, the semantic role of the subjects in (1) and (2) and the noun phrases preceding the adjectives in (3) and (4) vis-à-vis the to-clauses is invariably that of patient. However, in (1) and (3), the to-clauses are in the active voice, whereas in (2) and (4), the to-clauses are in the passive voice. In the traditional analysis, the examples instantiate the ‘tough-movement’ construction: they result from object-to-subject raising applied to the more ‘basic’ extraposition construction (e.g., It is convenient to take one wash shampoos on holidays for (1)). The tough-construction is typically found with adjectives expressing the degree of ease or difficulty involved in an activity (tough, simple,
easy), but this easy-class is often taken to include adjectives evaluating the fitness or necessity of entities or activities (Fischer 1991: 178–179; Dubinsky 1997: 82; Miller 2002: 207–219). In contrast to the traditional analysis, I will argue that the examples illustrate two semantically and syntactically distinct constructions. What crucially distinguishes the two types is whether the adjective involved modifies an activity or an entity. In the first case, the expression can be paraphrased by an extraposition construction, such as for (4) (it is not proper to reveal these secrets). Syntactically, this activity-oriented use involves object raising. In example (3), however, the adjective modifies an entity. Semantically, something good to eat cannot be adequately paraphrased by it is good to eat something, but rather by ‘something that can be characterized as good with regard to eating’. Syntactically, this characteristic-oriented use involves object deletion.

In this paper, I will use the distinction between activity-oriented and characteristic-oriented meaning to explain the variation in clausal voice type from the Late Middle English period onwards. In the Old and Early Middle English period, both characteristic-oriented and activity-oriented uses are found with active to-infinitives. It is only in the course of the Middle English period that the passive to-infinitive enters the grammatical system of the language. In the Late Middle English period, this passive to-infinitive appears in post-adjectival constructions, in variation with the original active to-infinitive. I will show that active and passive do not occur in free variation, but that characteristic-oriented uses typically occur with active infinitives, whereas activity-oriented uses typically occur with passive infinitives, unless these are preceded by a for-PP expressing the agent of the activity. Thus the distinction between the two types of constructions will be used to explain formal characteristics of the various post-adjectival infinitival constructions found in the diachronic and synchronic data.

The structure of the paper is as follows. Section 2 discusses the data that were used in this study. Section 3 discusses the distinction between activity-oriented and characteristic-oriented adjectival constructions in semantic and syntactic terms, and examines the types of adjectives that are found in the two construction types. Section 4 presents the historical sketch of the post-adjectival infinitive, focusing on voice. Section 4.1 discusses the developments as they have been described in the literature, with special attention to the rise and spread of the passive to-infinitive. In section 4.2, I will
show that the distinction between activity-oriented and characteristic-oriented meaning offers an explanation for the seemingly random variation of clausal voice type. Section 5, finally, presents the main conclusions of this study and proposes some questions for further research.

2 The data

As mentioned above, this study includes adjectives that denote various degrees of goodness, properness, desirability, or necessity. To get a comprehensive view of this semantic domain, I used several thesauri and dictionaries. For Old and Middle English I used the online *Thesaurus of Old English* and the *Middle English Dictionary*, especially their Modern English word search functions. From the Modern period onwards, I used *Roget's Thesaurus* (1970) along with the online *Oxford English Dictionary*. The adjectives thus found were subsequently searched in five corpora (of course, taking into account spelling variants). The corpora used are listed in table 1. Table 2 shows which adjectives were investigated per period with the number of tokens between brackets. The ones appearing with a post-adjectival infinitive are marked in bold.

Table 1: The corpora used for each subperiod with their number of words (mln: million)

<table>
<thead>
<tr>
<th>Subperiod</th>
<th>Corpora</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old English</td>
<td><em>Thesaurus of Old English</em>, <em>Middle English Dictionary</em></td>
</tr>
<tr>
<td>Modern English</td>
<td><em>Roget's Thesaurus</em>, <em>Oxford English Dictionary</em></td>
</tr>
</tbody>
</table>

Table 2: The adjectives under investigation

As can be seen in table 2, the set of adjectives is rather different for the first three periods. In these periods, many changes occurred in the lexicon itself. Some adjectives disappeared, such as *niedpearf* (‘necessary’), others underwent semantic change, such as *rightful*, and yet others entered into the language due to language contact, such as *profitable*, *proper*, and *convenient*. For the Late Modern English and Present-Day English period, fewer adjectives were studied, more specifically only those that are attested with a post-adjectival infinitive in the Early Modern English period (apart from *meet*). Moreover, it should be noted that for the most frequent adjectives, viz. *necessary* and *good*, the queries in LmodE were limited to the adjectives immediately followed by *to* and *for*, as the total number of tokens would otherwise have become unmanageable. For PDE, the queries were
designed to allow zero to three or four words between the adjective and the to-infinitive. It is on the basis of these data that the investigation reported on in the following sections was carried out.

3 Activity-oriented versus characteristic-oriented meaning

In this section, I will argue that the constructions with adjectives denoting goodness, fitness, or necessity that are traditionally analysed as tough-constructions (e.g. Miller 2002: 194) should be divided into two types, viz. activity-oriented and characteristic-oriented constructions. The semantic and syntactic arguments for this distinction have already been mentioned in the introduction, in the discussion of the modern examples (3) and (4). More generally, a focus on activity, which includes the bringing about or maintenance of a state, seems to trigger a modal type of interpretation, whereas a focus on the characteristics of an entity seems to trigger a purely evaluative meaning. The following examples show that the distinction can be made as of the Old English period. Note that in this period, the constructions usually do not differ in surface structure.

(5) Eft, blod bið god to lætanne on foranlenctene of þam winstran earme. “Afterwards, blood is good to let of(f) the left arm in the early springtime.” (YCOE 850–950)

(6) ða geseah ðæt wif ðæt ðæt treow wæs god to etenne, be ðam ðe hyre ðuhte, & wlitig on eagum & lustbære on gesyhðe. “Then that wife [Eve] saw that that tree was good to eat, and, as it seemed to her, beautiful to the eyes and pleasant in sight.” (YCOE 950–1050)

In example (5), god modifies the activity of blood-letting, rather than the entity ‘blood’. The extraposition paraphrase it is good to let blood of the left arm is felicitous, which suggests a syntactic analysis of object raising, and emphasizes a weakly modal meaning of advice for the construction as a whole. As such, (5) clearly has activity-oriented meaning. Moreover, a characteristic-oriented reading is ruled out contextually. It is not the case that the quality of blood needs to meet some requirements before blood-letting can be practised. Rather, blood-letting is recommended here because of problems with the spleen. In (6), by contrast, god does not modify an activity (the eating of the tree), but rather an entity (that tree). More specifically, god is used to evaluate the characteristics of ‘that tree’ as good with regard to a particular activity, viz. eating. In this case, a modally flavoured activity-oriented meaning is ruled out, because whether it is good to eat from the tree is not something that can be
observed empirically: the extraposition paraphrase that wife saw that it was good to eat the tree does not make much sense (remember also that Eve knew very well that it was not good to eat from it, as God forbade Adam and her to do so). The failure of the extraposition paraphrase test suggests that the syntactic structure does not involve object raising, but rather object deletion. We can thus conclude that (6) has purely evaluative characteristic-oriented meaning, rather than activity-oriented meaning, and consequently that both types already occurred in the Old English period.

