A Short Note on English *long* and the Why of Negative Polarity

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1. Introduction

   English *long* shows polarity behavior in:\(^1\)
   (1) Have you been waiting long?
   (2) Fortunately, we haven’t been waiting long.
   (3) *Unfortunately, we’ve been waiting long.

   Examples (1) and (2) seem interpretively indistinguishable from:
   (4) Have you been waiting a long time?
   (5) Fortunately, we haven’t been waiting a long time.

   Yet *a long time* does not show the polarity behavior that *long* does:
   (6) *Unfortunately, we’ve been waiting a long time.

   The question is, why do *long* and *a long time* differ in this way? Merely saying that *long*,
   but not *a long time*, is a polarity item would not answer the question.

   Relevant is the fact that adding a degree word to *long* in (3) yields an acceptable
   sentence:
   (7) *Unfortunately, we’ve been waiting too long.
   (8) *Unfortunately, we’ve been waiting so long that we’ve decided to leave.
   (9) *Unfortunately, we’ve been waiting as long as we can stand it.
   (10) *Unfortunately, we’ve been waiting long enough.

   Let us informally call *long* in (1)-(3) ‘bare’. Then the generalization spanning (3)-(10)
   might initially be stated as follows:
   (11) Bare *long* is impossible in the context *we’ve been waiting...*

   Yet *long* in (1) and (2) looks as bare as it does in (3).

   Evidently the negation *n’t* in (2) (and some comparable silent yes-no element in (1))\(^2\)
   must be having the effect that *long* in (2) does not count as bare for (11). But before
   getting further into the question of negation, let us ask why bareness should matter in
   the first place. Put another way, why should *long* in (3) differ sharply in behavior from
   the synonymous *a long time* in (6), as well as from degree-modified *long* in (7)-(10)?

2. Proposal

   The answer I would like to propose rests in part on the idea that the language faculty
   readily allows (when licensing conditions are met) the existence of antecedentless silent

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\(^1\)Cf. Pullum and Huddleston (2002a, 827).

\(^2\)I won’t be pursuing this silent element in this paper (nor more general questions
   concerning non-negative polarity), nor the silent element that must be present in *before
   long* (vs. *after long*). Nor will I pursue the status of wh-questions, which on the whole
   seem not to license bare *long*, e.g.:
   i) *Why have you been waiting long?*
   ii) *Now I know who’s been waiting long.*
nouns, as argued for in a variety of cases in Kayne (2005).\textsuperscript{3} Close to the current discussion is the specific proposal made in Kayne (2003, sect. 4) concerning:

(12) They'll be there in two hours.
(13) They'll be there in two hours' time.
where it is immediately plausible to take (12) to contain an instance of silent TIME (I will use capitals to indicate silence), parallel to the overt \textit{time} seen in (13). Similarly in Kayne (2016, (57)), I suggested, on the basis of:

(14) ?They'll leave at the soonest time possible.

in which \textit{soon} cooccurs with overt \textit{time}, that there is again an instance of silent TIME in:

(15) They'll leave soon.

In this light, what I have been calling bare \textit{long} should be understood to be an instance of overt \textit{long} associated with silent TIME, i.e. (2) is to be understood as:\textsuperscript{4}

(16) we haven't been waiting \textit{A long TIME} with in addition a silent indefinite article.\textsuperscript{5} TIME in (16) provides a key component of the interpretation. In addition, since silent elements, even those without antecedents, as in this case, must arguably always be licensed, the presence of TIME in (16) will turn out to give us a handle on why \textit{long} in (3) differs from \textit{a long time} in (6), the idea now being that whatever licensing requirement TIME is failing to meet in (3), that requirement is irrelevant to (6), since in (6) \textit{time} is overt.

If we now compare bare \textit{long} in (3) with degree-modified \textit{long} in (7)-(10), it seems natural to say that TIME in (7)-(10) is being (indirectly) licensed by the degree word itself (\textit{too, so, as, enough}). In (3), there is no degree word and TIME remains unlicensed, with the result that (3) is unacceptable.

3. Licensing
The question arises as to why a degree word in combination with \textit{long} should allow the licensing of TIME when \textit{long} by itself does not. Let me suggest that there is a link to the fact that English degree words allow adjectives to precede the indefinite article.\textsuperscript{6}

(17) You’ve spent \textit{too long a time} on that project.
(18) *You’ve spent \textit{long a time} on that project.

Let us take as our expository example (7), repeated here:

\begin{itemize}
\item[(i)] *We have(n’t) been waiting \textit{(too) short}.
\item[(ii)] We’ll be there \textit{shortly/*longly}.
\end{itemize}

for reasons that remain to be explored. (French allows \textit{longuement}, in the approximate sense of \textit{at length}.)

\textsuperscript{3}See the entry \textit{silence} in the Index.
\textsuperscript{4}It remains to be understood why the following is impossible:

\begin{itemize}
\item[(i)] *We have(n’t) been waiting \textit{(too) short}.
\end{itemize}

i.e. why TIME cannot be licensed in the context of \textit{short} the way it can be with \textit{long}.

