

On Grammaticalization of Prepositions in English: A Comparative and Typological Review

1. Introduction

- All languages are thought to have grammatical devices to encode the relationship among nominal constituents in a sentence, be they structural (such as word order) or morphological (such as inflection) or lexical (such as adpositions).
- Grammaticalization theory has attracted the attention of researchers across languages who investigate the diachronic paths of grammatical forms and their synchronic effects.
- In addition to research on individual grammatical forms, recent contributions from cognitive linguistics, language typology, corpus linguistics, discourse analysis, and related fields helped to better understand how linguistic forms arise, how they interact with other grammatical forms, how they change through space and time, and how they become fossilized or even lost eventually.
- This workshop explores the synchronic manifestations and diachronic emergence of prepositions in English.
- Development of grammatical forms in English has been discussed from early grammaticalization studies, as shown in the literature that contributed to introducing this new synchronic approach (Lehmann 1995[1982], Heine et al. 1991, Hopper and Traugott 2003[1993], among others).
- In addition to edited volumes on English grammaticalization (Rissanen et al. 1997, Fischer et al. 2000, Lindquist & Mair 2004, Lenker & Meurman-Solin 2007, among others), a number of grammaticalization research studies in English has addressed grammaticalization of prepositions, e.g., Chung 2003, Hoffmann 2005, Baik 2005, Rhee 2006, Ahn 2007, Eom 2007, Yae 2008, Yi 2009, Lee 2010, Ahn 2015, Kim 2017, inter alia.

2. English Prepositions: A Historical Overview

2.1 Old English (Mustanoja 1960, Blažek 2001, Weber 2012)

(1) From PIE

<i>æfter</i>	'after'	< PIE <i>*apoter-o/i</i>	Dat, Acc
<i>æt</i>	'at'	< PIE <i>*ad</i>	Dat, Acc
<i>be</i>	'by'	< PIE <i>*ob^{hi}/*b^{hi}</i>	Dat
<i>fora</i>	'for'	< PIE <i>*pr̥rā</i>	Dat, Acc, Inst
<i>in</i>	'in/on'	< PIE <i>*en/*eni/*ni-</i>	Dat, Acc
<i>mid</i>	'with'	< PIE <i>*med^{hi}</i>	Dat, Acc, Inst
<i>of</i>	'of'	< PIE <i>*apo</i>	Dat

<i>ofer</i>	'over'	< PIE <i>*uper(i)/*upér(i)</i>	Dat, Acc
<i>on</i>	'on'	< PIE <i>*an(ō)</i>	Dat, Acc, Inst
<i>to</i>	'to'	< PIE <i>*dē/*dō</i>	Gen, Dat
<i>purh</i>	'through'	< PIE <i>*ter-/*tr-</i>	Gen, Dat, Acc
<i>under</i>	'under'	< PIE <i>*nd^heri</i>	Dat, Acc
<i>ymb</i>	'about/around'	< PIE <i>*amb^hi / *mb^hi</i>	Dat, Acc

