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Why would anyone *take long*? Word classes and Construction Grammar in the history of *long*

David Denison

1 Introduction¹

What is the word class of English *long*? At first sight, in phrases like *a long bench*, *the longest leap*, it is a prototypically lexical word with regular morphology and straightforward semantics and syntax, ‘obviously’ an adjective of size. Then there is another common role, the temporal adverb seen in *last longer*, *not long gone* and the like, where its word class is again uncontentious. *Long* adj. and *long* adv. are self-evidently related, historically and semantically. ‘Nothing to see here, move along please!’

On the contrary, there *is* something to look at. Some everyday uses of *long* are problematic for the distinction between adjective and adverb, while others have been controversially diagnosed as noun or as preposition, whether in Present-day English (PDE) usage or in historical development through Old, Middle and Modern English (OE, ME, ModE). Representative (invented) examples are:²

(1) *It won't be long.*

(2) *I won't be long.*

(3) *It won't take long.*

(4) *I won't take long.*

(5) *the whole night long*

I attempt to determine the word class in a range of patterns. I will argue that constrained underspecification of word class can be detected in *long* from the earliest historical times and is the seed from which curious decategorialised ModE usages like *take long* have arisen, and that some patterns show subtle signs of grammaticalisation.

In traditional grammar and indeed most modern linguistic theories, every word in every grammatical sentence belongs to one and only one word class. Some of our data cast doubt on whether addressee/hearer and even speaker/writer can operate such neat pigeon-holing. If not, should linguistic theory impose that requirement? I model the historical development of these uses of *long* in a version of Construction Grammar which privileges co-occurrence patterns and meaning over word class.

The order of presentation will be as follows. I detail my data sources and glance at the straightforward adjective and adverb uses of *long* (remainder of Section 1), then turn to the boundaries of the adverb use (Section 2). After a comparison with Danish (Section 3), I question whether uniqueness of word class can be maintained for English *long* and discuss the theoretical implications (Section 4), then sketch a constructional approach to the history (Section 5). I close with some methodological reflections (Section 6).

1.1 *Data sources*

Relevant headwords in the *OED* are (i) *long* adj.1 and n.1 and (ii) *long* adv.1 (entries revised June 2016), plus the obsolete comparatives †*leng* adv. and †*lenger* adj. and adv., and the

superlative †*lengest* adj. and adv. (entries first published 1902). The very thorough collections of the *OED Online* are invaluable. I have also consulted the *Middle English Dictionary* and sampled other data collections (ECCO, EEBO, PPCEME, PPCMBE, COHA, BNC).

My principal data source is a database of all examples of adjective or adverb *long* in the York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE) and the Penn-Helsinki Parsed Corpus of Middle English, 2nd edition (PPCME2). Positive, comparative and superlative instances are all included.³ I created separate records where more than one instance occurs in a clause (that is, in CorpusSearch parlance, more than one hit per token), and removed the four instances that proved to be of *long* adj.2 = *long/along* (*of*) 'attributable to' (*OED* s.v.). There are 1684 records in my database, counting both instances in correlative pairs like *swa lange swa ... swa lange* and *so longe ... as longe*.

The word *long* gets special treatment in the Penn parsing scheme:

LONG is always treated as an adjective. See NP measure phrases for the conventions concerning adjectives used as measure phrases. (Santorini, 2010: Adjectives and adverbs | Treatment of individual words | LONG)

Thus in the Penn Parsed Corpus of Modern British English (PPCMBE), examples that would conventionally have been classed as adverbs are parsed as follows in their notation:

(6) *but did not last long* (AUSTEN-180X,175.333)

(NP-MSR (ADJ long))

(7) *looking very long at the pictures* (BENSON-190X,115.307)

(NP-MSR (ADJP (ADV very) (ADJ long)))

The 'adjective' *long* in (6) is sole constituent of a headless measure NP, while in (7) it is head of an AdjP which in turn constitutes the measure NP. This idiosyncratic approach applies to Penn corpora from ME onwards⁴ but not to YCOE, where a more orthodox distinction between adjective and adverb is observed for this word.

I have attempted to mark each instance of *long* in my database with its actual word class in traditional terms – thus by no means always the same as the corpus tag. My preliminary results are tabulated in Table 1, with all instances that could not readily be classed as clear adjectives or clear adverbs thrown together in the table as 'unclear'. Detailed discussion will follow in the appropriate sections. Every instance was also classified semantically.

Corpus	tagged as	tagged as	totals		Adjective	Adverb	Unclear	totals
	ADJ	ADV						
YCOE	341	594	935		329	590	16	935
PPCME2	735	14	749		262	428	59	749
totals	1076	608	1684		591	1018	75	1684

Table 1: Corpus tagging in two corpora vs. preliminary POS analysis

1.2 Prototypical adjective and adverb

We can trace part of the semantic development of the adjective through a selection of senses in the published *OED* entry, with verbatim snippets taken from illustrative quotations; see

Table 2. The sense numbering fits the uncontroversial assumption of a transfer from spatial senses to temporal. Such a transfer must have taken place already in pre-OE times, as senses A.5 and A.6 are well represented in OE with at least 150 examples in YCOE. Sense A.8 may be there too in modest numbers, witness (8), at most 8× in YCOE, though not yet extended to human referents:

(8) *And swa eall nytenu and fugelas, swelces ðe nu ys lang æall to arimanne.* (IOE, OED; also YCOE, cosolilo,Solil_1:10.2.97)

and likewise all beasts and birds, such as now is long all to enumerate

sense	abbreviated definition	date range	illustrative snippets
A.1	'extensive in length'	OE-	<i>long low rowing boats</i>
A.2a	'of a specified length'	OE-	<i>about a quarter of an inch long</i>
A.5	'great in extent from beginning to end'	OE-	<i>long letters</i>
A.6	'having a great extent in duration'	OE-	<i>her long twilight of decrepitude and decay</i>
A.8	'too long, lengthy, tedious'	OE-	<i>He..thought it long till hee was in the Citie; He is apt to be long in his descriptions</i>

Table 2: Some adjective uses of *long* in OED

sense	abbreviated definition	date range	illustrative snippets
1	'for or during a long time'	OE-	<i>Ȝet ic mei longe libben; We have long been expecting a packet.</i>
2	'at/from/to a far distant time'	OE-	<i>long since; long after (X); but he cut his teeth long before me</i>

Table 3: Some adverb uses of *long* in *OED*

The adverb *lange/longe* with its comparative and superlative forms is even more common in OE and ME than the adjective, as can be seen from Table 1. Two important temporal senses of the adverb are listed in Table 3 (spatial senses are negligible). Other uses of the adverb will be discussed later.

The clusters of adjective and adverb meanings in Table 2 and Table 3 are familiar in PDE, and with the possible exception of adj. A.8, the word classes involved are not controversial.