Another piece of evidence for the different syntactic structure of characteristic-oriented uses relates to preposition stranding. As a general observation, linguists such as Joan Maling (apud Allan 1980: 283, n25), Koma (1981: 135, n5), and Van der Wurff (1990: 520) have noted that there are no examples of tough-constructions with preposition stranding in Old English, i.e., “there was nothing like they are easy to talk to” (Miller 2002: 216). Rather, preposition stranding was only found with object deletion constructions, such as in (7) below.

(7) Seo burg … wæs swiþe fæger an to locianne. “The city was very beautiful to look at.” (Or 2 4.74.11) (Fischer 1991: 154)

(8) þære readan eoþpan dæl scafe þær to & þa stanas sint ealle swiðe gode of to drincanne wiþ eallum uncuþlicu þing. “You should shave thereto a portion of the red earth, and the stones are all very good to drink of/from, against all uncouth things.” (YCOE 850–950)

The example in (8) also involves the stranding of a preposition (of). The context suggests that gode is used with characteristic-oriented meaning: the text is concerned with the medicinal qualities of the white stone, which is good against stitches and flying venom. Another characteristic of the stone is that it is good to drink from against all strange calamities. So, in this example, gode modifies an entity (þa stanas), rather than an activity. Structurally, it occurs in an object deletion construction which, in contrast to object raising constructions, allowed for preposition stranding in Old English (Allen 1980: 283; Van der Wurff 1987).

The examples discussed above suggest that it is possible to make a classification of adjectives on the basis of whether they occur in activity-oriented and/or characteristic-oriented constructions. Three classes can be distinguished. Adjectives such as fæger (‘beautiful’) in (7), pretty, delicious, or soft can only be used to modify entities (cf. Minami 2003), and thus typically occur in characteristic-
oriented constructions (note that the extraposition paraphrase is ungrammatical: *it is beautiful to look at the city). Adjectives such as good can be used either to modify entities, as in (6) and (8), or to modify activities, as in (5). Adjectives expressing fitness will also be shown to occur in both activity-oriented and characteristic-oriented constructions (see, for example, section 4.2.1). Finally, adjectives expressing necessity always modify activities. An example is given in (9).

(9) De pacientia. Hit cwēð on þan godspelle, þurh eowe r geðyld ge mugen habben eower sawle hæle. On eallen þæs mannes life geðyld is neodðearfllice to habbene. “On patience. It says in the gospel: through your patience you can have your soul’s heal. In all life of man, patience is necessary to have/be had.” (YCOE 1050–1150)

In (9), neodðearfllice (‘necessary’) is used with activity-oriented meaning, as it modifies the activity or rather state of having patience or being patient. The extraposition construction it is necessary to have patience is an adequate paraphrase and illustrates the modal flavour of the expression. The three types of adjectives thus distinguished are presented in table 3 below.

Table 3: A classification of adjectives in terms of their occurrence in characteristic-oriented and activity-oriented constructions

In the remainder of this paper, I will only be concerned with adjectives expressing goodness, fitness or necessity. It is clear from the table that the necessity-adjectives will not show variation in the type of construction they occur in. The adjectives denoting goodness and fitness can occur in both characteristic-oriented and activity-oriented constructions, which also becomes clear in their surface structures from the Late Middle English period onwards.

4 The two types of constructions in the explanation of voice contrasts

In this section, I will show that the distinction between characteristic-oriented and activity-oriented constructions can be used to explain the distribution of voice contrasts in post-adjectival infinitives. I will first outline the development of voice contrasts as such, in section 4.1, and I will then use the distinction between the two construction types to explain the distribution of voice contrasts, in section 4.2. In the explanation, I will focus on the adjectives good and fit, and contrast them with necessary.
As necessary invariably occurs in the activity-oriented construction, voice contrasts do not imply a difference in meaning. For *good* and *fit*, however, a clear tendency will be shown for activity-oriented uses to be construed with a passive infinitive, and for characteristic-oriented uses to be construed with an active infinitive. In these cases, voice contrasts will be argued to be semantically conditioned, rather than in free variation.

### 4.1 The rise and spread of the passive to-infinitive

Though it has to be noted that the majority of the twenty-eight examples found in the YCOE occur in translations of Latin texts, the post-adjectival infinitive construction investigated in this study is of native stock, as argued in Bock (1931) and Fischer (1991: 155). Likewise, Van der Gaaf (1928b: 130), Visser (1972: 988–997), and Mitchell (1985: 391–392) do not mention any Latin influence in their descriptions either. In Old English, the construction requires a dative-inflected infinitive in *-anne* preceded by *to* (Callaway 1913: ch 11; Traugott 1992: 249), which was only available in the active voice. Confirming this, all the examples found pattern with an active *to*-infinitive, such as in (5) to (9) above. The passive infinitive in Old English is invariably a bare infinitive in *-an* without *to*, consisting of a passive auxiliary (*beon*, *wesan*, or *weorþan*) and the past participle, which may or may not be inflected (Mitchell 1985: §786; Fischer 1991: 143). It is only found after the precursors of the modals (e.g., *cunnan*, *dearr*, *magan*, *mot*, *sculan*, *ðurfan*, and *willan*) (Callaway 1913: 83–87; Van der Gaaf 1928a: 108–109). An example is given in (10).

(10) and he ne mot na beon eft gefullod.

“and he may never be again baptised” (*ÆLS* (Ash Wed) 141) (Fischer 1991: 143)

Other infinitival constructions containing passive infinitives in Present-Day English are found with active inflected infinitives in Old English, however, as for example in purposive adjunct clauses, A.C.I.-constructions, and as a complement of the verb *to be*, as in, for example, *þas þing sint to donne* (Fischer 1991: 147) (Callaway 1913: 97; Van der Gaaf 1928a). For the constructions studied here, some examples, such as (9), can also be used with a passive infinitive in PDE. To explain these formally active infinitives in the syntactic environments mentioned above, it has been argued that the
Old English inflected infinitive can be both active and passive ‘in sense’. This idea of dual voice or voice neutrality has been put forward by, for instance, Callaway (1913: 6), Van der Gaaf (1928a, b), and Van der Wurff (1987, 1991). By contrast, Bock (1931: 200ff) and Fischer (1991) convincingly argue that there are good reasons to interpret these infinitives as “truly active within the grammatical system in which they function” (Fischer 1992: 326). However, the situation changed in Middle English, when the language underwent a typological shift, with the regulation of SVO-order in both main and subclause. Together with the development of an obligatory subject, this caused the relation between subject and verb to become primary, whereas in Old English it was the relation object-verb that was primary (Strang 1970: 345–349). The example Fischer gives, repeated in (11) below, may clarify her point.


In Old English, which is still SOV, *ealla burg* would be interpreted as the object of the infinitive, and therefore an active infinitive – in form as well as sense – is appropriate [‘Scipio commanded to destroy the town’]; in Middle English, a SVO-language, the same phrase would be interpreted as subject of the infinitival complement and so a passive infinitive is to be expected [‘Scipio commanded the town to be destroyed’] (Fischer 1992: 327–328).

In other words, the typological change in Middle English and the concomitant change of argument standing in primary relation with the verb caused a systematic gap in the syntax, which was filled by the passive to-infinitive in the course of the Middle English period.