(2) From Germanic

<i>ær</i>	'before'	< <i>ēr</i>	Dat
<i>andlang</i>	'along'	< <i>ant+lang</i> 'against+long'	Gen
<i>beforan</i>	'before'	< <i>biforan</i>	Dat, Acc
<i>begeondan</i>	'beyond'	< <i>be+geondan</i> 'by+yonder'	Dat, Acc
<i>behionan</i>	'on this side of'		Dat
<i>behindan</i>	'behind'	< <i>be+hindan</i> 'by+from behind'	Dat
<i>binnan</i>	'within'	< <i>be+innan</i> 'by+within'	Dat, Acc
<i>beneoþan</i>	'beneath'	< <i>be+neoþan</i> 'by+below'	Dat
<i>betweonum</i>	'between'	< <i>be+tweonum</i> 'by+two each'	Dat, Acc
<i>bufan</i>	'above'	< <i>be+ufan</i> 'by+above/over'	Dat
<i>butan</i>	'but'	< <i>be+utan</i> 'by+out'	Dat, Acc
<i>foran</i>	'before'		Dat, Acc
<i>fram</i>	'from'		Dat
<i>geond</i>	'through'		Acc
<i>innan</i>	'in'		Gen, Dat, Acc
<i>neah</i>	'near'		Dat
<i>onbutan</i>	'about'	< <i>on+be+utan</i> 'on+by+outside'	Dat, Acc
<i>onforan</i>	'before'	< <i>on+foran</i> 'on+before'	Acc
<i>ongemang</i>	'among'	< <i>on+genmang</i> 'in+crowd'	Dat, Acc
<i>onuppan</i>	'upon'	< <i>on+uppan</i> 'on+up'	Dat
<i>op</i>	'until'		Dat, Acc
<i>samod</i>	'at'		Dat
<i>toeacan</i>	'beside'	< <i>to+eacan</i> 'to+large'	Dat
<i>toforan</i>	'before'	< <i>to+foran</i> 'to+before'	Dat
<i>togean</i>	'against'	< <i>to+gean</i> 'to+straight'	Dat
<i>toward</i>	'toward'	< <i>to+weard</i> 'to+in the direction of'	Gen, Dat
<i>uppan</i>	'upon'	< <i>up+on</i> 'up+on'	Dat, Acc
<i>wið</i>	'against'		Gen, Dat, Acc

(3) OE Formation

<i>ætforan</i>	'before'	< <i>æt+foran</i> 'at+before'	Dat
<i>gehende</i>	'near'	< <i>ge+hende</i> 'with+hand'	Dat
<i>into</i>	'into'	< <i>in+to</i> 'in+to'	Dat, Acc
<i>ongegn</i>	'against'	< <i>on+gegn</i> 'on+again'	Dat, Acc
<i>ymbutan</i>	'about/around'	< <i>ymb+utan</i> 'about+outside/without'	Dat, Acc

2.2 Middle English

- Some OE forms disappeared (*ætforen*, *baeftan*, *binnan*, *butan*, *ymbutan*, *tomiddes*, *toforen* etc.)
- Some new forms arose (*around*, *beside(s)*, *notwithstanding*, *until*, *upon*, *within*, *without* etc.)
- Some new forms were formed from compounding (*amid*, *amidst*, *biuten*, *inwith*, *unto*, *utwith* etc.)

- Some OE forms disappeared through competition (*mid*, *ymb*, *op* replaced with *wið*, *about*, *till*).

(4) From OE stratum

<i>abuten</i> 'about'	<i>aboven</i> 'above'	<i>ætforen</i> 'before'
<i>aforen</i> 'before'	<i>after</i> 'after'	<i>again</i> 'against'
<i>andlong</i> 'along'	<i>amang</i> 'among'	<i>at</i> 'at'
<i>beforen</i> 'before'	<i>bi</i> 'by'	<i>binethe</i> 'beneath'
<i>betwix</i> 'between'	<i>biȝ eonde</i> 'beyond'	<i>bihinde</i> 'behind'
<i>binnan</i> 'within'	<i>for</i> 'for'	<i>fram</i> 'from'
<i>in</i> 'in'	<i>inne</i> 'within'	<i>into</i> 'into'
<i>mid</i> 'with'	<i>nigh</i> 'near'	<i>of</i> 'of'
<i>on</i> 'on'	<i>over</i> 'over'	<i>sithen</i> 'since'
<i>to</i> 'to'	<i>tofore</i> 'before'	<i>toward</i> 'toward'
<i>through</i> 'through'	<i>under</i> 'under'	<i>up</i> 'up'
<i>upon</i> 'upon'	<i>wið</i> 'against/with'	<i>withinnen</i> 'within'
<i>wiþuten</i> 'without'		

(5) From ME Formation

<i>adown</i> 'adown'	<i>amid</i> 'amidst'	<i>biside</i> 'beside'
<i>forby</i> 'past'	<i>forthwith</i> 'with'	<i>forwith</i> 'before'
<i>forto</i> 'until'	<i>inwith</i> 'within'	<i>noughtwithstondyng</i> 'notwithstanding'
<i>throughout</i> 'throughout'	<i>unto</i> 'unto'	