2 The boundaries of adverb *long*

Temporal *long* is often interchangeable with the NP *a long time*, clearly an NP containing adjectival *long*.⁵ This has been taken – illogically – to support the classification of *long* by itself either as a noun (a reduced NP) or as adjective. In any case the parallel is by no means perfect, as *a long time* is not always an acceptable substitute for *long*:

- (9) a. *the very thing I've long been wishing for* (PPCMBE, OKEEFFE-1826,1,24.255)
- b. *The pheasant on her hat was long dead* (BNC, ALL 1338)
- c. *How long will it last?* (BNC, BPD 543)
- d. *Before long, Jenny showed up.* (BNC, A0F 2618)

There is a subtle constraint on the distribution of object-like and adverbial uses of *long*, as illustrated in the contrast between (10) and (11):

- (10) a. *It won't take/last long* (BNC, BMW 521/KD0 3233)
- b. *Will it take/last long?* (BNC, FS1 2331/invented)
- (11) *It took/lasted *long/?*very long.*

It looks at first as if *long* is a kind of negative polarity item (NPI) – or ‘negatively-oriented polarity-sensitive item’, to use Huddleston & Pullum’s more precise formulation (2002, pp. 569, 822-7).⁶ Quirk et al. call the context of restriction ‘non-assertive’ but say that the restriction doesn’t apply when *long* is ‘inflected or modified by anything other than *very*’ (1985, p. 541 Note [c]), cf. (12):

- (12) a. *our hero's hesitant romance with the camp nurse takes painfully long to blossom* (BNC, CHA 1395)
- b. *it took long enough* (BNC, HA6 3337)
- c. *Recording an album inevitably takes longer than expected.* (BNC, A6A 2377)

I believe there is a pragmatic interpretation. To use these constructions felicitously in PDE is to question, comment on or dismiss the actual length of the period covered by *long* – cf. Nigel Vincent's suggestion that 'the construction requires *long* to be interpreted as a scale' (pers. comm. 3 July 2015) – frequently with an implicit looking-forward to the situation *after* its end-point. This would cover the vast majority of non-assertive examples in BNC plus the apparently assertive (13):

- (13) *and you know what until I get started takes long for me and then I usually can get going you know but until I keep going or sometimes somebody <unclear> and I say that's it!* (BNC, KCV 5122)

Whatever the precise constraint, note that *a long time* does not share it:

- (14) a. *You've been a long time!* (BNC, KBD 2796)
 b. *I was taking a long time!* (BNC, KCN 1977)

2.1 *Between adverb and adjective?*

Consider two of the examples we began with:

- (15) = (1) *It won't be long.*

- (16) = (2) *I won't be long.*

According to \bar{X} Theory, the VP will contain AdvP if *long* is an adverb, AdjP if an adjective, but the choice between them is not immediately obvious. Within AdvP and AdjP, exactly the same premodifiers of the head *long* are permitted, and comparison of *long* is the same for

each. While the structure [_{VP} *be* AdjP] is common in English, [_{VP} *be* AdvP] is less so, which would support but hardly prove the case for adjective.

The difficulty was clearly felt by successive editors at the *OED*. Before the recent revision, *OED*² (still available online) assigned such patterns to the adverb but placed a note s.v. *long* adv.¹, sense 2a, an implicit variant of the main sense '[F]or or during a long time':

The suppression of the qualified adj., adv., or phrase, in expressions like *to be long about one's work*, causes the adv. *long* to assume the character of an adj. compl. = 'occupying a long time', 'delaying long'. [...] The originally advb. character of the word in this use is shown by the form *longe* (riming with *fonge*) in the first example, and by the analogy of the similar use of the advb. phrase in *to be a long time*.

This alleged move towards adjectivehood was explained with reference to type (16). All the following examples and others beside are now found in *OED*³ s.v. *long*, adv.1 6a 'expressing the notion of protracted occupation in some task, or of absence or delay (esp. when caused by such occupation)'.

- (17) a. *þe king sende his sonde after Brien þa wes to longe.* (c1275(?a1200))
the king sent his messenger after Brian who was too long
- b. *Sumdel þe pope was anuyd þat he hadde i-beo so longe* [rhyme *onder-fonge*]. (c1300)
somewhat the Pope was annoyed that he had been so long
- c. *Lunet þare stode in þe thrang, Until Sir Ywaine thocht hir lang.*
(a1425(?c1350))
Lunet there stood in the throng until Sir Ywain thought her long.absent⁷
- d. *Goe, Ile not be long.* (1612)
go I'll not be long

However, what was previously supposed to be the source construction is found only from ?a1425 (s.v. *long* adv.1 6b), well *after* the earliest forms with apparent ellipsis. This already casts doubt on the scenario in *OED*².

Other arguments come from several domains. In morphology, presence or absence of final *-e* cannot be used to discriminate between adverb and adjective, even in early ME; see the data from PPCME2 presented in Table 4.

subcorpus	M1 & MX1	M2	M23& M3	M24 & M34 & MX4 & M4	total
spelling <lang, long>: clear adv/ clear adv + clear adj	96/105	16/23	124/175	190/223	426/526
%	91.4	69.6	70.9	85.2	81.0
spelling <lange, longe>: clear adv/ clear adv + clear adj	75/89	12/17	82/172	77/117	246/395
%	84.3	70.6	47.7	65.8	62.3

Table 4: Proportion of examples that are clear adverbs ± final -e in PPCME2

If *long* is an adjective in (16), it is predicative-only. It cannot occur in this sense in attributive or postpositive use:

- (18) a. *The doctor should not be long now.* (BNC, AR3 1619)
b. *!a long doctor* [in sense 'slow to arrive']
c. *a doctor !long and slow (to arrive)*
- (19) a. *The answers were not long in arriving.* (BNC, CES 2054)
b. *!long answers* [in sense 'slow to arrive']
c. *?!some answers long in arriving*

Note that in Hengeveld's typological classification (1992), only attributive use is criterial for a class of adjectives. Compare, say, *late*, more clearly an adjective and available for all or nearly all of the patterns in (18)-(19).

Semantics too rather goes against the claim of adjective status. Though *long* is roughly equivalent to *a long time* here, that would suggest at most a similar grammatical function but not necessarily the same phrasal class (cf. *He's miserable/a misery*). In (20) *a long time* is not a predicative complement:

(20) *X will be a long time (at this task/absent)*

The meaning is not that person X *is* himself a period of time but that X will be at the task or absent *for* a long time. On those grounds, *a long time* would be an adverbial in clause structure, hence *long* (by itself) likewise, and therefore in word class most naturally an adverb.

With non-human subjects as in (15), however, the semantic case for adjective is a little stronger, though *OED* does class examples under the adverb:

(21) *Till that time come, whiche I trust shall not be long.* (1579, *OED*)

With both personal and non-human subjects, a semantic development of *long* takes it towards such senses as 'excessively long, tedious'. *OED* understandably treats such examples as belonging under *long* adj.1 8a,b.

Finally here, when *long* or *longer* modifies a gerund in ME (7×), its word class hovers between adjective and adverb in line with the gerund's uncertain status as noun or verb:

(22) & in longe preiing or redyng (PPCME2, CMCLOUD,80.376)

All in all there is no hard-and-fast boundary between adverb and adjective *long* when in construction with *be* (or equivalent without *be* as in (17)c). In many cases we can regard the word class as underdetermined.

