



ARE ENGLISH PREPOSITIONS GRAMMATICAL OR LEXICAL MORPHEMES?¹

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Introduction

This article will start from the very traditional assumption that it is necessary to classify prepositions in parts of speech, even if, according to D. Gaatone [2001 : 23] “la notion même de ‘préposition’ reste aussi controversée que jamais” or, according to A. Borillo [2001 : 141] “le terme de ‘préposition’ s’applique à des constituants qui diffèrent tant par leur forme que leur mode de fonctionnement ou la spécificité de leur contenu sémantique”. Without completely calling the very existence of this traditional class generally called “grammatical” or “syntactic” into question, We aim to reexamine the notion of grammaticality, as it seems most characteristic of prepositions, which are normally placed into the “grammatical” or “syntactic” category.

We will ask ourselves whether it is possible to classify words such as *of*, *instead of*, *in view of* and *in ignorance of* in examples (1) to (4) in the same category, i.e. the prepositional syntactic class?

- (1) **EEC 1341** What would be the status **of** a new document?
- (2) **A8U 46** **Instead of** focusing on the narrow agenda of Delors the new Europe should be more forward looking.
- (3) **HPN 653** **In view of** the numbers of theses produced by both universities, it seems that the latter hypothesis is the more likely.
- (4) **CBR 1158** Now that we have the means to observe samples of language which must be fairly close to representative samples, the

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clear messages are: a) We are teaching English **in ignorance of** a vast amount of basic fact.

Is it possible to consider the syntactic category of English prepositions as a homogeneous class, or is it better to regard it as a fundamentally heterogeneous class, made up of distinctive elements? Do we not need to posit the existence of a gradient from the more grammatical to the more lexical within the category of English prepositions? Or is it better to posit the existence of a gradient going from the more lexical to the more grammatical, as we will try to demonstrate in this article, especially if we take the evolution of language and the lexicalization process into account?

We will first go back over some definitions of “preposition,” as well as the traditional dichotomy between “simple prepositions” and “complex prepositions,” so as to highlight the fact that this dichotomy is too restrictive, and, therefore, ineffective. We will finally try and shed new light on the criteria necessary for the establishment of the degrees of what we will refer to as “prepositionality” in English.

I. The traditional approach: some basic landmarks and definitions

Traditionally, there are between 8 and 10 parts of speech, that is to say 8 or 10 syntactic classes. We generally distinguish between lexical morphemes and grammatical morphemes:

- **Lexical** morphemes comprise *nouns, verbs, adjectives* and *adverbs*;
- **Grammatical** morphemes include *conjunctions, interjections, determiners* and *prepositions*;
- Linguists sometimes add *locutions* and *pronouns* to these eight parts of speech. However, these are normally placed into a separate category, because locutions and pronouns function as both lexical and grammatical morphemes.

Following the traditional approach, prepositions therefore fall into the category of grammatical morphemes. However, in this article, we would like to revise the traditional approach by examining not only the processes by which prepositions have been generated, but also the functional role they play in discourse.

Let us now take a closer look at some definitions found in the reference books. The term “preposition” is defined as follows in *Dictionnaire de la linguistique* by G. Mounin [1974 (1993): 269]:

Gram. – Ce terme désigne une classe de mots ou de locutions invariables (*à, de, par, pour, sur, à cause de, avant de, etc.*), ou particules, qui ont une fonction grammaticale et qui, comme c'est le cas en latin et en grec, se trouvent en général (dans les langues classiques d'Europe), juste avant le nom ou le syntagme nominal auxquels ils confèrent l'autonomie fonctionnelle. Dans beaucoup d'autres langues, des particules ayant des fonctions grammaticales semblables à celles des propositions (sic) latines, grecques ou françaises se trouvent après le nom ; c'est pourquoi on les appelle postpositions [...]

For Mounin, prepositions are therefore clearly grammatical morphemes. D. Crystal [1980 (1992): 275] shares this point of view for English prepositions in *A Dictionary of Linguistics and Phonetics*:

Preposition A term used in the GRAMMATICAL classification of WORDS, referring to the set of ITEMS which typically precede NOUN PHRASES (often single nouns or PRONOUNS), to form a single CONSTITUENT of STRUCTURE.