In the Late Middle English period, the first examples of a passive post-adjectival to-infinitive show up in the corpus data. Van der Gaaf (1928b: 133–134), Visser (1972: 990–993), and Fischer (1991: 161) note that more and more adjectives appear with a passive to-infinitive towards the end of the fourteenth century. Of the twenty-three examples with a post-adjectival infinitive found in Late Middle English, the only two with a passive infinitive are given below.

(12) And this ilke order constreyneth the fortunes and the dedes of men by a bond of causes nat

able to ben unbownde. “And this same order [put forth by the divine thought] constrains the deeds of men by a bond of causes, not proper to be unbound.” (PPCME 1350–1420)
(13) Þan þe Meyr alto-rebukyd hir & rehersyd many repreuows wordys & vngoodly, þe whiche is mor expedient to be concelyd þan expressyd. “Than the mayor rebuked her altogether and rehearsed many disgraceful and wicked words, which is more expedient to be concealed than expressed.” (PPCME 1420–1500)

In line with Fischer (1991: 177), we can note that the adjectives in (12) and (13) are Romance loans. More particularly, Fischer suggests a double reason for the spread of the post-adjectival passive infinitive. On the one hand, Late Middle English is also the period in which (native) eager-type adjectives appear with passive to-infinitives. As the syntactic subject of such eager-constructions is the logical subject of the infinitive, this form has to be passive when passive in sense. In (14), for instance, the adjective ready (‘willing’; eager-sense) is predicated of a human subject, and occurs with both a passive and active infinitive. This increase of passive infinitives “may have promoted the use of the passive infinitive after easy-adjectives, where the passive infinitive was not strictly necessary” (1991: 177).

(14) Y am redi, not oonly to be bounden, but also to die. “I am ready/willing, not only to be bound, but also to die.” (1388, Purvey, Acts, XXI. 13) (Van der Gaaf 1928b: 133)

On the other hand, the Late Middle English and Early Modern English period witness an influx of Romance loans, which could be used as both easy- and eager-type adjectives. In their source language, adjectives such as profitable or convenient can be conceived in two ways; that is to say, they can mean both ‘able’, ‘competent’, ‘properly qualified’, when conceived from the point of view of the person or thing that possesses it (i.e., the ‘active’ sense), and ‘useful’, ‘proper’, when conceived from the point of view of the effect produced (i.e., the ‘passive’ sense) (Fischer 1991: 177–178). They retained this double-handled nature after their arrival in English and even affected some native adjectives, which blurred the distinction between easy- and eager-type adjectives. Fischer argues that “this situation may have given rise to ambiguities especially when the subject was animate” (1991: 178–179). It can be noted that Fischer’s actual examples are not very helpful, as they all involve inanimate subjects. An example with an animate subject is given in (15).
Notwithstanding their Corruptions they may still retain the true Essence of a Church: as a man may be truly and really a man, though he have the plague upon him; and for that reason be **fit** to be avoided by all that wish well to themselves. (PPCEME 1640–1710)

In (15), *fit* is used in its *easy*-sense, but has an animate subject. The passive infinitive makes explicit that the intended meaning is not ‘a man who has the plague on him is properly qualified to avoid (something)’, but rather ‘it is fit/proper to avoid a man who has the plague on him’. In many cases the context helps to disambiguate the meaning of the adjective. In the corpus data, however, the majority of passive infinitives with human subjects occur with adjectives that are still used in their *eager*-sense, e.g. (16).

**But since the case is so, I will beg your leave to lay before you, in as few words as possibly I can, the names and pretences of the several persons who have been hitherto proposed to mee as **proper** to be recommended to your Majesty for that employment.** (PPCEME 1640–1710)

As noted by a referee, the double-handled nature of the Romance adjectives as described in Fischer (1991) might already suggest the distinction between characteristic-oriented and activity-oriented meaning. However, in Fischer’s discussion the ‘active’ sense is restricted to animate subjects in *eager*-constructions (1991: 177–179), whereas I think that the distinction between characteristic-oriented and activity-oriented meaning cross-cuts the distinction between animate and inanimate subjects. Table 4 below illustrates the terminology.

[INSERT TABLE 4 ABOUT HERE]

Table 4: The *eager/easy* distinction versus the characteristic/activity-oriented distinction (A: active; P: passive infinitive)

It is clear from the table that the *eager*-constructions indeed coincide with the characteristic-oriented constructions with animate subjects. These terms can thus be used interchangeably. What is new in the distinction between characteristic-oriented and activity-oriented meaning made here, however, is that it cuts up the *easy*-domain, which is the domain under investigation in this paper. In the table we see that the distinction is especially relevant with inanimate subjects. Note that the
infinitives without brackets are the preferred option, whereas the ones between brackets are the non-preferred option.

Finally, though Fischer (1991) offers a double explanation for the spread of the passive to-infinitive in post-adjectival constructions, she does not indicate the token frequency of the passive form for the various types of adjectives that can occur in the construction, however. Nor does she give any information on the ratio of active versus passive forms. Rissanen (1999: 289) notes that the active forms remain the more common variant, but he does not specify which semantic types he looked at (the example he gives is harde, expressing the degree of difficulty of an activity). Concerning the Late Modern English period, Fischer notes that by this time, most of the borrowed Romance adjectives had lost their double-handled nature, and had become either an eager- (e.g., able) or an easy-type adjective (e.g., convenient) (Fischer 1991: 179). The distinction between the two types of adjective had thus become rather clear again, which in Fischer’s (1991: 179) view, resulted in a decrease of passive infinitives which were not semantically necessary. Denison (1998: 185) argues that in the case of the post-adjectival infinitive

it is generally the active rather than the passive which has triumphed. It has the advantage of being parallel to patterns in which the subject of the infinitive is expressed in a for-construction, and a passive infinitive is ruled out.

Neither author gives numbers of occurrence, or distinguishes between types of adjective, or types of construction. In the following section I will present the results of my corpus study, and I will use these to argue that the distinction between activity-oriented and characteristic-oriented meaning can be used to explain the variation in voice type in the Early Modern, Late Modern and Present-Day English period.

4.2 Activity-oriented and characteristic-oriented meaning in Modern English

As has been mentioned in section 3, the distinction between the modally flavoured activity-oriented and purely evaluative characteristic-oriented construction dates from the Old English period. The data show that until the Late Middle English period both constructions appear with an active to-infinitive.
The first two examples with a passive infinitive, presented above in (12) and (13) and repeated here for convenience as (17) and (18), set the scene for the Modern English period.

(17) And this ilke ordre constreyneth the fortunes and the dedes of men by a bond of causes nat able to ben unbownde. “And this same order [put forth by the divine thought] constrains the deeds of men by a bond of causes, not proper to be unbound.” (PPCME 1350–1420)

(18) Þan þe Meyr alto-rebukyd hir & rehersyd many repreuows wordys & vngoodly, þe whiche is mor expedient to be concelyd þan expressyd. “Than the mayor rebuked her altogether and rehearsed many disgraceful and wicked words, which is more expedient to be concealed than expressed.” (PPCME 1420–1500)

In these examples, the context suggests that the adjectives able (in the sense of ‘proper’) and expedient modify activities rather than entities. For both, an extraposition construction gives an adequate paraphrase; (17), for instance, means it is not proper to unbind the (divine) bond of causes. In the Late Middle English period, active infinitives are still found in both activity- and characteristic-oriented constructions, but it is telling that the first passive infinitives appear in constructions with activity-oriented meaning. In the following I will treat the variation of voice type in post-adjectival constructions in the Modern English periods.