2.2 Between adverb and adposition?

We turn now to patterns where *long* forms a constituent with what precedes it. Since *long* is clearly not a verb here, could it perhaps be a postposed preposition (adposition)? In Table 5 I list three candidates, two from the *OED*'s entry for the adjective and one from the adverb.

sense	abbreviated definition	date range	illustrative snippets
Adj.1 A.2a	'of a specified length' (NB. already mentioned in Table 2)	OE-	<i>about a quarter of an inch long</i>
Adj.1 A.7a	'of a specified serial extent or duration'	?	<i>four hours longe; A Play ... some ten words long</i>
Adv.1 3	'throughout the period specified'	a1275(?a1200)-	<i>the whole summer long; all day long</i>

Table 5: Postpositional *long*

I give corpus examples of the first two, predicated of or qualifying a noun:

(23) *se wudu is westlang and eastlang cxx mila lang oððe lengra and xxx mila brad*

(YCOE, cochronC,ChronC_[Rositzke]:893.4.868)

the wood is extending westwards and eastwards 120 miles long or longer and 30 miles broad

(24) *þonne se monoð byð geendod þe we nemnað se ærra Lyða, þonne byð seo nyht*

VI tyda lang ond se dæg XVIII tyda lang (YCOE, comart2,Mart_2.1_[Herzfeld-Kotzor]:Ju30,A.27.96)

when the month is ended that we call the earlier Lyða [= June], then is the night 6 hours long and the day 18 hours long

While postpositive spatial *long* is solidly attested from OE onwards, the date range for postpositive temporal *long* seems uncertain, hence the question mark in Table 5. In *OED* there is a lone OE example from Byrhtferð, also in YCOE, then none till 1555 for the *four hours longe* example, after which it is solidly attested. I have another 11 examples from YCOE, all from the *Old English Martyrology*, but none at all from PPCME2. Thus there seems to be a gap between OE and early ModE. A different pattern with *of*, e.g. *þe daie is now of xii oures lange*, is attested by *OED* from late ME.

To judge from the phrasal distribution and the semantics, the word class of both spatial and temporal types is indeed adjective. Many adjectives could take an NP complement in OE (Mitchell, 1985, pp.85-94), and some do so well into the ModE period (e.g. *(un)becoming*, *(un)worthy*, *like*, *next*), and a few even now, e.g. *worth*. Certain adjectives of dimension like *high*, *tall*, *thick* and *wide* routinely come *after* their complement, a measure phrase NP, and *long* belongs among them.

That leaves the third pattern, *all day long* and similar, used as adjunct adverbials:

(25) *Afterward he ordeyned in al his lond þat aboute a dede cors schulde be
wacche al þe nyzt longe.* (PPCME2, CMPOLYCH,VI,449.3290)

afterwards he ordained in all this land that around a dead body (there) should be
a.vigil all the night long

A temporal NP of extent containing a universal quantifier is followed by *long*, and the phrase as a whole functions as an adverbial adjunct. As indicated in Table 5, *OED* labels *long* an adverb here. Now, word classes are meant to identify sets of items with shared distributions, and it is difficult to find an exact parallel to the *long* of (25). The spatial dimensional adjectives noted above in relation to (23) do not have a temporal extension to form an equivalent to (24), nor do they have an adverbial (25) type. This might be an indication that the temporal (24) pattern of *long* helped to license pattern (25).

Another partial analogy for the *long* of (25) is seen in (semi-)fixed phrases like

- (26) a. *the (whole) world over*
b. *the whole night through*
c. *all year round*

The postposed items in (26) can function elsewhere as a preposition or an adverb with path semantics, and the phrases involve universal quantification, whether or not explicitly. Quirk et al. (1985, pp. 452n.[a], 541n.) imply that *over*, *through* and *round* remain prepositions in the fossilised word order of (26) but merely invite us to compare '*all (day etc.) long*'.

Huddleston & Pullum (2002, pp. 631-2) do not include any of them in a survey of prepositions that follow a complement; they label *all year round* an NP (2002, p. 707) but

without separate word class labelling of *round*. However suggestive the similarity between the patterns of (26) and (25), not much light is thrown on the word class of *long*.

Now, while *over*, *through* and *round* routinely serve elsewhere as conventional prepositions combining with a *following* NP to form a PP, *long* does not – except, perhaps, as *long* prep., considered by *OED* a different lexeme. This aphetic form of *along* has a path meaning, reinforcing the analogy. Is it conceivable that somehow it has played a part in the appearance of (25)? The chronology seems at first wrong, as the postpositional *long* of (25) apparently predates the appearance of aphetic *long* prep. However, the fuller form *along* is early (OE *ondlang*, etc.) and has a highly relevant use. This *OED* entry has been updated (September 2012) s.v. *along*, adj.2, prep. and adv., and the first sense given reads as follows

†A. adj.² (attrib.). ‘Modifying a period of time, used to denote that something continues for the full extent of the period concerned: throughout the whole length of; for the entirety of.’ *Obs.*

Only in expressions such as *along day*, *along night*, etc. These have been replaced in later use by *all day long*, *all night long*, etc.; cf. LONG adv.¹ 3. (See discussion in etymology.)

It looks, therefore, as if the current editors are linking *all day long* to both *long* adv.1 and either *long* prep. or *long* adv.2. In conclusion, a suitable word class label for the *long* of *all night long* is, according to preference, either (i) adverb or (ii) indeterminate adverb ~ preposition.⁸

2.3 *Between adverb and noun?*

There are uses of temporal *long* whose distribution resembles that of nouns – to the extent that in *OED*² they were actually labelled as such (s.v. *long* [adj.¹ and] n., B.1-2).⁹ After the latest revisions, however, they appear s.v. *long* adv.1, from where the relevant patterns are summarised in Table 6.

sense	abbreviated definition	date range	illustrative snippets
5	As complement of the verb <i>to be</i> with non-referential <i>it</i> as subject	OE-	<i>It es lang sen</i> ['since'] <i>it fell oute of þe hand; it will not be long before I see you</i>
P2	modified by demonstrative adverbs	1488-	<i>this long; it would hardly take that long</i>
7	As complement to verbs which take the noun phrase <i>a long time</i> as direct object.	?a1425-	<i>How long will it take to be full ... ?;</i> <i>Miss Churchill didn't need very long to answer this</i>
P1	prepositional phrases	a1530-	<i>before long, for long</i>

Table 6: Uses of *long* formerly labelled as nominal in *OED*

The evidence for the first two being nouns was very weak. I give *Dictionary* examples (now both classified under the adverb):

(27) *As it was long before* [= 'until', DD] *he could be perswaded to take a Prebend of Lincolne.* (1631, sense 5c)

(28) *Otherwise he had never..this long have deferr'd its discovery.* (1635, sense P2.b(a))

Why assume the complement of *be* to be an NP in (27)? The only conceivable motivation is the apparent equivalence with *a long time*. As for (28), although *this* and *that* are most often determiners of nouns, they can be used as degree modifiers of adjectives, as in *this good, not that expensive* (Huddleston & Pullum, 2002, pp. 549, 1510-1) – self-evidently AdjPs, not NPs.

Another use formerly classified as nominal in *OED*² can be safely reassigned to another word class:

(29) *You shal know before long.* (1610, sense P1.a)

Although NP is a characteristic prepositional complement, other lexical XPs can certainly be found in that slot, albeit with more restricted distributions:

- | | | | |
|------|----|--|------|
| (30) | a. | <i>before the game</i> | NP |
| | b. | <i>at large; for real</i> | AdjP |
| | c. | <i>before now; until very recently</i> | AdvP |
| | d. | <i>from beyond the grave</i> | PP |
| | e. | <i>by trying harder</i> | VP |

The inference that *long* must be a noun in examples like (29) was therefore unsafe.

In fact the internal syntax of the *long*-phrase is typical of Adj/Adv, not N, allowing premodification by *so, how, very, too, this/that* 'very', but not specification by *the*:

- (31)
- a. *before very long*
 - b. *after too long*
 - c. *how long*
 - d. **before the long*

Likewise the morphology is that of Adj or Adv, not N, since *long* inflects for comparison in these constructions, but not for genitive or plural:

- (32)
- a. *before any/much longer*
 - b. *three hours at the longest*
 - c. *it will be longer before X*
 - d. **at this long's end*
 - e. **They didn't stay for longs.*

I conclude that the most parsimonious analysis of *before long* and similar expressions is as a prepositional phrase containing an adverb phrase, with *long* an adverb (so also Huddleston & Pullum, 2002, p. 569 and cf. 640).