J. Dubois *et al.* [1973: 390] confirm the grammatical status of prepositions in their *Dictionnaire de linguistique*:

La *préposition* est un mot invariable qui a pour rôle de relier un constituant de la phrase à un autre constituant ou à la phrase toute entière, en indiquant éventuellement un rapport spatio-temporel. Le mot ou le groupe de mots ainsi reliés sont appelés « régime » ; les prépositions traduisent donc des relations grammaticales et spatio-temporelles.

However, they distinguish between two types of prepositions:

On a distingué des prépositions vides, qui sont de simples outils syntaxiques, et des prépositions pleines, qui, outre l'indication du rapport syntaxique, ont un sens propre.

The definition also then goes on to specify that the term "preposition" is in fact a hypernym for the two following terms: "proper prepositions" and "prepositional locutions". The definition also highlights the close link that binds prepositions and adverbs²:

Il n'existe pas de distinction nette entre l'adverbe et la préposition ; c'est ainsi que des prépositions comme *après, avant, avec, contre, depuis, derrière, devant, entre, hors, outre, etc.* s'emploient souvent comme adverbes avec ellipse du régime : *Il marche devant. Depuis, il n'a cessé d'être malade.*

² See Camille Debras's article for further details.

The tight link that unites prepositions (that supposedly belong to grammatical morphemes) and adverbs (that supposedly belong to lexical morphemes) blurs the distinction between the grammatical and lexical nature of prepositions.

(5) **H98 1690** Now he stood still, his very appearance drawing the people **around** him. (preposition → grammatical)

(6) **ACK 1392** I sat up and looked **around**. (adverb → lexical)

(7) **B3G 236** It also meant that I became much more familiar with the area I lived in and the people **around**. (adverb → lexical)

In *A Glossary of English Grammar*, G. Leech [2006: 90] makes no mention of the grammatical or lexical nature of prepositions, but merely notes that there are two types of prepositions: “simple” and “complex” prepositions:

Preposition A word which typically comes in front of a **noun phrase**, for example *of, in, with* in *of milk, in the building, with all the good intentions I had at the beginning of the year*. [...] In addition, there are quite a few **complex prepositions** which are written as more than one word: *away from, instead of, in front of, by means of* and so on. The meanings of prepositions are very varied, but two important categories are those of place and time relations: *at the airport, in the summer* and so on.

The same dichotomy is to be found in *An Encyclopedic Dictionary of Language and Languages* by D. Crystal [1992 (1994): 312]:

Preposition An item that typically precedes a noun phrase to form a single constituent of structure – a **prepositional phrase** or **prepositional group** – often used as an adverbial. [...] Constructions of the type *in accordance with* are sometimes called **complex prepositions**, because they can be analysed as a sequence of two prepositions surrounding a noun, the whole construction then being used with a following noun phrase: *in accordance with your instructions*.

Let us now examine the two main types of prepositions in order to determine to what extent this distinction is operative.

II. The two main types of prepositions

The two types of prepositions are generally opposed as follows: “simple” vs. “complex” prepositions.

– In French, simple prepositions are usually referred to as **vides** (empty), **faibles** (weak), **zéro** (zero), **légères** (light), **principales** (main), **abstraites** (abstract), **aplaties** (flat), **incolores** (colorless), **vraies** (true), **grammaticales** (grammatical), **casuelles** (case), **fonctionnelles (functional)** prepositions etc. They are part of a closed class, are in limited number, and are generally made up of only one element. In this category prepositions such as *about, above, across, around, as, at, but, by, in, of, on, to*, etc. are found, as exemplified in (8), (9) and (10):

(8) **BM1 778** If none of these options are open to you, then shopping **at** a large supermarket is probably the best solution.

(9) **ACW 1145** His hair had been cut very short but only shaved **around** his ears and towards the back of his neck

(10) **CEY 3215** To her surprise, Gioella laughed and said, “Really, that’s too bad **of** Ludovico”.