4.2.1 The Early Modern English period

In the Early Modern English period, a clear tendency can be noted for activity- and characteristic-oriented uses to become syntactically differentiated in surface structure. The non-necessity adjectives tend to appear with a passive infinitive when occurring in an activity-oriented construction, much like the Late Middle English examples (17) and (18) above, and with an active infinitive when occurring in a characteristic-oriented construction. A few activity-oriented uses, construed with passive infinitives, are given below.

(19) the saide Justices of or neere the saide Countie, or any two of them, shall or may taxe and assesse the Inhabitant~ of the Countie within five miles of the saide place infected, at such reasonable weekelie Taxes and Rates as they shall thinke fit to be levied by Warrant from any such two Justices of Peace. (PPCEME 1570–1640)
and no Objection of Novelty ought to take place against that which upon all accounts was so fit and necessary to be done. (PPCEME 1640–1710)

In the examples (19) and (20), fit modifies activities rather than entities. For both expressions, an extraposition construction yields an adequate paraphrase, such as they shall think it fit to levy weekly taxes for (19). It can also be noted that the constructions have a modal meaning: they express the desirability of the activities involved. As such, the meaning of these examples is rather different from that of the following characteristic-oriented examples, which pattern with active infinitives.

and so turne it vpon the brine which comes from the salt two or three daies or more, according to the bignesse of the cheese, and then lay it vpon a faire table or shelle to drie, forgetting not euery day once to rubbe it all ouer with a cleane cloth, and then to turne it til such time that it be throughly drie and fit to goe into the presse (PPCEME 1570–1640)

If they shoot up tall after they are molded, you had best top them at a convenient height, it will make them grow the more in bigness, and so be sooner fit to graff. (PPCEME 1640–1710)

In (21) and (22), the meaning of fit can be described as ‘ready after a process of internal change’, such as the drying of cheese in (21) or the growing of shoots in (22). Extraposition paraphrases do not produce the intended meaning (e.g., (22) as *It is fit to graft the shoots). Rather, the adjectives describe the characteristics of the entities involved, and evaluate them as fit with regard to a particular activity.

An attempt to explain the different syntactic behaviour of characteristic-oriented and activity-oriented constructions can start from the examples presented above. Example (21) is the only case in which fit is used with an intransitive infinitive, with the syntactic subject coinciding with the logical subject of the infinitive. The fact that its meaning is very similar to those cases in which the syntactic subject is in fact the logical object of the infinitive (as in (22)) confirms that in characteristic-oriented constructions the relation between subject and adjectival predicate is primary, with the infinitive ‘merely’ specifying in which regard the evaluation holds. In activity-oriented uses, by contrast, the relation between the infinitive and its logical object is primary (i.e., the syntactic subject), which together form the logical subject of the adjectival predicate. The passive infinitive emphasises this
object-verb relation. Much in the same vein, Fischer (1992: 338–339) argues that the use of the passive infinitive with adjectives expressing ease or difficulty “emphasises the adverbial reading of the adjective, while the adjective itself remains morphologically an adjective.” In an adverbial reading, it is indeed the activity that is focused on, rather than the characteristics of the subject. In the case of active infinitives, the relation between the syntactic subject and adjective is more prominent (Fischer 1991: 172), much like in the characteristic-oriented examples. 12

As mentioned above, the variation of voice type is meaningful for adjectives denoting goodness or fitness, but not so much for necessity-adjectives, as these invariably occur in activity-oriented constructions. In example (20) above, necessary was found with a passive infinitive. In the example below, it is construed with an active form, but without a difference in meaning. Again, the extraposition paraphrase gives the intended meaning (It were necessary to know how to plough for pees and beans), and the construction has a modal flavour.

(23) Howe to plowe for pees and beanes, were necessarye to knowe (PPCEME 1500–1570)

The considerable number of passive infinitives with necessary (see table 5 below) may be explained as ‘being promoted’ by the passive forms following eager-type adjectives (Fischer 1991: 177), but it should be noted that they were never used to disambiguate between eager- and easy-senses, as necessary is never predicated of animate subjects (unlike good and fit). As another explanation, necessary might have been influenced by a semantically similar construction without an adjective, viz. the predicative to be to-construction 13 (see section 4.1). This construction expressing obligation or necessity 14 also came to be used with a passive to-infinitive in the Late Middle English period (Van der Gaaf 1928a; Fischer 1991: 146–151), giving, for example, PDE these things are to be done for OE þas þing sint to donne (Fischer 1991: 147 (9a)). It should be noted, though, that unlike in the case of necessary with infinitive, the passive infinitive became the established form with semi-modal be due to the typological shift to SVO-order (see section 4.1), “except in a few idiomatic phrases like he is to blame, the house is to let” (Fischer 1992: 337). As such, the construction became also formally distinct from the to be to-construction expressing future or purpose, like in he is to come next week, which was not yet attested in Old English, but became more frequent in the course of the Middle English period (Fischer 1992: 336).
Another construction that is relevant here also emerged in the Middle English period, viz. the for-NP-to-infinitive construction. It can be shown that this construction with an active to-infinitive can be either characteristic-oriented or activity-oriented in meaning. In both cases, the for-PP expresses the agent of the to-infinitive. Examples with the adjective fit are given in (24) and (25).

(24) if, as soon as the suspended and well rubb’d Electric was brought to settle freely, we applied to the chafed edge, but without touching it, the lately mention’d Cushion, which, by reason of its rough Superficies and porosity, was fit for the Electrical Effluvia to fasten upon, the edge would manifestly be drawn aside by the Cushion steadily held. (PPCEME 1640–1710)

(25) That which I meane is that when ever they desire any thing not fit for them to have or doe, they should not be permitted it because they were little and desird it. (PPCEME 1640–1710)

In (24), the expression focuses on the proper characteristics of the cushion (its rough surface and porosity) for the effluvia to fasten upon it (*it is fit for the effluvia to fasten upon the cushion). The for-NP-to-infinitive construction is thus used with characteristic-oriented meaning. In (25), by contrast, fit modifies an activity rather than an entity. The extraposition paraphrase it is not fit for them to do or have any thing yields the intended meaning, and suggests that the construction as a whole has a modal meaning.

In the above discussions, necessary was shown to use formal variants without a difference in meaning (cf. (20) and (23)), whereas the for-NP-to-infinitive construction was shown to occur with either characteristic-oriented or activity-oriented meaning, but without a difference in formal properties (cf. (24) and (25)). As such, these cases suggest that the variation of voice type cannot always be explained by the general tendency presented above. In the following, I present some data of non-necessity adjectives that do not conform to the tendency either. Some so-called ‘exceptions’ can be functionally explained or can be argued to be truly ambiguous cases, whereas others cannot. It should be noted that in the Late Modern English period, such exceptions or ambiguous cases have become significantly fewer. For the Early Modern English period, consider the following examples.