Just one possible nominal use remains from those listed in Table 6, namely after apparently transitive verbs. This is perhaps more troubling than the PP data, with *long* able to occur in the complement of *allow*, *give*, *have*, *have got*, *need*, *require*, *spend* and especially *take*:

- (33) *It won't need/take long.*

- (34) a. *He doesn't have/need/spend/take long.*
 b. *You haven't got long.*
 c. *How long should we give them/allow (them)?*

(Example (34)c adds the possibility of an indirect object.) Corresponding to the alternation in subject position between inanimate themes and human agents in (33) and (34) is a similar alternation in post-verbal position with *give*:

- (35) *I wouldn't give it/him too long.*

These verbs generally take objects, and objects are generally NPs. A few *V + long* idioms even marginally allow a passive:

- (36) a. *How long was spent filling in forms?*
 b. *Much longer was needed for the second phase.*
 c. *?*Longest was taken by the form-filling. [cf. ?The longest was taken by the form-filling.]*

Passivisation is often regarded as a good test of objecthood. In (36), then, we do have a little evidence for the *long*-phrase acting in an NP-like fashion in its external distribution, though we could argue that phrases promoted to passive subject are not always NPs:

- (37) *?On Thursday was felt to be the safest time to test the fire alarms.*

There are other reasons to doubt an NP analysis of the *long*-phrase. The 'transitive' verb most characteristically used with *long*, namely *take*, can sometimes be used intransitively, for example in *take against*, *take off* (of a plane), *take sick*, and – crucially – in the same sense as in *take long*, witness (38):

- (38) a. *if it takes until tomorrow morning* (1879, COHA)
 b. *The tourists took until late in the third quarter to overcome Wales B*
 (BNC, CEP 2787)

Furthermore, the *long* of *take long* is used to much the same effect with *last*, a clearly intransitive verb. The other verb most commonly used with *long* 'a long time' is *be*, which is of course firmly intransitive.¹⁰ Such collocations do not support claims that *long* is a noun.

Even in (33)-(36) it does not follow that *long* must be a noun. The same arguments can be brought to bear as with the PPs, and they are just as persuasive here: the morphology is wrong (e.g. potential for comparison of *long*), and the internal structure of the phrase is wrong (e.g. potential for modification of the head by *so*, *how*, *very*, *too*, *this/that* 'very'). It could be countered that internal structure and external distribution of the *long*-phrase may give different answers.

We may also note the addition of a human referent in the VP of the (33) type:

- (39) a. *They say it won't take you long!* (BNC, KDM 15381)
 b. *It did not take the family long to appreciate her situation.* (BNC, H7E
 700)

In English, semantically the NPs *you* and *the family* in (39) are closer to Experiencer than Beneficiary. Syntactically they do not behave like canonical indirect objects, however – or indeed like direct objects – which is yet further evidence of how anomalous the *take long* construction is. (The optional personal argument is not apparently listed in the discussions of object types, semantic roles or complementation patterns in Huddleston & Pullum (2002, Chapter 4) or Quirk et al. (1985, Chapter 10). Nor is the possibility explicitly recognised in the *OED*, though it occurs half a dozen times elsewhere in citations.)

My response to the *OED* editors concluded that the adverb entry would be the most suitable home for *long* in (33)-(36). I will argue in Section 5 for a more nuanced view that does not require a unique part of speech label, in which the noun-like characteristics of *long* would be recognised too.

3 Excursus on Danish

In what may be a recent development, Danish is beginning to exhibit behaviour very similar to the English pattern of (3) and perhaps (4), as the word-for-word glosses demonstrate:¹¹

(40) *Hvorfor har det taget jer så længe, at lave det nye album?* (1988, KorpusDK)

why has it taken you-ACC.PL so long to make the new album?

(41) *Det har taget længe at nå hertil.* (Google, <http://paradoks-megan.blogspot.dk/2011/04/pa-blikstille-hav.html>)

it has taken long to reach here.to

- (42) *Hvor længe tog det at komme igennem det?* (1983, KorpusDK)
 how long took it to come through it
- (43) *Jeg har brugt længe på at udtænke små retter ...* (Google, <http://www.hestenettet.dk/forum/1/2336325/2336325/>)
 I have used/spent long on to think.up small courses

The verb *tage* is cognate with English *take*, *længe* with English *long*. Though (40)-(43) are attested examples that Sten Vikner judges to be valid, he himself finds them awkward, perhaps to be rated as of grammaticality “??” (pers. comm. 2 Jul. 2015).

I cite a preliminary corpus search by Vikner in KorpusDK¹² (56m. words) for the verbs *vare* ‘last’, *tage* ‘take’ and *bruge* ‘use, spend (time)’. He looked for co-occurrence of one of these verbs with the duration adverbials *længe* ‘long’ or *lang tid* ‘(a) long time’. Only two configurations were searched for: verb followed by adverbial with up to 3 words intervening, as in (40), and a *wh*-phrase consisting of *hvor* ‘how’ + adverbial followed by verb, again with up to 3 words intervening, as in (42). In Table 7 I adapt Vikner’s summary (pers. comm. 19 May 2014) of his findings. In the 10 out of 12 cells (= 3 verbs × 2 adverbials × 2 syntactic patterns) with totals under 100, he checked individual examples, while the two most frequent possibilities represent conservative approximations only.

<i>vare</i> 'last' 0-3 <i>længe</i> 'long'	>600	<i>vare</i> 'last' 0-3 <i>lang tid</i> 'long time'	27
<i>tage</i> 'take' 0-3 <i>længe</i> 'long'	3	<i>tage</i> 'take' 0-3 <i>lang tid</i> 'long time'	>500
<i>bruge</i> 'use' 0-3 <i>længe</i> 'long'	0	<i>bruge</i> 'use' 0-3 <i>lang tid</i> 'long time'	88

<i>hvor længe</i> 'how long' 0-3 <i>vare</i> 'last'	85	<i>hvor lang tid</i> 'how long time' 0-3 <i>vare</i>	16
<i>hvor længe</i> 'how long' 0-3 <i>tage</i> 'take'	9	<i>hvor lang tid</i> 'how long time' 0-3 <i>tage</i>	88
<i>hvor længe</i> 'how long' 0-3 <i>bruge</i> 'use'	0	<i>hvor lang tid</i> 'how long time' 0-3 <i>bruge</i>	21

Table 7: Selected patterns in KorpusDK

Lang tid is an NP containing the adjective *lang* 'long', while unlauted *længe* is an adverb,¹³ morphologically distinct from the adjective (more securely so than ME *longe*: see Section 2.1). Their word class status is straightforward. According to my Danish informants, the adjective cannot be sole complement of either transitive or intransitive verb:

- (44) *Det vil ikke vare længe/*lang*
it will not last long-ADV/*long-ADJ

In the choice between the two adverbials, the intransitive verb *vare* 'last' clearly favours *længe*, though the bare NP *lang tid* is also possible, whereas the transitive verbs favour *lang tid*. To what extent transitive verbs can also be used with *længe* is the point of interest. Transitive verbs complemented by *længe* are starting to appear, though examples still sound odd to native speakers:

(45) ??*Det vil ikke tage længe* (invented example)

it will not take long

(46) ??*Han vil ikke bruge længe* (invented example)

he will not spend long

So far only *tage* 'take' has been found in KorpusDK, only with an inanimate subject like English (3) and never with a human subject like (4), but *bruge* 'use' (i.e. 'spend time') with human subject apparently sounds possible, though *bruge* + *længe* has not been found in the corpus. However, Vikner has found some 15 examples on the web, of which (43) is one.¹⁴

If examples like (45)-(46) are only dubiously acceptable to Danish speakers, how come Vikner found 12 examples in his corpus search and more on the web?¹⁵ He suggests that *længe* as complement of transitive *tage* or *bruge* is better when not so obviously in an object position, either through fronting of *hvor længe* 'how long', as in (42), or because an NP with personal reference intervenes between verb and *længe*, as in (40). Both conditions are well attested in English; for the former compare fronted *how long* in (34)c, (36)a, (55)b, (75), and for the latter, (39) above.