– In French, complex prepositions are usually referred to as **pleines** (contentful), **fortes** (strong), **lourdes** (heavy), **secondaires** (secondary), **concrètes** (concrete), **colorées** (colored), **fausses** (fake), **lexicales** (lexical), etc. They are part of an almost open class – or at least a class that is less closed – with more members than simple prepositions. Very often, the characteristics of these prepositions are not clearly defined, which raises doubts as to the true prepositional status of some of them. They are often referred to as “complex” prepositions. In this category, prepositions such as *according to, except for, apart from, instead of, in front of*, etc. are found, as exemplified in (11), (12) and (13):

(11) **BN1 2477** And that first step, **according to** similar smartarses, is the hardest.

(12) **ALS 132** Then there was silence **except for** the lapping of the rising tide.

(13) **ARK 2452** He found himself **in front of** the main station.

Various issues can be raised, and we would like to shed light on some of these questions:

– Do all complex prepositions necessarily have some semantic content?

— Conversely, are all simple prepositions semantically empty?

Regarding complex prepositions, it is noticeable that they are generally made up of simple prepositions and a noun used as a “prop word” (*instead of*, *in favor of*, etc.). The presence of these clearly lexical items and the fact that they retain their lexical meaning (see A. Borillo [2001: 144]) help us detect a relatively strong semantic content in complex prepositions. This enables them to be used as complex prepositions exclusively. Yet, if some simple prepositions are indeed rather “colorless” (just like *of* in (22), which seems to be emblematic of this phenomenon), can we say that simple prepositions such as *under*, *on*, *above*, *between* etc. in (23), (24) and (25) are devoid of all semantic content?

(22) **HLD 2942** The term **of** the Assembly has been routinely extended, most recently in February 1991 for a period of one year.

(23) **AE0 3370** You’ve got terrible shadows **under** your eyes and you’re very pale, my dear.’

(24) **APT 1823** The balcony **above** the main door has figures of miners on either side.

(25) **AM6 930** The balance **between** a game and reality is a delicate one [...]

If the main role of prepositions is indeed a functional one, i.e. a relational and subordinating role³, we think it is inaccurate to say that most simple prepositions are devoid of all semantic content (see D. Gaatone [2001: 26]). According to D. Gaatone, only lexical prepositions (i.e. what he calls “complex prepositions”) are relational words, therefore real prepositions. Other “prepositions” are mere link-words (“joncteurs” in French).⁴ Our intuition is confirmed by the examples below, with a place indication given in (26) and a time indication in (27):

(26) **GUS 927** A week later Dorian Gray was **at** his house in the country, where he had invited Lord Henry and several other friends.

(27) **EC4 441** Concerts start promptly **at** 6pm, tickets £2.50

At introduces the NP *his house in the country* in (5) and *6pm* in (6), thus forming prepositional phrases which complement *be* and *start* respectively. However, the semantic role, though it may be weak, is almost always present, be it the indication of space (28), time (29), cause (30) etc.

³ This role will not be dealt with in this article.

⁴ A “joncteur” is a kind of purely syntactic link-word, without any semantic content, a preposition that is almost empty because of its use rather than because of its meaning.

(28) **ANF 30** I shut him up **in** my cellar with all he needed for painting and a bottle of cognac, and my maid, who was a very pretty girl, served as his model. (spatial indication)

(29) **CE7 924 Within** six months, however, he had left the Party and set out on the road that led to the formation of the British Union of Fascists in 1932. (temporal indication)

(30) **FS3 614** But he must kill him, **because of** his father. (causal indication)

Another more fundamental question has to do with the division of prepositions in two different sub-categories, and more particularly with the absence of a zone between the two sub-categories:

— What does the label “complex preposition” really cover? Is there not a gradation in terms of complexity among prepositions belonging to this subclass?