(26) but as to a publique declaration, they being so few, desired that his majestie would call the rest of their brethren &peeres, that they might consult what was fit to do on this occasion, not thinking it convenient to publish any thing without them. (PPCEME 1640–1710)
(27) But this will be time enough for Apples, if the Stocks be in any thing good liking, which if they be not, they are not fit to be graffed any way. (PPCEME 1640–1710)

(28) They [i.e., walnuts] are euell for them that haue the coughe. They are fit to be taken fastinge of them that woulde vomite. (PPCEME 1500–1570)

(29) The holy scripture sayeth, y=e= wine maketh the hart of man merie, and that it is good to be taken of them that haue a weake and a feeble stomach. (PPCEME 1500–1570)

In example (26), the context suggests that fit is used with activity-oriented meaning, similar to (20), but we do find an active infinitive instead of an ‘expected’ passive one. The reverse is the case in (27), which resembles (22) in context. It can be noted that in (27) the adjective is used in its negative form, which renders an adverbial reading more prominent according to Fischer (1991: 175). It can thus be argued that (27) is an ambiguous example. In (28) and (29), the context suggests that the adjectives are used with characteristic-oriented meaning, focusing on the medicinal qualities of walnuts in (28) and wine in (29), but they occur with passive infinitives. Here, the writer may have opted for the passive construction in order to have the long information-laden of-adjuncts in sentence-final position. However, as suggested by a referee, it cannot be excluded that the writer wanted to give a piece of advice (activity-oriented meaning), and that these utterances are genuinely ambiguous as well.

In conclusion, the distinction between activity-oriented and characteristic-oriented meaning can be argued to be useful to explain the variation in clausal voice type for the non-necessity adjectives fit and good. The data, summarized in table 5, show that the passive infinitive was typically used in modally flavoured constructions with activity-oriented meaning, whereas the active infinitive tended to be retained in the evaluative cases with characteristic-oriented meaning.

[INSERT TABLE 5 ABOUT HERE]

Table 5: The EmodE results for fit, good and necessary (PPCEME) (A: active; P: passive infinitive)

As the constructions with animate subjects have been discussed in section 4.1, this section has focused on the constructions with inanimate subjects. It is clear from the table that the voice preferences of the semantic types distinguished are tendencies rather than absolute rules. One example was found with activity-oriented meaning but construed with an active infinitive, (26). Moreover, also truly ambiguous examples were found (cf. (27) to (29); these are included in table 5 as characteristic-
oriented examples with passive infinitives). Finally, it should be noted that the non-occurrence of *good* followed by an infinitive with animate subjects or with activity-oriented meaning (i.e., the shaded cells in the table) is mere coincidence. For example, *good* is found modifying animate nouns, such as *fellow*, *knight*, and *lady*, but not with a post-adjectival infinitive. *Necessary*, however, is never predicated of an animate subject and cannot express characteristic-oriented meaning, as it can only modify activities (see section 3). Its shaded cells thus indicate structurally impossible constructions, rather than coincidences.

4.2.2 Late Modern English

The tendencies described for the Early Modern English period become even more outspoken in the Late Modern English period. By this time the distinction between the *eager-* and *easy-*class of adjectives had become rather clear-cut again, which in Fischer’s (1991: 179) view yielded a reduction of passive infinitives which were not semantically necessary, i.e. infinitives with *easy*-adjectives (see section 4.1). The data for *necessary* confirm Fischer’s findings, in that more active infinitives are found compared to the Early Modern English period. For *fit* and *good*, however, clausal voice type has become meaningful; therefore these adjectives need not comply with the overall decline of post-adjectival passive infinitives. A few examples are given below.

(30) [T]he language of nature variously modified and corrupted by passions, prejudices, and habits; the language of simulation and dissimulation: very hard, but very necessary to decipher. (CLMETEV 1710–1780)

(31) I have hitherto, my lords, confined myself to the consideration of one single article of this complicated charge, because it appears to me to be the only part of it necessary to be examined. (CLMETEV 1710–1780)

(32) In a Month’s time, if the Vessel holds about eight Gallons, it will be fine and fit to bottle, and after bottling, will be fit to drink in two Months: but remember, that all Liquors must be fine before they are bottled, or else they will grow sharp and ferment in the Bottles, and never be good for any thing. (CLMETEV 1710–1780)
(33) The two young men came on, in earnest and vehement conversation; but the subject they were on was a terrible one, and hardly fit to be repeated in the face of a Christian community. (CLMETEV 1780–1850)

(34) Close by I saw the wild arum, the roots of which, when well baked, are good to eat, and the young leaves better than spinach. (CLMETEV 1780–1850)

(35) This Marmalade is good to be serv’d in Glasses as a Sweet-meat in Desert, or to be put into Coffins for Tarts, or to be brought upon the Table in Saucers among the other Sweet-meats in a Desert. (CLMETEV 1710–1780)

These examples illustrate the different semantic-syntactic behaviour of necessary as opposed to the non-necessity adjectives. Examples (30) and (31) with necessary differ in terms of clausal voice type, but at the same time they both have an activity-oriented meaning and are adequately paraphrased by an extraposition construction (e.g., for (31), it appears necessary to me to examine only this part). In the examples with fit and good, however, the difference in voice type goes together with a difference in meaning. In examples (32) and (34), which contain active infinitives, the adjectives clearly evaluate the characteristics of the inanimate subjects with regard to an activity (bottling and drinking in (32), and eating in (34)). Example (33) with a passive infinitive, by contrast, has a modal meaning, which can be described as ‘it is hardly fit to repeat the subject in the face of a Christian community’. Rather than assessing the internal characteristics of a certain substance, fit assesses the (non-)desirability of a particular activity. As for example (35), which also has a passive infinitive, I think both a characteristic-oriented and an activity-oriented reading are possible. A weakly modal meaning fits in with the context of the example, viz. it is taken from a cookery book. In this sense, it is the author’s advice to serve the marmalade in glasses as a dessert, to put it into the crust of a pie, and so on. Nevertheless, a purely evaluative meaning could also be possible, with good assessing the characteristics of the marmalade as regards serving as a dessert, for instance. In the latter reading, good does not comply with the suggested tendency, that is to say, it is used with characteristic-oriented meaning, but construed with a passive infinitive. Since I have also found some examples of fit with this combination of form and meaning, we are led to conclude that the passive infinitive could still
occur with characteristic-oriented meaning, even though it is clearly the non-preferred option. Some further deviating examples are given below.

(36) The men, like demons, in their fire-and-soot colouring, stood swart around, awaiting the moment when the tons of solid iron should have melted down into fiery liquid, fit to be poured, with still, heavy sound, into the delicate moulding of fine black sand, prepared to receive it. (CLMETEV 1780–1850)

(37) There is now the Skerret fit to be eaten; it is a very nourishing and pleasant Root, and is prepared in the following manner for the Table. (CLMETEV 1710–1780)

These examples do not have a modal meaning; yet they are construed with a passive infinitive. According to Quirk et al. (1985: 1229), fit in fact belongs to a set of adjectives such as free, ready, and available, which appear in constructions in which the main clause subject is identified with the logical object of the infinitive, but for which the extraposition paraphrase does not hold. Further, they state that “we can generally (a) omit the infinitive clause, or (b) substitute a passive infinitive clause without change of meaning” (1985: 1229). I have tested these remarks on a small-scale corpus study of ready combined with active or passive infinitives in the Cobuild Corpus, which yielded the following results.

Table 6: Ready with eat and serve in CB

(38) This evening’s meal was ready to be served. Everything was clean, bright, ready. (CB)

(39) It's just a vegetable risotto which has been on for about four to six hours so that would be ready to serve and it does smell lovely. (CB)

The results in table 6 show that passive infinitives can be used with inanimate subjects, but the active forms are preferred. The examples suggest that there is not really a difference in meaning. This situation of different forms, one of which is preferred, with a similar meaning may also hold for the characteristic-oriented uses of fit and good in the Early and Late Modern English period.