I have found corpus examples of human subject + *være* 'be' + adverb *længe*, but crucially these have a place adverbial acting as complement of *be*, so that the time adverbials *længere* and *for længe* are free adjuncts and so quite acceptable – and irrelevant:

(47) *Jeg vil ikke være her længere.* (1988, KorpusDK)

I will not be here longer/anymore

(48) *når han er for længe i Danmark i de mørke og kolde vintermåneder* (2001, KorpusDK)

when he is too long in Denmark in the dark and cold winter.months

For completeness I mention possible parallels to the allegedly noun-like use of English *long* after the prepositions *before* or *for* (see Section 2.3 above). The Danish equivalent of *before long* (c. 350× for the uninterrupted string in BNC) would seem to be *inden længe* (c. 450× uninterrupted in CorpusDK), while the very awkward *?before a long time* (0× in BNC) corresponds to the equally disfavoured *inden X lang tid* (only 5× in CorpusDK, always with an intensifier ± negator before *lang*). The parallel holds. However, there seems to be no obvious equivalent to *for long*.¹⁶

Overall, the Danish parallel is very intriguing and worth following up in more detail in recent history, especially in case it provides a real-time analogy to the history of English. I have tentatively taken it into account in the following constructional history of English (Section 5), and I return to the comparison in my concluding remarks.

4 Theoretical prerequisites

Sections 2.1-2.3 suggest that certain PDE uses of *long* are not clear-cut members of the word classes adverb or adjective. Even if a unique word class could be established, analogical resemblances to another word class would not be dispelled. Word classes are theoretical constructs devised to capture syntactic and other analogies. It is no more than a convenient fiction to assume that speakers and hearers operate with precisely those analogies and no others.

4.1 Vagueness

I have argued elsewhere (e.g. Denison, 2013, 2017) for vagueness in word class assignment in certain situations. For example, there are now dozens of former nouns which in some contexts and for some speakers cannot be assigned a unique word class. To take two examples, for speakers who have both N and Adj entries in their lexicon for one of the underlined words in (49), the word class of that word is underdetermined in the context shown, which permits either N or Adj:

- (49) a. *a powerhouse song*
 b. *This is rubbish ['no good'].*

The addressee/reader need not worry whether the word is a noun or an adjective in such a context, and the linguist cannot decide in any non-arbitrary way (vagueness = underdetermination); arguably even the speaker/writer need not have decided (underspecification).

In similar fashion we could posit Adj ~ Adv vagueness in relevant uses of *long*. The morphology doesn't help after the earliest ME, and probably not even then. In some cases it is a moot point whether *long* is predicated of an NP (like Adj) or modifies the verb (like Adv); compare *ill* in (50) below. Because relevant uses of *long* are post-verbal, the word class of *long* affects the label of the phrasal projection but perhaps not the constituent structure, assuming a non-generative structural analysis of the *Cambridge Grammar* type (Huddleston & Pullum, 2002), without movement.

The word classes adjective and adverb have a permeable and sometimes problematic boundary in other contexts too. Mitchell (1985, I §1108) documents some interchange between them in OE. Later in the history of English, *look* in the sense 'have a specified appearance' gives us another context, occurring almost interchangeably with adverb (*OED* s.v. v., 11a, e.g. *Things ... look badly*) or adjective (s.v., 11b, e.g. *things look bad*). Thus with a morphologically invariant word like *ill* at that period, the analysis is indeterminate:

- (50) *Whatsoever looks ill, and is offensive to the Sight* (1712, *OED* s.v. *nuisance* n.
2b)

And for a related language, German, Eva Schultze-Berndt (pers. comm.) offers the example of

- (51) *Die Frau kam wütend näher.*
the woman came angry/angrily nearer

The distributional facts of Modern German could license *wütend* in (51) equally well as adjective or adverb.

4.2 Decategorialisation

Where category vagueness in lexical words concerns the boundaries between otherwise well-motivated word classes, decategor(ial)isation need not. As an element in a larger unit gradually loses autonomy in the process of grammaticalisation, the morphosyntactic evidence of its original word class membership becomes weaker (see e.g. Hopper & Traugott, 2003,

pp. 106-15, Brinton & Traugott, 2005, pp. 25-6). While vagueness is synchronic, decategorialisation is necessarily diachronic, but the symptoms may overlap.

PDE has several derivationally simple, everyday words which show grammaticalised behaviour. Compare here *much* with *long*, both etymologically adjectives of size. Both have developed uses no longer safely characterised as adjective or adverb.

- (52) a. *I don't much like his attitude.*
 b. *They haven't long been living here.*
- (53) a. *much happiness*
 b. *long delays*
- (54) a. *It won't take much (to VP).*
 b. *It won't take long (to VP).*
- (55) a. *How much did they spend (on X)?*
 b. *How long did they spend (on X)?*

In (52) they are adverbs; in (53) *long* is an adjective but *much* arguably a determiner; in (54) they belong to idiomatic NPI constructions where their own word class status is obscured; and in (55) they form with *how* the unmarked interrogative adverbs of amount and duration, respectively, essentially complex function words. Of course the overall distributions of *much* and *long* are by no means identical; *long* shows no evidence of determiner use, for example. Each of these words is unique – otherwise, of course, we could simply (if unhelpfully) invent a new word class for them.

It is hard to find other adverbs of duration that pattern like *long* after *be*. The entries in the *Historical Thesaurus of the OED* for 'the external world > abstract properties > time > duration in time > in respect of duration' as adverb (evidently a function rather than a word

class) give a number of synonyms and antonyms, some of which are clearly NPs or PPs and can be discounted, leaving as possible adverbs

'for a long time': *long* c888, *yore* c1275, *longly* 1340, *lastingly* 1372, *longs* a1450, *longsomenly* c1485, *stayingly* 1648, *eternally* 1664, *sometime* 1801, *chronically* 1854, *somewhile* 1864, *secularly* 1971

'in a protracted fashion': *trailingly* 1589, *protractedly* 1624, *extendedly* 1660, *prolongedly* 1832

'for a short while (adv.) *awhile* < *ane hwile* OE-1810, *a little* c1175-1842, *a litel wan* c1200, *little* c1200-1604, *short* 1611-c1730 + 1875, *momentally* 1646, *momentarily* 1655, *shortly* 1809, *momently* 1827

The dates are first attestations in the *OED* in the relevant sense. Although I haven't made a thorough corpus search, intuition suggests that only *long* is likely to be found in the complement of *be*.¹⁷

Although it appears in a different section of the *Thesaurus*, *quick* shows somewhat similar behaviour to the problematic *long* pattern of (2):

(56) *I will/won't be quick.*

But *quick* lacks the pragmatic NPI-like restriction and conversely cannot occur as 'object' of a transitive verb like *take* or *spend*:

(57) **I won't take quick.*

And semantically, *quick* has related uses which are fully adjectival, unlike *long*:

- (58) a. *He won't be quick/long.*
 b. *He isn't a quick/!long worker.*

If it is difficult to find words which have a similar distribution to *long*, then by definition it will be difficult to group it with others in a word class.