— If there is no doubt that prepositional locutions such as *in favor of*, *according to*, *in spite of*, *except for* etc. belong to complex prepositions, can we consider more fixed sequences such as *because of*, *into*, *onto* or *instead of* as part of this subclass, or is it preferable to class them in the category of simple prepositions? Or would these prepositions fall in between the two categories? (see the notion of “cline”). Yet, the etymology of these prepositions indicates that they were originally complex prepositions:

(31) **because of** (c.1305, *bi cause* “by cause,” modeled on Fr. *par cause*. Originally a phrase, often followed by a subordinate clause introduced by *that* or *why*).

(32) **instead of** (< OE *in stede of* ‘in place of’).

Even prepositions that we would intuitively identify as simple prepositions are historically made up of several elements, be they lexical or grammatical items. We will not discuss the formation of prepositions in this paper as we would wander too far off our point, but an etymological study carried out on etymonline.com confirms this hypothesis⁵ :

(33) **about** (O.E. *onbutan* “on the outside of,” from *on* “on” + *be* “by” + *utan* “outside,” from *ut* (see [out](#)))

(34) **above** (O.E. *abufan*, from *on* “on” + *bufan* “over,” compound of *be* “by” + *ufan* “over/high,”)

⁵ We will only mention what appeared to us as the most relevant examples, but the reader may find the etymology of simple and complex prepositions in the appendix.

- (35) **after** (O.E. *æfter* "after, next, following in time," from O.E. of "off" (see [apo-](#)) + -ter a comparative suffix),
- (36) **behind** (O.E. *behindan*, from *bi* "by" + *hindan* "from behind" (see [hind](#))),
- (37) **beside** (O.E. *be sidan* "by the side of" (only as two words), from *sidan* dative of [side](#) (q.v.)),
- (38) **between** (O.E. *betweonum*, from *bi-* "by" + *tweonum* dat. pl. of **tweon* "two each" (cf. Goth. *tweih-nai* "two each")),
- (39) **but** (O.E. *butan*, *buton* "unless, without, outside," from W.Gmc. **be-* "by" + **utana* "from without."),
- (40) **near** (O.E. *near* "closer, nearer," comp. of *neah*, *neh* "nigh.").

This calls for a redefinition of the categories that are generally admitted. In the third and last section, we would like to propose a more graduated approach that posits not only the absence of clear-cut boundaries, the gradual passing from one category to another, but also degrees of complexity within the sub-categories themselves. We will thus posit a continuum going from the +/- lexical to the +/- grammatical or functional, because we believe that this approach alone can account for the subtleties and specificities of these language realisations.

III. A gradual analysis of prepositions: from the more lexical to the more grammatical

In the last section, we would like to show that there is a cline going from the more lexical to the more grammatical / functional, which corresponds more or less to a cline going from the most discursive uses to the most lexicalized uses. Following A. Mardale's idea, we posit that while some prepositions are closer to the grammatical / functional end of the cline, others are closer to the lexical end, most of them are found in between.

We regard simple prepositions as originating from complex prepositions that have undergone an advanced grammaticalization process, while complex prepositions are still at an intermediary, incomplete stage of the grammaticalization process. We will define "grammaticalization" as follows, taking up J. Kurylowicz's definition [1965: 69]:

Grammaticalization consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status, e.g. from a derivative formant to an inflectional one.

We would like to first of all remind the reader of the difficulty of classifying some occurrences into a specific category because the boundaries of the categories are not clear-cut. It is therefore expected that we should encounter difficulties in determining the boundaries of the “complex preposition category” for they are – initially at least – perceived as prepositional locutions; and we know that locutions pertain both to the lexical and the grammatical uses. We will also try and show that inside a given category, there are degrees of lexicality or grammaticality (for instance, a complex preposition such as *in front of* is more grammaticalized than *up to*). We will also try and show that prepositions move along the cline going from the more lexical to the more grammatical uses according to the following pattern:

- Non-lexicalized low-frequency complex “prepositions”
- Lexicalized low-frequency prepositions
- Complex prepositions perceived as complex
- Complex prepositions not perceived as complex
- Simple prepositions