(6) Foreign Influences

<i>considering</i> (< F)	<i>during</i> (< F)	<i>except</i> (< F)
<i>fra</i> 'from' (< Old Norse)	<i>maugre</i> 'notwithstanding' (< F)	<i>pur</i> 'by' (< F)
<i>til</i> 'till' (< OE & Old Norse)	<i>touching</i> (< F)	<i>until</i> (< Old Norse)

2.3 Modern English

- New complex forms arose (Hoffmann 2005):

(7)

- First group: *by means of*, *by virtue of*, *by way of*, *in place of*, *in spite of*, *in respect of*.
- Second group: *in common with*, *in conjunction with*, *in favour of*, *in need of*, *in relation to*, *in search of*, *on behalf of*, *on top of*, *with regard to*, *with respect to*
- Third group: *by reference to*, *in accordance with*, *in addition to*, *in charge of*, *in connection with*, *in contrast to*, *in excess of*, *in front of*, *in line with*, *in response to*, *in return for*, *in support of*, *in terms of*, *in view of*

3. Inventory of Prepositions in Modern English (Simplex & Complex)

- OED lists about 400 prepositions.
- In MoE, frequently used primary prepositions are about 80 (Rhee 2003)

(8) Prepositions by frequency grouping (freq. based on Johansson & Hofland 1989) (*a la* Rhee 2003: 196)

Group	Members (number)	Frequency Range (actual range)
A	of, in, to, for, with, on, by, at, from, as (10)	Above 2,000 (2805-35324)
B	into, about, after, like, between, over, through, without, under, against (10)	500-2,000 (575-1,658)
C	before, upon, within, among, behind, across, above, since, along, down, until, near, round, beyond, outside, around, off (17)	100-500 (116-488)
D	below, up, except, beside, beneath, past, amongst, till, concerning, owing, opposite, besides, via, onto, toward, unto, alongside, notwithstanding, nearer (19)	10-100 (11-99)
E	amid, considering, aboard, underneath, amidst, pending, out, versus, touching, minus, vis-a-vis, nearest, afore, onward, aside, atop, inward, together, while, ahead, midway, abroad, withstanding, back (24)	Below 10 (0-9)

- (9) 3 domains in case and case-related systems (cf. Lehmann 2004: 1845-1851; Blake 2004, Chs 2 & 3)
- a. **Grammatical case** (= core case; nuclear case; non-local case): typically indicates the role of a syntactic argument in the sentence (Sylak-Glassman et al. 2015: 83).
e.g. nominative, accusative, dative, genitive, absolutive, ergative
 - b. **Local case**: designates the relationship of two entities in terms of relative positions.
e.g. ablative (from), adessive (on), adelative (from), allative (to), delative (off), destinative (to), illative (into), inessive (inside), locative (at, in), mediative (between), perlative (through), postessive (behind), prolative (along), subessive (under), superessive (above), terminative (up to)
 - c. (Non-local) **Case**: marks the general relationship of the argument with respect to the referenced event.
e.g. benefactive (for), comitative (with), directional (to), equative (like), instrumental (with), motivative (by), partitive (of), referentive (about), vocative

(10)

Category	Label	Meaning	Form
case	abessive:	(lack/absence)	<i>without, except for, apart from, but for, other than, save for, excluding, for lack of, for want of</i>
case	approximative	(near)	<i>close to, near, near to</i>
case	associative:	(near)	<i>next to, close to</i>
case	benefactive:	(for)	<i>for</i>
case	caritive	(lack/absence)	<i>without</i>
case	comitative	(accompaniment)	<i>together with, along with, in company with</i>
case	distributive:	(each)	<i>per, each</i>