4.3 *Word classes and Construction Grammar*

There are various theoretical means of allowing for mixed or hybrid categories (see e.g. Bresnan, 1997, Malouf, 1998, 2000, Hudson, 2003). This would be one way of capturing the fact that certain *long* patterns have the internal structure of an AdvP or AdjP but an external distribution akin to an NP (Section 2.3 above). Compare the English gerund, sometimes regarded as a VP in its internal make-up but an NP in its external distribution. For a number of reasons I will not pursue this approach here. First, a mixed category seems rather heavy-duty machinery to invoke for such a small set of patterns, lexically specific and of low token frequency. Second, it would not help with the blurred boundary between adverb and adjective. Third, the evidence for phrasal NP status is not all that convincing. Fourth, it is not clear to me how mixed categories would help explain the process of gradual historical change.

Another alternative is a specific 'supercategory' for each pair of overlapping conventional categories (Dick Hudson, pers. comm. 12 Jul. 2013), since, for example, the *long* of *I won't*

be long has characteristics of adverb and adjective but cannot be, say, preposition or determiner or verb. The suggestion embodies the theory-dependent assumptions that each word must have a unique category and that the space of possible categories is neatly partitioned, but supercategories would simply multiply word classes and create new overlaps. The genuine problem of constraining the underspecification can be dealt with elsewhere: not only are the morphosyntactic peculiarities of *long* more easily handled at the phrasal than the word level, but a cluster of semantic and pragmatic properties only makes sense at phrase or construction level. This suggests that some version of Construction Grammar would be appropriate.

There is no space for a review of all the different versions of Construction Grammar (CxG); see the helpful conspectus in Goldberg (2013). As far as I am aware, all formal CxGs such as those propounded in Boas & Sag (2012), etc. (cf. also Hoffmann & Trousdale, 2013, pp. 5-7), operate with a syntax that relies on conventional word classes, as too do most less formal CxG approaches, such as those of Goldberg (2006), Traugott & Trousdale (2013) and others, though decategorialisation as part of grammaticalisation may stand apart. In Radical Construction Grammar (Croft 2001), word classes are neither axiomatic nor language-independent but are epiphenomena of constructional patterning. In the exemplar-based work of Bybee, alternative syntactic analyses may co-exist (e.g. Bybee, 2015, Bybee & Moder, 2017). I couch my account within a hierarchical framework à la Traugott & Trousdale, making reference to conventional word classes. In what I take to be the spirit of the CxGs of both Croft and Bybee, I assume where appropriate that a word class can be underspecified, with the construction itself inheriting properties that constrain the possible fillers of the slot.

5 A partial constructional history of temporal *long*

We now have the materials to put together a diachronic account of *long* with a duration meaning. My detailed corpus data only extends to the end of the ME period, although dictionary data and opportunistic use of post-ME corpora give much useful information on the subsequent history. We start from the corpus examples of *long* that were initially classified as 'unclear' for not being straight-down-the-line adjectives or adverbs: 16/935 examples = 1.7% in OE, 59/749 = 7.9% in ME (Table 1 above). I discuss those that may be relevant to subsequent developments.

The adjunct adverbial pattern with a universal quantifier, e.g. *al þe nyzt longe*, appears in the ME data (2×), with *long* arguably indeterminate between adverb and adposition (Section 2.2). To the extent that this use is partly derived from *along* (*OED* adj.2, prep. and adv.), the temporal meaning is a later development, as 'the adverb and preposition in earliest use only refer to spatial relations' (etymological note, *OED* s.v.). A referee speculates that post-nominal *round* and *through* ((26)b,c above) might show a similar development, in which case an extension from spatial path to temporal meaning in a shared parent construction would be constructional change (Traugott & Trousdale, 2013). The dictionary evidence confirms the spatial > temporal ordering for *round* and *through* (*All the night thorow* 1535, *the year round* 1675, *the whole summer through* 1787), but *long* had got there significantly earlier. The referee also observes that with several temporal nouns in COHA, an earlier *all the N long* is replaced by an increasingly frequent *all N long*, suggesting that the construction has been undergoing change quite recently.

The predicative AdjP type *four hours long*, where *long* is an adjective, is found in OE and again in early ModE with a numeric quantifier. There is a strong formal resemblance at

phrasal level despite the difference in distribution, which may have promoted the similar word order of *all (the) night long*; see also Section 2.1.

Long as complement of a preposition was classified as of unclear word class. Although adverb is by far the strongest candidate here, there are echoes of noun and of adjective. In my OE data, 5/6 such examples have the preposition *embe/ymb(e)* 'about, after':

- (59) *ða andswarode he ymbe long* (YCOE, coboeth,Bo:39.125.22.2494)
then answered he after long

Now, in almost any construction where PP = P + XP can be a term, P + AdvP will be at best a minor micro-construction beside the dominant P + NP. The pattern *ymb(e) long* in OE establishes *long* as possible head of an XP that is complement of a preposition, the construction inheriting semantic properties ultimately from a schematic construction of time adjuncts. After *ymb(e)* becomes obsolete in ME, the usage continues with other prepositions, principally *before* (2/4 of the examples in my ME data). These PPs are one route from the duration meaning of *long* by itself to a focus on the moment at the *end* of some period: this construction is a punctual time adjunct.

Meanwhile the preposition *for* develops a duration sense in early ModE (*OED* s.v., prep. and conj., 28 – all the citations involve *for* + NP).¹⁸ From the 16th century the P + *long* micro-construction is extended to *for long* (*OED* s.v. *long* adv. P1.c (a)), an instantiation of the time adjunct construction which inherits duration meaning from *for*.

Now consider *long* as complement of *be* with a non-referential subject, mostly *(h)it* (6× in the OE data, 10× ME):

(60) *Hit bið long hwonne se hlaford cume* (YCOE, cocura,CP:17.121.11.813)

it will.be long until the Lord comes

(61) *But it is full longe sith þat ony man durste neyghe to the tour* (PPCME2,

CMMANDEV,25.599)

but it is full long since that any man dared move.near to the tower

In these examples the duration is stated factually by the speaker/writer, whereas in (62) and a possible second OE example, perception of it is attributed to an explicit Experiencer, with the modifier *to* 'too' confirming the subjective element:

(62) *& þincð him to lang hwænne he beo genumen of þyses lifes earfoðnyssum. &*

gebroht to ecere reste. (YCOE, cocathom1,æCHom_I,_9:252.89.1642)

and seems to.him too long until he be taken from this life's miseries and

brought to eternal rest

A counterfactual variant is also common (12×):

(63) *Oþur monye dispites þei duden him, whuche weore longe to telle.* (PPCME2,

CMEDVERN,255.643)

other many injuries they did him which would.be long to relate

(64) *and yn mony oþer myscheves þat he suffurd , þat wern to long to tell*

(PPCME2, CMMIRK,70.1895)

and in many other misfortunes that he suffered that would.be-PL too long to

relate

Again, adjective or adverb? Note the plural *wern* in (64), which may support an adjectival reading of *long* qualifying *myscheves*, possibly with a semantic development towards 'excessively long-lasting, tedious'.