We would like to examine which criteria enable us to say that a given morpheme (a preposition in our case) is lexical or grammatical, bearing in mind that morphemes always go from the more lexical to the more grammatical. In other words, we would like to show that items which are intuitively perceived as more prepositional are items that have undergone an advanced grammaticalization process. The 9-criterion classification that we put forward is by no means exhaustive; we have not ranked these criteria according to their importance insofar as it is often a difficult task to determine the prevailing criterion/a at work in the grammaticalization of prepositions. Each of these criteria plays a more or less important role according to the stage of the grammaticalization process reached by a given preposition. That is the reason why we have adopted a multicriteria approach, as exemplified below.

1. The prepositions which are closer to the lexical end of the cline belong to an **open class** (“pas complètement fermée” as S. Oriez would say [2009: 49]), while the prepositions closer to the grammatical end of the cline belong to a **closed class** (these are fairly easy to list), which is evidence of their advanced grammaticalized status.
2. The prepositions closer to the lexical end of the cline are mostly made up of **lexical items** (*in obedience to, in consideration of, in hope for, in search of*)

while the prepositions closer to the grammatical end of the cline are only made up of **grammatical items or elements** whose lexical origin is not – or no longer – perceived⁶. Some prepositions fall between those two categories such as *in spite of*, *in front of* or *in view of*, where the lexical item can only be perceived as such by isolating it from the prepositions around it. Otherwise the whole is seen as a lexicalized unit (see criterion 5).

3. The prepositions closer to the lexical end of the cline have a **fairly precise meaning** (*in contradiction to* >> *in spite of* >> *instead of*) whereas the meaning of the prepositions closer to the grammatical end of the cline is **broader, more vague**. The ambiguous meaning is due to the process of desemanticization, a.k.a. semantic bleaching or attrition, which generates various semantic realisations, as exemplified by the following occurrences with the preposition *in*:

(41) **ARM 148** Harlow, **in** Esse, will also be getting their own indoor mini ramp. (purely spatial)

(42) **AK9 1407** What eventually appeared **in** the manifesto was less dramatic. (not spatial geographically speaking)

(43) **ARS 1287** Getting the cut hay fit to cart or put on tripods may take anything from two days (**in** ideal conditions) to several weeks. (not spatial at all)

(44) **AD0 644** There is absolutely no need, on any diet, to stop mixing protein sources **in** this way. (not spatial at all)

This seems to account for the fact that the prepositions closer to the lexical end of the cline may only belong to a single syntactic class, i.e. prepositions, whereas prepositions closer to the grammatical end of the cline may belong to several syntactic classes as the table below shows:

Prépositions	Adv	Adj	N	V	Conj	Interj.
Of	-	-	-	-	-	-
To	+	-	-	-	-	-
In	+	+	+	-	-	-
For	-	-	-	-	+	-
On	+	+	-	-	-	-

⁶ See the diachronic remarks on simple prepositions in the first part, such as *about* << *abutan*, on the outskirts of.

With	-	-	-	-	-	-
As	+	-	-	-	+	-
At	-	-	-	-	-	-
By	+	-	+	-	-	-
But	+	-	+	-	+	-
From	-	-	-	-	-	-
Up	+	+	+	+	-	-
Out	+	+	+	+	-	+
About	+	+	-	-	-	-
Into	-	-	-	-	-	-
Like	+	+	+	+	+	-
Over	+	+	-	-	-	-
After	+	+	-	-	+	-
Down	+	+	+	+	-	-
Between	+	-	-	-	-	-
Before	+	-	-	-	+	-

4. **Loss of compositional meaning** is noticeable in prepositions that are closer to the grammatical end of the cline; the elements they are originally made up of are scarcely or never retrievable without carrying out an etymological study, as exemplified by *between*, for which the link with *two* is not perceived synchronically by any native speaker:

(45) **between** (O.E. *betweenum*, from *bi-* "by" + *tweonum* dat. pl. of **tweon* "two each" (cf. Goth. *tweih-nai* "two each"))

A phenomenon of **morphological and semantic opacification** is also to be observed, and it is the loss of compositional meaning that allows for the wide range of meanings of prepositions that are closer to the grammatical end of the cline.