Conversely, we have:

\begin{itemize}
\item[(ii)] We’ll be there \textit{shortly/*longly}.
\end{itemize}

\textsuperscript{5}Since \textit{time} in \textit{a long time} seems like a mass noun, there may also be present a silent \textit{STRETCH}, as in ‘a long \textit{STRETCH OF time}’, but this won’t play any role in what follows.

\textsuperscript{6}This is clearly the case for \textit{too, so, as, how}. In my English, pre-indefinite article position is marginal with \textit{enough} (cf. Bresnan (1973, 288)), but improves if (colloquial) \textit{of} is added:

\begin{itemize}
\item[(i)] I think you’ve spent \textit{long enough ?(of) a time} on that project.
Unfortunately, we’ve been waiting too long. The idea would be that *too long* in (19) is:

(20) too long A TIME

with *too long* preceding the silent indefinite article in the same way that *too long* precedes the overt indefinite article in (17), and with that position for *too long* a necessary component of the licensing of TIME.

In contrast to (19), (3), repeated here, is not possible:

(21) *Unfortunately, we’ve been waiting long.

for a combination of reasons. If we try to take bare *long* in (21) to be:

(22) *long A TIME

we run into the violation seen in (18). On the other hand, if we try to take bare *long* in (21) to be:

(23) *A long TIME

we run afoul of:

(24) A post-indefinite article adjective blocks the licensing of TIME.

The proposal in (24) has wider effects than just helping to exclude (21). It also allows a tie-in to the following triad:

(25) We haven’t been waiting a long time.
(26) We haven’t been waiting long.
(27) *We haven’t been waiting a long time.

In effect, (24) simultaneously rules out (27) and participates in the ruling out of (21).

As for the question of why (24) should hold, there might be a link to a proposal set out in Kayne (2006), which took all silent elements (or at least the antecedentless ones like the TIME under consideration) to become silent by virtue of moving into a position that would be overlooked by Spellout. In the case of TIME here, that position would be Spec,DP. If so, then it might be that a post-indefinite article adjective like *long* would interfere with TIME moving up to Spec,DP.

From this perspective, the next question is, why does pre-indefinite article *too long* in (19)/(20) not block the movement of TIME up to Spec,DP. A possible answer is that the raising of *too long* past the indefinite article pied-pipes TIME, in such a way that (20) should be recast as:

(28) TIME too long A...

in which case *too long* would not be expected to block further raising of TIME to Spec,DP.

Differently from the case of *too long, so long, as long,* (my) English does not allow *very long* in non-polarity contexts:

(29) Fortunately, we haven’t been waiting very long.
(30) *Unfortunately, we’ve been waiting very long.
(31) Unfortunately, we’ve been waiting a very long time.

The deviance of (30) is now expected, given (cf. Borroff (2006, 515)) and Troseth (2009, 38, 45)):

(32) *We’ve been waiting very long a time.

where we see that *very long a time contrasts with too/so/as long a time.

English does, on the other hand, allow:

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Combined with the perspective of Troseth (2009, 49), this would amount to saying that predicate raising can pied-pipe the subject of that predicate.
(33) We've been waiting longer than you.
with comparative longer combined with TIME in a non-polarity context. The licensing approach just sketched leads us to expect, then, that longer should be able to raise past the indefinite article in the same way as too long et al. To my ear, it can, to some degree, in some cases:

(34) We've been waiting for longer (of) a time than you.

Bresnan (1973, note 10) gives:
(35) *taller a man
(36) no taller a man
attributing the difference between these two to the addition of a Det element. Possibly, (33) contains a silent Det element of some sort that accounts for its being more acceptable than (34).

Superlative longest is also possible with TIME:
(37) Of all the students, you're the one who's been waiting (the) longest.
Since there is no indefinite article here, the question whether longest raises in a way parallel to too long et al. requires a more indirect answer. Evidence that it can raise in a way that facilitates the licensing of TIME comes in part from:8
(38) They're the best of friends.
(39) *They're (the) better of friends (than they used to be).
(40) *They're good of friends.
if the of of (38) corresponds to that of (34).

A different aspect of the licensing of TIME can be seen in:
(41) We haven't been waiting (for) long.
which contrasts with:
(42) We haven't been there in a long time.
(43) *We haven't been there in long.
Bare long is possible with for, but not with in, even with negation. It may well be that in (41), for alternates with FOR, and that for/FOR plays a necessary role in the licensing of TIME, with long. If so, then (44) would have to contain FOR, too:
(44) It won't take us long to finish.

Possibly, the deviance of (43) is relevant to the following challenge. Although bare long displays what we can call polarity behavior, bare soon does not, as mentioned earlier, and repeated here:
(45) We'll leave soon.

despite bare soon arguably cooccurring with TIME, as suggested by:
(46) ?They'll leave at the soonest time possible.