Even in the modest numbers of my database, then, there is strong evidence of a micro-construction of the general syntactic form

(65) *it (Aux) BE long + clause*

Syntactically it inherits from the *easy-to-please* construction (van der Wurff, 1990) an alternation with raising variants, NP BE *long* + clause, where a full NP corresponds to an argument in the subordinate clause. Semantically it conveys that some act or situation takes or would take a long time, with a pragmatic implicature of tedious or excessive or undesirable length or delay, and a strong association with non-actuality. Counterfactuality and subjectivity together could have led in several *long*-constructions to what may loosely be called the NPI property (see Section 2 for alternative formulations).

It is a micro-step (Traugott & Trousdale, 2013, Vartiainen, 2016) to a different construction, with personal subject NP. This occurs in ME. In my data *long* is complemented by an adverb or PP (5×) or is left bare (2×):

- (66) a. *And as for Balyne, he woll nat be longe frome you.* (PPCME2, CMMALORY,59.1960]
 b. *for he was so long* [i.e. 'so long absent'] (PPCME2, CMKEMPE,118.2711)

The semantics is subtly different from that of (65), insofar as the construction topicalises a *person* who is absent or occupied with a task for a long time.

From ME it is common to find intransitive verbs other than *be* with an inanimate subject and AdvP headed by *long*. For example, the verb *last* is immediately followed by *long(er/est)* well over a hundred times in *OED* quotations and probably more still in *MED*, one of the earliest examples being

- (67) *dusi luue ne last noȝt longe.* (c1275(?a1216) Owl & N.(Clg A.9))
 dizzy love NEG lasts not long
 'Foolish love does not last long'

This is unsurprising; it is compositional and evidently productive. What will be significant for us is that the grammatical function of the *long*-phrase is unclear. It can be regarded as inheriting its semantics from the time adjunct construction, but it resembles a complement in being near-obligatory.

Now at last we can turn to the most striking use of temporal *long*, as complement of normally transitive verbs, especially *take*. The earliest examples of possibly transitive verbs + *long* in the *OED* with inanimate (theme) subject come from the late 17th or 18th centuries, apart from one 'isolated early example' of *need* + *long* in late ME, (68):

- (68) *Pe member..nedeþ longe or it be souted* (?a1425)
 the member ... needs long before it is healed
- (69) *We should quickly find, that the largest Stock of Humane friendship would be too little for us to spend long upon.* (1694)

Example (69) is the earliest *OED* example with a human subject. There are a number of sources.

Compare *cost* in its usual sense of 'necessitate the expenditure of' with *much* or *more*:

(70) *It coste me moche more.* (c1400(c1378), *MED, PPl.B* (LdMisc 581) 13.383)

(71) *His bath costs much; his riding house costs more.* (1647, *OED*)

In PDE *much* is an NPI and closer to an AdvP of extent than a NP object in its semantics and its resistance to passivisation. *Cost* may occur with 'dative of interest'. All of this resembles complementation of a low-transitivity verb by *long*, especially when the subject is inanimate. Another analogue is *cost somebody dear*, found from the fourteenth century (*OED* s.v. *cost* v. 2b), where even Huddleston & Pullum (2002, p. 313) concede that 'the syntactic analysis of *dear* is unclear'. What this suggests is the development of a construction with the syntax of (72):

(72) $NP_{inanim} V_{trans} (NP_{anim}) XP_{amount}$

In this formula, V_{trans} is shorthand for a verb that generally takes a direct object, while XP_{amount} is shorthand for an obligatory but adjunct-like phrase with decategorialised head. Construction (72) inherits properties from both the general transitive and (especially in semantics) intransitive constructions.

For the type with animate subject we would have

(73) $NP_{anim} V_{trans} XP_{amount}$

Common exemplars of both (72) and (73) will involve the verb *take*.

Before its use with *long*, *take* could show low transitivity, especially in certain verb-complement idioms. In some of them *take* is a light verb, with lexical content mainly in the

'object' NP (*take a nap* a1425 (?a1400)- in *OED*, *take a bath* 1602-, *take a swim* 1764- , etc.); see Nunberg, Sag & Wasow (1994), Brinton & Traugott (2005, pp. 130-2). From the mid-fifteenth century (mid-eighteenth in fully modern meaning), English has had the idiom *take place*, in which decategorialised *place* cannot be promoted to passive subject. Another analogue is *take much to*, which appears in *OED* quotations from 1839 (s.v. *wet* v.), from 1833 in COHA. Cf. also *take much*, not specifically in *OED*, also an NPI. Idioms like *take + lame/sick/ill* are recorded from 1674 (*OED* s.v. *take* v., 4c). All such idioms can be regarded as micro-constructions dependent on more abstract constructions, both agentive and non-agentive.

The dictionary gives generous space to temporal *take* (s.v., v. 67a):

To use or spend (a specified amount of time) in an action, process, or activity; to require or allocate (a specified amount of time) (*to* do something). Also with direct and indirect object. Frequently with *it* as anticipatory subject and clause as complement.

The sense is exemplified from the late fourteenth or early fifteenth centuries, always with NP object (or perhaps extent adverbial), and indiscriminately with inanimate and animate subjects. As it happens, the earliest quotation has an animate subject, the second, not much later, a clausal one.

With all these analogical patterns, constructions and components to predispose the development, it is not surprising that temporal *take* is extended to complementation by *long*. My earliest probable example so far of *take long* is (74), while (77) is an early example of *take long* with human subject:

- (74) *These tricks take not long, especially with discreet persons, among which the best way to seem chaste is to be so.* (1656, EEBO)
- (75) *How long will it take to be full in this case?* (1763, OED)
- (76) *My son..hastened us to our toilets. Mine did not take long.* (1783, OED)
- (77) *yea, I wish Slougher and Bayard all such friends, who will not take long to ruin him* (1827, COHA)

No doubt earlier examples will turn up. The data are not at present available to test whether the construction shows any early predominance of examples where the object position of *long* is non-salient; cf. the discussion of the Danish (40) and (42) types in Section 3 above.

As we have seen, *take long* seems to appear near the end of the early ModE period. The Danish data would suggest that *tage længe* entered the language earlier with inanimate than with human subjects. If English developed in the same way, it would make sense that *take long* be extended to human subjects, both because *take* is so often associated with agent subjects, and because *take* was already so used with NP objects in sense 67a (definition quoted above).

The *OED* notes several senses where *long* idioms connote excessive or wearisome duration, e.g. s.v. *long* adj.¹ 1 and n. 8, or the now-regional *think long* (s.v. *think* v.2, 13b). That does not apply to all our patterns and examples, but pragmatically, they often have an almost presentative implicature: *being long* or *taking long* implies that at the end of the activity or absence, a (usually desired) person or result could (have) become available, a sort of resolution. Note too that the other anomalous construction with decategorialised *long*, namely use after prepositions, has been largely whittled down to *before long* and *for long*.¹⁹ These too share the pragmatic implicature of resolution. When both the pragmatics and the

morphosyntax are not predictable from the individual words, the merits of a constructional analysis come to the fore.