The discussion so far has focused on inanimate subjects. The non-necessity adjectives also appear with animate ones, with both active and passive infinitives. The active infinitives always involve the eager-sense of ‘properly qualified’ or ‘having the proper characteristics’ (see section 4.1),
whereas the passive infinitive may involve either the *eager*-sense or activity-oriented meaning. Consider the following examples.

(40) I did all I could to dissuade him from going to the wars: I told him there were men enow that were *good* for nothing else but to be killed, that had not the love of such fine ladies.

(41) That man is vile and *fit* to be trampled on, who cannot count his future in gold and victory.

(42) Robert, the eldest, was a wild, rude, thoughtless youth; but he fancied himself *fit* to govern Normandy, and asked his father to give it up to him.

In (40), which is construed with a passive infinitive, the lady does not mean that it is good to kill men that do not have the love of fine ladies, but rather that there are men who are useless and therefore only good to be killed. In (41), the extraposition construction presents an adequate paraphrase: *it is fit to trample on that man, who cannot count his future in gold and victory.* Here the passive infinitive occurs in a structure with activity-oriented meaning. Finally, in (42), which is construed with an active infinitive, *fit* is used in its *eager*-sense: Robert thinks he has the proper qualities to govern Normandy.

In summary, the tendencies observed for the non-necessity adjectives in the Early Modern English period have become stronger in the Late Modern English period. This is particularly the case for the activity-oriented uses, which are all construed with a passive post-adjectival infinitive except when the infinitive is preceded by a *for*-PP. For the characteristic-oriented uses, a clear preference can be noted for the active infinitive, but the passive one is also attested, similar to the situation of adjectives such as *ready* in Present-Day English, which can be used with either an active or passive infinitive without a difference in meaning. The same situation seems to hold for the activity-oriented uses of the adjective *necessary*. As can be seen in the summarizing table below, both active and passive infinitives can be used – without a difference in meaning cf. (30)–(31), but the passive infinitive, which is paired with activity-oriented meaning in the case of non-necessity adjectives, seems to be preferred. The slight rise of active infinitives compared to the data in table 5 may be due to the overall decline of passive post-adjectival infinitives where they were not necessary to disambiguate (Fischer 1991: 179).
4.2.3 Present-Day English

In the Present-Day English data, there are surprisingly few tokens of the relevant constructions, cf. table 8. Especially the activity-oriented uses have become few; the characteristic-oriented uses with inanimate subjects occur only with *good*, including some fairly idiomatic constructions. Nevertheless, the data confirm the tendencies sketched above, as can be seen in examples (43) to (49).

(43) Now, rather than state directly that she won’t relate a dream or engage in defensive dissimulation, she skips out at the end of a session as if ‘school’s out!’ and any challenge posed too close to ‘the bell’ is not necessary to answer. (CB)

(44) I’ve almost run out of time but there’s one thing a feature which is common to all of Shakespeare’s er plays but has a special part in the tragedies which I feel is necessary to be at least stated. (CB)

(45) Anderton said: ‘I’m fit and ready to play but it doesn’t look like I figure in the manager’s plans. It’s very frustrating. (CB)

(46) Setting snares required a certain expertise, not to mention the state of the rabbit when you went back a few days later, still alive but fit only to be killed, and you meanwhile hanging onto the heather for dear life. (CB)

(47) They [students] were […] they were very motivated and. They were were they. Mm. very very very good to relate to. (CB)

(48) These are the characteristics that make this and the whole Renault range so good to drive and with low rate finance still available from Digbath’s. (CB)

(49) But it is good that we have series like As Time Goes By in which older people get a chance. After all, it happens in real life. Why not? It’s good not to be passed over. (CB)
Examples (43) and (44) are similar to (30) and (31) in that they both involve an activity-oriented meaning, but a different voice type. Examples (45) and (46) have animate subjects, which are the logical subjects of the infinitives. In the ten cases containing *fit* with an active infinitive in the data, *fit* means ‘physically fit’, and it is often coordinated with semantically cognate adjectives, such as *able, healthy,* and *ready* as in (45). Example (46) with a passive infinitive is comparable to (40); after being trapped into a snare for a few days, the rabbit has become worthless and therefore only *fit* to be killed.

We can thus conclude from the examples that *fit* has preserved only characteristic-oriented meaning in Present-Day English. For *good*, both types of uses are attested in the data. Most frequent is the characteristic-oriented use with inanimate subjects and active infinitives, such as in (48). Least frequent is the activity-oriented use with inanimate subjects and passive infinitives; in fact, (49) is the only example found in the data, with the subject *it* referring to a proposition given earlier in discourse.

It may be paraphrased as follows: *It is good not to pass over older people appearing in television series.* Finally, *good* is found nine times with animate subjects, such as in (47). It is striking, however, that the infinitives are all active, whereas the syntactic subjects are not the logical subjects of the infinitives, as is the case for *fit* in the *Cobuild* data and for various adjectives in earlier periods (cf. (14)), but rather the logical objects or the NP of the prepositional object, as in (47). It seems therefore that the type of meaning involved (i.e., characteristic-oriented meaning, paired with active voice) has taken precedence over the animacy of the subject, or rather, that animacy is no longer a determining factor in the case of *good*. Interestingly, another type of construction is found with animate subjects, which seems to combine both characteristic- and activity-oriented meaning, as will become clear below (this type is not included in table 8). Bolinger (1961: 369) regards it as a “personal-impersonal syntactic blend.” An example is given in (50).

(50) Souter: Senator, that’s the point at which I--I will have to exercise the prerogative which you were--you were **good** to speak of explicitly. (CB)

Only three such examples of *good* have been found, but other adjectives that are evaluative of human behaviour, such as *wise, mad,* and *nice,* appear in this construction as well. The construction has an analogue in an extraposition construction with an *of*-PP specifying the human subject: *It was good of you to speak of the prerogative* (Lees 1960: 219; Bolinger 1961: 369; Quirk et al. 1985: 1227;
Biber et al. 1999: 720). Quirk et al. (1985: 1227) also note that the infinitive may be perfective. It is crucial indeed that the activity expressed by the infinitive has already been actualized at the moment of speaking. This fits in with the semantic characterization of the construction proposed in Bolinger (1961: 370–371): the adjective is attributed to the subject because of or as a result of them having actualized the activity designated by the infinitive. A plausible paraphrase is, for example, *speaking of it explicitly makes you good*. As such, the positive evaluation of the activity is being transferred to the human agent.

As a last, minor topic, I will go further into the characteristic-oriented uses with inanimate subjects that may have become idiomatic. The constructions concerned all involve active infinitives of mental or perception verbs, such as *know*, *see*, and *hear*, and their subject noun phrases do not refer to physical entities, such as the Renault range in (48), but rather to propositions, expressed by anaphoric *this*, *that*, or *which*, referring to the situation of the preceding discourse. Consider the following example.

(51) **Woman #3**: How do you feel on the abortion?

**Ryan**: I’m pro-choice.

**Woman #3**: Very good. OK. Well, that’s one of the main things, seeing I give to the Pro-Choice Committee, so that’s *good* to know.