case	equative:	(like)	<i>as, like</i>
case	instrumental:	(means)	<i>with, by means of</i>
case	motivative:	(cause)	<i>by, because of, due to, on account of, owing to, thanks to, by virtue of, by dint of, by reason of</i>
case	partitive:	(some of x)	<i>of</i>
case	privative:	(lack/absence)	<i>without, except for, apart from, but for, other than, save for</i>
case	proprietary:	(having)	<i>with</i>
case	referentive:	(about)	<i>about, with reference to, with regard to</i>
case	similitive	(similar)	<i>as, like</i>
case	transformative:	(becoming)	<i>as, into</i>
grammatical case	dative:	(direction)	<i>to</i>
grammatical case	genitive:	(possessive)	<i>ø, of</i>
local case	ablative:	(from)	<i>off, from</i>
local case	addirective:	(in the direction of)	<i>to, toward</i>
local case	aditive:	(to)	<i>to, toward</i>
local case	allative:	(to)	<i>onto, to</i>
local case	antessive:	(before)	<i>before, prior to, ahead of, forward of, in front of</i>
local case	apudessive:	(next)	<i>next to</i>
local case	delative:	(off a surface)	<i>off, from, down from</i>
local case	destinative:	(to)	<i>to</i>
local case	directional:	(towards)	<i>towards</i>
local case	elative:	(out of, away from)	<i>out of, away from</i>
local case	essive	(during, while)	<i>during</i>
local case	illative:	(into)	<i>into</i>
local case	inelative:	(out of)	<i>out of</i>
local case	inessive:	(location)	<i>in, at, during, inside of</i>
local case	lative:	(motion to)	<i>to, into, to from via</i>
local case	locative:	(location)	<i>in, on, at, by</i>
local case	mediative:	(between, among, in between)	<i>between, among, in between</i>
local case	perlative:	(through, across)	<i>through, across</i>
local case	postdirective:	(towards)	<i>towards</i>
local case	postrelative:	(from)	<i>from</i>
local case	postessive:	(behind)	<i>behind</i>
local case	prolative:	(by way of, along)	<i>by way of, along</i>
local case	subrelative:	(from below, from under)	<i>from below, from under</i>
local case	subessive:	(below, under)	<i>below, under</i>
local case	sublative:	(to under)	<i>to under</i>
local case	superdirective:	(onto)	<i>onto</i>

local case	superrelative:	(off, from above)	<i>off, from above</i>
local case	superessive:	(above, on, over, on top of)	<i>above, on, over, on top of</i>
local case	superlative:	(over, to above)	<i>over, to above</i>
local case	terminative:	(up to, up until, as far as)	<i>up to, up until, as far as</i>
local case	translative:	(change of state, purpose, across)	<i>into</i>
local case	lateral-general	(along, next to, on the side of)	<i>on the side of</i>
local case	lateral-laevus	(left of, left to)	<i>left of, left to</i>
local case	lateral-dexterum	(right of, right to)	<i>right of, right to</i>
local case	external	(outside, outside of)	<i>outside, outside of</i>
local case		around	<i>around</i>
	topic	(as for, as to)	<i>as for, as to</i>
	comparative	(than, vis-à-vis)	<i>than, vis-à-vis</i>
	dissimilative	(unlike)	<i>unlike</i>
	enumerative	(plus)	<i>plus</i>
	status	(as)	<i>as</i>
	focus	(focus)	<i>nothing but, no less than, as much as</i>
	mirative	(surprise)	<i>even, as much as</i>
	adversative	(in spite of, against, contrary to, in face of, up against)	<i>in spite of, against, contrary to, in face of, up against</i>
	oppositive	(opposite to)	<i>opposite to</i>
	additive	(as well as, in addition to, aside from, further to, together with)	<i>as well as, in addition to, aside from, further to, together with</i>
	consequitive	(according to, following, as per, depending on, in view of)	<i>according to, following, as per, depending on, in view of</i>
	distantive	(far from)	<i>far from</i>
	substitutive	(instead of, on behalf of, in lieu of)	<i>instead of, on behalf of, in lieu of</i>
	conditional	(in case of)	<i>in case of</i>
	consensual	(in favor of)	<i>in favor of</i>
	disregard	(regardless of)	<i>regardless of</i>
		(on board)	<i>on board</i>
			<i>north to</i>
			<i>south to</i>
			<i>in charge of</i>

4. Grammaticalization

- English adpositions are almost entirely prepositions (cf. *notwithstanding, ago, before...*)
- typological influences (Greenberg 1963, Dryer 1980, Hawkins 1983)