Conceivably, soon is to be understood as:
(47) soon A TIME
If so, then the contrast (given (18)) with:
(48) *long A TIME
would be related to that holding in the following pair:
(49) a long time
(50) *a soon time

8Cf. also the fact that in Persian the only prenominal adjectives are superlatives - Ghomeshi (1996, 145).
4. Back to negation

The degree words that in (7)-(10), repeated here, play a role in the licensing of
TIME, are all adjacent to long:9

(51) Unfortunately, we’ve been waiting too long.
(52) Unfortunately, we’ve been waiting so long that we’ve decided to leave.
(53) Unfortunately, we’ve been waiting as long as we can stand it.
(54) Unfortunately, we’ve been waiting long enough.

In (2) vs. (3), also repeated here, negation plays a key role:

(55) Fortunately, we haven’t been waiting long.
(56) *Unfortunately, we’ve been waiting long.

Yet n’t in (55) is not adjacent to long. Nonetheless, I have been taking (51)-(55) to form
a natural class of sentences in which TIME is properly licensed, in contrast with (56).

The challenge, then, is to understand what negation in (55) has in common with the
degree words of (51)-(54), relative to the licensing of TIME.10 Let me adopt here a
proposal made in passing by Chomsky (1973, 242), to the effect that in sentences like:

(57) I didn’t see many of the pictures.

a rule of not-Movement might have extracted not from within the object DP, and in
much more detail, over a much wider range of cases, in Collins and Postal (2014), in
terms of NEG-raising.

Applied to present concerns, the key claim of the NEG-raising idea is that in (55) the
negation originates within the adverbial phrase containing long. Rather than:

(58) ...n’t been waiting A long TIME

what we start with looks more like:11

(59) ...been waiting [n’t A long TIME]

This is not sufficient, however, since in the previous section I took the position that for
too long, the relevant licensing configuration is (abstracting away from (28)) as in:

9In long enough, long has very likely moved to the left past enough; cf. Jackendoff
(1977, 151), apart from the direction of movement; also Kayne (2006) on a point of
similarity with topicalization.

10Pullum and Huddleston (2002b, 569) note that in a more formal English one can have
sentences like:

i) I had long realized that...

Possibly, these involve ‘long SINCE’.

How exactly the licensing of TIME works in:

i) long ago

ii) as long as

iii) long before/after...

iv) all day long

vi) a longtime friend

remains to be looked into; and the same for Italian a lungo (‘at long’ = ‘at length’);
German bare lange seems to have more options available than English long, in ways
that will need to be made precise.

Also for future work is the question of what exactly is to be said about the relation
between the long of time contexts and the long of distance contexts.

11I abstract away here from (important) differences between n’t and not.

For indirectly relevant discussion of (Swiss) German, see Leu (2015, 121ff.).
(60) too long A TIME
in which long precedes the (here silent) indefinite article. This leads to revising (59) to:
(61) ...been waiting [n’t long A TIME]

Evidence that [n’t long A TIME] is a plausible constituent comes from the following contrast:12
(62) John seems to have become not very good (of) a student.
(63) *John seems to have become very good (of) a student.

Sentences like (62) are acceptable to one extent or another, and clearly better than (63), supporting the idea that (62) contains a phrase not very good in DP-initial position, with not playing a key role in making that possible, given the contrast with non-negative very good.

The visible presence of ‘[not very good] (of) a student’ in (62) then supports the proposed pre-NEG-raising presence of ’[n’t long A TIME]’ in (61)/(55). At the same time, the deviant status of (63), due to the absence of negation, converges with that of (56). In effect, long in (55) vs. (56) needs to be accompanied by negation because without negation (or a degree word) long cannot reach the pre-indefinite article position that’s necessary to license silent TIME.

5. Conclusion.
To think of bare long as a negative polarity item is to miss a generalization. Bare long has no particular need for negation. It just needs something to be present that can carry it along to pre-indefinite article position. Negation is one such something; degree words are another.

Put another way, we now have an answer to the question why bare long and a long time differ in the way they do, with a long time showing no need for negation at all. The reason is that a long time contains no silent TIME in need of licensing. The apparent negative polarity status of bare long is, indirectly, just a side effect of its containing TIME.

6. Appendix. Other negative polarity items
One wonders whether other negative polarity items also owe their status to the presence of some silent element and the associated licensing requirements.13 A good candidate is much, as in:
(64) We don’t go there much anymore.
(65) *We go there much nowadays.

(On silent elements and much, see Kayne (2005).) The following more general conjecture comes next to mind, whose correctness or incorrectness should be determined:
(66) All apparent negative polarity items need negation for the licensing of some silent element(s).

References:

12For relevant discussion, see Borroff (2006) and Troseth (2009).
13On the other hand, silent elements, even of the antecedentless sort, don’t necessarily imply negative polarity behavior, e.g. in He’s ten, It’s five after ten, on which, see Kayne (2003).