**Ryan**: Can I leave a--would you like to have one of my position papers?

**Woman #3**: Sure. (CB)

This example is taken from the spoken subsection of the *Cobuild Corpus*. The other thirteen examples, which are included in table 8, also come from this subsection, or involve direct speech representation. In my opinion, this construction has become idiomatic in that the infinitive is actually superfluous. In many cases, it is already preceded by a phrase such as ‘(that is) good’ without the infinitive, as in (51). A proper paraphrase might be an extraposition construction such as *it is good to know that you feel pro-choice on the abortion*. Essentially, however, the activity denoted by the infinitive has already been actualized, as at the moment of speaking, the speaker already knows the propositional content of the *that*-clause. Therefore, we can argue that what the adjective evaluates is the propositional content as such, rather than the activity. In the same vein, the construction in (51) can
be paraphrased by ‘that is good’, rather than by ‘that is good as regards knowing’, with the infinitive to know reinforcing the positive evaluation.

Clearly, the post-adjectival infinitive has become marginal in Present-Day English, at least for the constructions and adjectives investigated here. For necessary, the situation holding in Late Modern English continues into the present, i.e., it continues to pattern with both active and passive infinitives, without a difference in meaning. For fit, only characteristic-oriented uses with animate subjects have been retained. For good, both characteristic- and activity-oriented uses are attested with active and passive infinitives respectively, and even a ‘syntactic blend’ between the two has emerged. Moreover, I have illustrated that good occurs with some frequency in idiomatic expressions, in which the infinitive expressing a perception or mental activity only emphasizes the positive evaluation of the propositional content already given in the discourse.

5 Conclusion
In this paper, I have shown that the constructions that are traditionally analyzed as object raising or tough-constructions, can actually be divided into two semantically and syntactically distinct types, viz. activity-oriented and characteristic-oriented constructions. In the first type, the adjective modifies an activity (e.g., blood is good to let). Such expressions have a (weakly) modal meaning and involve object raising (it is good to let blood). In characteristic-oriented constructions, the adjective modifies an entity (e.g., this apple is good to eat). These expressions are purely evaluative, and involve object deletion. The adjectives investigated in this study were shown to be of two types as well: adjectives expressing necessity were found to occur only in activity-oriented constructions, whereas adjectives denoting goodness and fitness were found to occur in both construction types.

The necessity adjectives were attested with both active and passive infinitives throughout the various periods. As they always occur in activity-oriented constructions, this variation in voice did not appear to be meaningful. In the Early Modern English period, when the passive post-adjectival to-infinitive spreads to many adjectives in both eager- and easy-constructions, necessary is complemented by a passive infinitive in all but one case, possibly influenced by the simultaneous rise of the passive infinitive in the semantically similar to be to-construction. In the Late Modern English
period, *necessary* is found with the passive infinitive in only three fifths of the cases. In Present-Day English, the construction has become marginal, with two examples of the active and three of the passive infinitive. So, after the sudden rise of the passive infinitive in the Early Modern period, the active form gained ground again in the Late Modern period, but today the post-adjectival construction is only rarely used.

As to the non-necessity adjectives, we also noted a sudden rise of the passive infinitive in the Early Modern period, but the situation was shown to be different from that of necessity adjectives, in that the distribution of voice was found to be semantically conditioned. Here the distinction between activity-oriented and characteristic-oriented constructions proved useful to explain the variation in voice type. Until the second half of the fourteenth century, adjectives evaluating goodness, fitness or properness only appear with an active infinitive, in both construction types. With the rise of the passive *to*-infinitive, the characteristic-oriented and activity-oriented uses become different in surface structure, as the former tend to retain the active infinitive, whereas the latter tend to adopt the new passive infinitive. This was clearly the case in Late Modern English, although in this period a few characteristic-oriented constructions were found with an ‘unexpected’ passive infinitive. These cases and the ambiguous examples of the Early Modern period show that the formal distinction between active and passive infinitives is not always so systematically related to function on a one-to-one basis. In Present-Day English, only few tokens are attested. *Fit* is only found in characteristic-oriented uses with animate subjects. For *good*, more tokens were found, especially with characteristic-oriented meaning and inanimate subjects, some of which were argued to have become idiomatic. The passive infinitive was counted only once, in an activity-oriented expression with an inanimate (propositional) subject. With the non-necessity adjectives focused on in this study, *fit* and *good*, the passive infinitive was frequent in the Early and Late Modern period with inanimate subjects, but in the Present-Day English data it plays only a minor part. We can conclude that however few data were found in Present-Day English, they nevertheless conform to the tendencies noticed in the Early Modern English period, and that the distinction between activity- and characteristic-oriented constructions thus serves well to explain the seemingly random variation of voice type.
Finally, a few questions for further research may be suggested. Apart from adjectives denoting goodness, fitness or necessity, adjectives expressing ease or difficulty especially have been argued to appear in object raising constructions. These adjectives have also been affected by the rise of the passive post-adjectival infinitive (Fischer 1991, 1992; Denison 1998: 184–187), but so far no systematic study has reported on the distribution of clausal voice type with this semantic class of adjectives. A second question might be interesting for both adjectives expressing ease or difficulty and the ones investigated in this study: how do the adverbials enough and too influence the post-adjectival voice type? And how does this bear to the semantics of the construction? In the examples with too (52) and enough (53) below, good is used with characteristic-oriented meaning, but construed with a passive infinitive.

(52) He had on a coat made of that cloth they call thunder and lightning, which, though grown too short, was much too good to be thrown away. (CLMETEV 1710-1780)

(53) He initially wrote the poems for a friend in Dominica who assured him they were good enough to be printed. (CB)

Could we conclude that these adverbials annihilate the distinction between characteristic-oriented and activity-oriented uses? Such and related questions may form the topic of another diachronic study.

Notes

* The research reported on in this paper has been made possible by research grants OT/03/20/TBA and OT/04/12 of the Research Council of the University of Leuven. I would like to thank Jean-Christophe Verstraete and Tine Breban for their very helpful comments on earlier versions of the paper. I am also indebted to the two anonymous referees for their very insightful remarks and stylistic advice.
1. This example is taken from the Collins Cobuild Corpus (CB).
2. This example is taken from the Corpus of Late Modern English Texts (Extended version) (CLMETEV).
3. My searches started from the Modern English adjectives necessary, needful, suitable, proper, convenient, desirable, and good.
4. The following adjectives witig on eagum & lustbære on gesyhðe confirm that the verb see is used in its sensual perception sense. As such, it does not mean ‘realize’ (acquisition of knowledge sense, cf. Noonan 1985: 118), in which case the extraposition paraphrase would be felicitous indeed.
5. Necessary can also modify states, especially the possession of things. A knife is necessary to cut bread, for example, can mean ‘the possession of a knife is necessary to cut bread’, but also ‘the use of a knife is necessary to cut bread’.
6. Apart from -anne, other endings are attested, such as -enne, -onne, -ane, and -ene (Callaway 1913: 2).
7. Also for -an, variants are attested, such as -on, -un, -en, and Northumbrian -a (Callaway 1913: 2).
8. Fischer (1991: 160) also mentions one often-cited example of the (bare) passive infinitive after the adjective wurðe. Further, the passive infinitive is infrequently found with A.C.I.-constructions and with impersonal verbs, but only in cases that are direct translations of Latin passive constructions.
9. Fischer (1991: 163) notes that in Old English, “passive sense could be expressed in their case presumably only (I have found just one example, after gemyndig, in PPs 118.52) by means of a passive subclause.”
10. Likewise, Greenough and Kittredge (1902: 272) explain that the Latin word *opinio* “means both opinion (from the point of view of him who has it) and reputation (from the point of view of him concerning whom it is held).”