4.1 Source Domains & Concepts

- Since grammatical case is closely tied to the grammatical structure, the event-related notions are expected to surface as case, perhaps closely tied to human conceptualization of events (Who did what to whom...?)
- Case (=non-local case), as opposed to local case, tends to mark diverse relationship in general rather than local relations:
 - (i) binary distinctions: presence/absence, proximity/distance, association/dissociation, similarity/dissimilarity, etc.
 - (ii) cognitively salient relational concepts: accompaniment, cause, benefit, etc.
- Local case marks the local/positional relationship between two or more referenced entities.
 - (i) axial relationship such as front-back, top-down, left-right, in-out, etc.
 - (ii) cognitively salient positional concepts: direction, source, path, destination, etc.
- However, it is noteworthy that there are a large number of complex adpositions whose meaning still bears the non-positional or very weakly positional lexical meanings of the participating formants (e.g., *in spite of, contrary to, in face of, up against...*)

4.2 Mechanisms

[Intralexical semantic change]

- *with*: opposition > cooperation (Rhee 2004)
- *against*: straight > repetition > opposition (Rhee 2002c)
- metonymic change
- metaphorical change
- subjectification
- analogy

[Compounding/Univerbation]

- reanalysis (esp. with periphrastic forms)
- combined (periphrastic) forms > single forms
 - OE *be*-derivatives, *a*-derivatives (Rhee 2002a,b, Weber 2012)
 - PNP complex prepositions

(11) PNP forms susceptible to change

- a. Baik 2006:
conceptual extendability (per metaphor, metonymy, etc.)
- b. Eom 2007:
 - (i) with 'relationality' meaning
 - (ii) conceptual centrality
- c. M. Ahn 2009a,b
semantic attraction through analogy

- d. H. Lee 2011
analogy effect and perspective shifting
- e. K. Ahn 2015:
semantic similarity with extant forms/categories

- morphosyntactic compacting (coalescence Haspelmath 2011)
- fusion and loss

[Borrowing/Calquing]

- *during* (< F. *durant*) (Kim 2015)
- *by virtue of* (< F. *par la vertu de*); *in respect of* (< OF *a respieg de* < L)

(12) 1500-1700 from F/L (Hoffmann 2005)

in common with, in conjunction with, in favour of, in relation to, with regard to, with respect to...

5. This Workshop: An Overview

Sunhee Yae discusses the grammaticalization of topic markers in English (*on, about, with reference to, as for, regarding..*). Topic markers have an essential function of establishing a discourse subject between interlocutors. English, however, for its being a subject-oriented language, is largely regarded as a language in which topic markers are not, or very weakly, grammaticalized. This presentation will thus focus on the topic markers to shed a new light in grammaticalization studies.

Kyou-Dong Ahn discusses disjunctive perspective on grammaticalization of English complex prepositions. Grammaticalization of complex prepositions manifests diverse aspects that are theoretically intriguing, and among them is the relationship between the synchronic gradience of complex prepositions and the diachronic gradualness, the disparity of which is often difficult to reconcile. The author argues for the disjunctive perspective on the grammaticalization of complex prepositions for a coherent account of grammaticalization.

Junghye Baik discusses the emergence of the motivative prepositions in English focusing on the complex prepositions *in need of* and *by virtue of*. Since motivative markers signal causal relationship, which is conceptually primitive, they are prominent in adpositional functions across language. Focusing on morphosyntactic derivation, intra-categorial status, and levels of grammaticalization, this presentation traces the historical trajectories of these two motivative prepositions and shows their synchronic functions.

Eunmi Kim discusses the emergence of the paradigm of cause markers from prepositions. Causality, a conceptually prominent notion, is encoded by various forms in English. The author examines cause-encoding prepositions from a panchronic perspective and show how they are grounded in their schematic meanings and semantic networks, and how diverse mechanisms, esp. context-induced reinterpretation, come into play in the development via gradual conceptual transfer.

Hyunsook Lee discusses the grammaticalization of an English preposition derived from a

verb, i.e., *regarding*. English has a number of verb-derived prepositions through gerundival constructions. The preposition *regarding* is among such cases that originated from a gerundival verb constructions. Focusing on the mechanisms (e.g. analogy) and principles (e.g. decategorialization, layering, source determination, specialization, etc.), the author presents an elegant analysis as to how syntactic and semantic changes pushed the form from a verb to a preposition.

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