6 Closing remarks

It is unclear to me how valid it is to use Danish data from the late twentieth century and early twenty-first to corroborate earlier English developments. Although the languages are cognate and the parallels are suggestive, there is no guarantee that the languages should follow the same path. The greater morphological specificity of Danish *lang/længe* is indeed a useful diagnostic for Danish, but it is conceivable that the very morphosyntactic vagueness of English *long* would have allowed the grammar of English to take a different course.

Could it even be that current change in Danish is in some measure a contact phenomenon resulting from widespread knowledge of English in Denmark? If the possibility is not dismissed out of hand, the question could perhaps be answered by a sociolinguistic investigation of the acceptability of *tage + længe* patterns in relation to knowledge of English. In any event, more work on Danish *længe* would be welcome, including the time-depth of apparently parallel constructions (and in Swedish too).

Mareike Keller notes too that a project on code-switching in elderly, long-resident German immigrants to the USA throws up several mixed examples like the following (pers. comm. 14 Jun. 2016):

(78) *Wenn mer dann schon so müd' is' un' den ganzen Tag auf die Beine und dann nimmt's no' so lang.* (1999-2005, SKDE)

if one then already so tired is and the whole day on your feet and then takes it on-top-of-it-all [*noch*] so long

Lang nehmen 'take long' is not possible in German. However, some varieties of German do show patterns rather similar to the English data under discussion (e.g. *Es braucht nicht lang(e)* 'It doesn't need long') (Keller, pers. comm. 5 Feb. 2016), which suggests that other Germanic languages ought to be systematically followed up in future work.

The English *long* material seems to demonstrate partial recategorisation or even (in the case of *take long*) decategorialisation. The transitions are not clear-cut. I take ambiguity to involve alternative analyses, with addressee/hearer and perhaps linguist unsure which reading was intended by speaker/writer. Vagueness, on the other hand, is where the analysis is underdetermined. I have argued elsewhere that ambiguity plays relatively little part in the causation of linguistic change, though it may be a consequence, whereas vagueness often makes change possible (Denison 2017). It is vagueness of word class and decategorialisation that we have seen in certain uses of *long*. It is not really helpful to try to pin down the word class at every stage, but if a single label is insisted on for the controversial cases, adverb comes closest.

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ECCO = Eighteenth Century Collections Online. Available online at <http://find.galegroup.com/ecco/>.

EEBO = Early English Books Online. Available online at <http://eebo.chadwyck.com/home>.

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¹ I am grateful for helpful comments from audiences at SHES (Manchester) in May 2014, especially Sten Vikner, and at ICCG8 (Osnabrück) in September 2014, and from Nigel Vincent, Mareike Keller and two anonymous referees. (For Danish and Swedish material see notes 11 and 16.) I thank them all, but they are not to be blamed for the outcome.

² The oddness of patterns (1)-(4) was brought to my attention as a result of a consultancy request in 2014 from Matthew Bladen of the *Oxford English Dictionary (OED)*, when a proposed revision of the entries for *long* had raised queries about appropriate word class assignment; traditional part-of-speech labels are expected in the format of *OED* entries. In June 2016 *long* was updated in the online dictionary, seemingly in line with my suggestions.

³ I used the CorpusSearch 2 program (Randall 2005-2007) with search parameters node: IP*, query: AD* iDoms lang*|leng*|long*|lonk*|lagn*|lung*|loug*|lan|leong*|+ang*|ling*|legger*. In addition, a regex search of the tagged POS files picked up 17 examples in PPCME2 missed by using Corpus Search 2 with that node. Thanks to George Walkden and especially Paul Johnston for a web interface to CorpusSearch 2, in turn based on Web Query by Pablo Faria for the Tycho Brahe Project (<http://galileo.rice.edu/sci/brahe.html>), and to Ann Taylor for search tips.

⁴ In fact there are 14 occurrences tagged as adverb in PPCME2 (*longe* 8×, *lange* 1×, *lengre/lengyr* 2×, *longstreijt/long-streyt/longstreit* 3×) alongside the 735 instances tagged as adjective.

⁵ If the empty nominal head in (6) is regarded as an abstract placeholder noun with the general meaning of time, then the Penn parsing neatly captures the parallel between an empty nominal head on the one hand and an overt lexical noun, *time*, on the other.

⁶ Huddleston & Pullum (2002, p. 569) confine their discussion of NPI status to adverbial *long* in post-verbal position, to exclude patterns like those in (9) above.

⁷ I am grateful to David Matthews for checking the French and English texts.

⁸ Recall that those two word classes are frequently collapsed by Huddleston & Pullum (2002), even though no ruling on the word class of *long* in *all night long* appears to be offered in that grammar.

⁹ My concern is not with real nouns such as *long* 'long note; a dash in Morse code; etc.' (s.v. , adj.¹ and n.¹, B.1-6). Those are routine conversions by ellipsis:

(i) *A buzzer sounded..two longs, two shorts, another long.* (1973, sense B.2b)

¹⁰ Note, however, the interesting existential pattern

(i) *There may not be long to wait.* (BNC, K59 4670)

The constituent after *be* in most existentials with dummy *there* is an NP that is 'logical subject'. There is no non-existential equivalent in this case, so we cannot be sure that *long (to wait)* is nominal.

¹¹ I owe this information to Sten Vikner, in comments at SHES and follow-up emails. I am grateful for additional native speaker judgements from Maj-Britt Mosegaard Hansen (who does not believe the Danish usage to be particularly recent), Merethe Sorensen, Sarah Vincent and an anonymous referee.

¹² The Danish equivalent of BNC and COCA, freely accessible online.

¹³ This is the native unlauded adverbial form, but Ger. *Länge* n. may possibly be a secondary source.

¹⁴ On the longer-term chronology, an anonymous referee notes that *vare + længe* occurs in the poetry of Anders Arrebo (1587-1637) and is cited in Matthias Moth's dictionary (published 1697-1719), whereas *tage + længe* and *bruge + længe* seem to be much more recent, not being attested in *Ordbog over det Danske Sprog* (<http://ordnet.dk/ods>).

¹⁵ Vikner searched with Google for two likely sample patterns with the site restriction "site.dk":

(i) *Det har taget længe*

it has taken long-ADV

(ii) *Jeg har brugt længe på*

I have used/spent long-ADV on

In (ii) 'på "on"' is necessary to avoid the great number of extraction structures like "a toothpaste that I have used ___ a long time" (pers. comm. 2 Jul. 2015). He found about 20 valid examples of (i) as against 340 with *lang tid* instead of *længe*, and about 15 of (ii) as against 240 with *lang tid*.

¹⁶ The obvious translation of *for a long time* in Danish is *i lang tid* with the preposition *i* (over 1000× in KorpusDK according to Vikner), but there is no *i længe*.

A referee points out that in Swedish, *länge* can sometimes be used with preposition *på* 'on', in other cases with no preposition, e.g.

(i) *De har inte varit där på länge*

they have not been there on long [i.e. in a long time]

(ii) *De stannade inte länge*

they stayed not long

I thank Kersti Börjars for guidance on Swedish.

¹⁷ The same lists with the addition of words that didn't survive beyond OE can be found in Kay et al. (2015). See also Quirk et al. (1985, pp. 529ff.) for PDE.

¹⁸ But cf. *for ever*, appearing in the 13th century as a synonym of plain *ever* 'eternally' (*OED* s.v. *ever* adv. 5b).

¹⁹ The only prepositions governing *long/-er/-est* in BNC (ignoring premodification structures like *for much too long*, etc.) are *for* 1049×, *before* 340×, *ere* 2×, and the arguably different *from long ago* 12×.