11. Note that in Old English there was one formal property that distinguished between activity- and characteristic-oriented constructions, at least in some cases, viz. the possibility of preposition-stranding (see section 3). In Middle English, however, *tough*-constructions also allowed for P-stranding (Van der Wurff 1990: 522), which made the two types of constructions formally indistinguishable in surface structure. It should be noted, however, that Fischer (1991; 1992) does not attach any syntactic consequences to the voice contrast with post-adjectival infinitives: she sticks to an object raising analysis for both constructions.

12. It should be noted, however, that Fischer (1991; 1992) does not attach any syntactic consequences to the voice contrast with post-adjectival infinitives: she sticks to an object raising analysis for both constructions.

13. I thank one of the two referees for suggesting me this plausible explanation.

14. Apart from the meaning of ‘obligation’, ‘duty’, or ‘necessity’, Bock (1931: 199) and Fischer (1991: 149) also mention that of ‘possibility’ or ‘likelihood’ for the predicative *to be to*-construction, especially in Old English. In the course of the Middle English period, the deontic meaning becomes the most frequent one (Fischer 1991: 150).

15. The queries used are [ready+3TO+eat], [ready+3TO+be+eaten], [ready+3TO+serve], and [ready+3TO+be+served], with 3 indicating that zero to three words are allowed between *ready* and *to*.

16. One of the referees argues that example (43) is more characteristic-oriented that activity-oriented. I can understand this interpretation, but I argue for an activity-oriented reading on the basis of the negative polarity of the adjectival predicate, which foregrounds an adverbial reading (Fischer 1991: 175).

**References**


Middle English Dictionary: http://ets.umdl.umich.edu/m/med/ (Accessed 20 October 2006.).


Thesaurus of Old English: http://leo.englang.arts.gla.ac.uk/oethesaurus/ (Accessed 17 October 2006.).


Tables in “Activity-oriented and characteristic-oriented constructions: The distribution of voice in the history of the post-adjectival infinitive”

<table>
<thead>
<tr>
<th>Subperiod of English</th>
<th>Time span</th>
<th>Corpus</th>
<th>Number of words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old English (OE)</td>
<td>750–1150</td>
<td>York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE)</td>
<td>1.50 mln</td>
</tr>
<tr>
<td>Middle English (ME)</td>
<td>1150–1500</td>
<td>Penn-Helsinki Parsed Corpus of Middle English, Second Edition (PPCME)</td>
<td>1.30 mln</td>
</tr>
<tr>
<td>Early Modern English (EmodE)</td>
<td>1500–1710</td>
<td>Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME)</td>
<td>1.80 mln</td>
</tr>
<tr>
<td>Late Modern English (LmodE)</td>
<td>1710–1920</td>
<td>Corpus of Late Modern English Texts (Extended version) (CLMETEV)</td>
<td>15.01 mln</td>
</tr>
<tr>
<td>Present-Day English (PDE)</td>
<td>roughly 1990–1995</td>
<td>Collins Cobuild Corpus (CB)</td>
<td>57.42 mln</td>
</tr>
</tbody>
</table>

Table 1: The corpora used for each subperiod with their number of words (mln: million)

<table>
<thead>
<tr>
<th>Period</th>
<th>Adjectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>OE</td>
<td>andfenge (23), arlic (5), <strong>behef(e)(lic)</strong> (7), bryce (3), cynn (7), fremgendlic (3), <strong>fremful(lic)</strong> (12), (ge)beorh(lic) (7), (ge)byredlic (1), (ge)cop(lic) (3), (ge)cweme (61), (ge)cynde(lic) (65), (ge)dafen(lic) (35), (ge)defe(nlic) (5), (ge)dreog (2), geornlic (5), <strong>god</strong> (1733), (ge)limplic (17), (ge)lumpenlic (2), (ge)maete (4), medeme (15), (ge)met(lic) (13), neadwis (1), niedbehæfdlic (1), <strong>niedbe(hefe/hof)</strong> (18), (ge)niededlic (1), <strong>niedpearf(lic)</strong> (43), nyt(t)(lic) (35), nyttol (1), <strong>nytwearð(e)(lic)</strong> (35), (ge)radlic (3), rædlic (1), <strong>rihtlic</strong> (53), (ge)risen(lic) (28), (ge)screpe (4), (ge)tæse (1), til (4), þæslic (14), <strong>pearf(lic)</strong> (44), (ge)þungen (25)</td>
</tr>
<tr>
<td>ME</td>
<td>able (33), aise (3), <strong>behef(e)(lic)</strong> (20), behofsam (1), behoveful (1), behovely (4), <strong>bicumelich</strong> (28), comely (3), commendable (2), competent (3), <strong>convenient</strong> (8),...</td>
</tr>
</tbody>
</table>
covenable (30), desiderable (5), desirable (1), essenciall (2), expedient (5), fremful (6), fruitful (6), good (2525), goodly (29), helply (2), holsum (14), just (30), kendeli (37), lele (2), limplich (1), medeme (3), (i)mete (5), necessarie (23), needly (1), nied (1), niedful (69), nythe (1), profitable (42), proper (4), (i)queme (62), rightful (133), semeli (18), servisable (2), skilful (11), virtuous (34)

Table 2: The adjectives under investigation

<table>
<thead>
<tr>
<th>Type of adjective</th>
<th>characteristic-oriented construction</th>
<th>activity-oriented construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>expressing qualities that can be perceived through the senses</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>expressing goodness or fitness</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>expressing necessity</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Table 3: A classification of adjectives in terms of their occurrence in characteristic-oriented and activity-oriented constructions
Table 4: The eager/easy distinction versus the characteristic/activity-oriented distinction (A: active; P: passive infinitive)

<table>
<thead>
<tr>
<th>Adjective</th>
<th>Animate subject</th>
<th>Inanimate subject</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>eager/characteristic</td>
<td>easy/activity</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>P</td>
</tr>
<tr>
<td>fit</td>
<td>288</td>
<td>18</td>
</tr>
<tr>
<td>good</td>
<td>1154</td>
<td>1</td>
</tr>
<tr>
<td>necessary</td>
<td>290</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 5: The EmodE results for fit, good and necessary (PPCEME) (A: active; P: passive infinitive)

Table 6: Ready with eat and serve in CB
### Table 7: The LmodE results for fit, good and necessary (CLMETEV) (A: active; P: passive infinitive)

<table>
<thead>
<tr>
<th>Adjective</th>
<th>total</th>
<th>animate subject</th>
<th>inanimate subject</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>eager/characteristic</td>
<td>easy/activity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>P</td>
</tr>
<tr>
<td>fit</td>
<td>951</td>
<td>149</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>for NP 5</td>
<td></td>
</tr>
<tr>
<td>good</td>
<td>581</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>necessary</td>
<td>290</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>for NP 6</td>
<td></td>
</tr>
</tbody>
</table>

### Table 8: The PDE results for fit, good and necessary (CB) (A: active; P: passive infinitive)

<table>
<thead>
<tr>
<th>Adjective</th>
<th>total</th>
<th>animate subject</th>
<th>inanimate subject</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>eager/characteristic</td>
<td>easy/activity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>P</td>
</tr>
<tr>
<td>fit</td>
<td>42</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>good</td>
<td>795</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>necessary</td>
<td>1348</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>for NP 1</td>
<td></td>
</tr>
</tbody>
</table>