5. Since the constitutive elements of grammaticalized prepositions, that is to say prepositions that are closer to the grammatical end of the cline, are no longer perceptible, distributional properties are blocked. It implies that basic

modifications of the NP become impossible as the tests performed on the complex preposition *with the exception of* suggest, because the following variations are ungrammatical:

(46) *with the exceptions of / *to the exception of / *with \emptyset exception of / *with the exception to, etc.

This phenomenon is known as the *process of decategorialization and automatization* and involves a *syntactic reanalysis* because the sequence is perceived as a single unit and no longer as a compound structure. Another consequence is the impossibility to split up the elements because complex prepositions are viewed as a whole; therefore the elements they are made up of are not seen as separate units:

(47) **ARK 2233** Only an army tank crashing **into** his truck could put it out of action.

but

(47') *Only an army tank crashing **in, of course, to** his truck could put it out of action.

or

(48) **AYP 2104** £40 per day, tax-free, as soon as you're admitted to hospital for a period of **up to** one year.

but

(48') *£40 per day, tax-free, as soon as you're admitted to hospital for a period of **up, of course, to** one year.

Conversely, *except for* seems to be less lexicalized, since the insertion of an element between *except* and *for* remains possible:

(49) **ABS 2126** It's a dictum that largely holds true today, **except, of course, for** the Pucci tie.

Therefore, the insertion of an element in the middle of a more or less lexicalized unit often remains an option in the case of prepositions that are closer to the lexical end of the cline:

(50) **EC3 360** The home currency may appreciate **in \emptyset terms of** one currency and yet depreciate in terms of another.

(51) **ASY 1016** It is difficult to predict the outcome of changes **in the terms of** employment of teachers.

(52) **FAU 1991** These are usually express, i.e. stated **in the terms of** the lease, though covenants may also be implied.

(53) **EEN 54** In other words, they are unified only through ideological constructs ('scripts' **in the terms of** Gagnon and Simon), and it is these that constitute 'sexuality'.

(54) **ASB 1356** Whereas the ordinary person has a choice whether or not to act, the police officer, **in Ø view of** his or her status, has a positive obligation to take action.

(55) **A8N 440** Neville Southall, whose saves had prevented Forest running away with the game in the first half, gathered the ball and started to think about clearing it but **in the view of** the referee, George Tyson, he had thought too long.

(56) **AKD 201** There is no doubt he will be a dominant figure and **in the view of** many he is just what is needed to revive a moribund department.

Therefore, it is a legitimate question to ask whether all *non lexicalized low frequency complex prepositions* that are made up of a PREP + Noun + PREP are real prepositions (i.e. lexicalized, listed in the dictionary) or mere non-lexicalized sequences.

6. A **morphological reduction** a.k.a. **attrition** results from the loss of syntactic autonomy of the elements, which constitute all the prepositions closer to the grammatical end of the cline. Those prepositions, which are very often monosyllabic, are therefore shorter than the prepositions closer to the lexical end of the cline. Consequently, the degree of grammaticalization is expected to be inversely proportional to the morphological length of the preposition.

7. The most grammaticalized prepositions undergo a process of **phonological attrition or erosion** as well. This also results from the loss of syntactic autonomy. The preposition *of* is the most representative of this phenomenon because phonologically, *of* is usually realised as a weak form:

Of strong form θv || Λv $\alpha:v$ (*), weak form $\ə v$ —There is also an informal rapid-speech or nonstandard weak form, used before consonants only, $\ə$. (*Longman Pronunciation Dictionary* de J. Wells).

Of is the only preposition that can be realized as a single phoneme, i.e. a schwa, and it is also the most grammaticalized preposition in English.

8. Lexicalization, and consequently the conventionalization of a preposition, depends on **frequency**, which means that repetition is a necessary condition for a preposition to lexicalize (see Langacker’s concept of *entrenchment*). In order to be grammaticalized, a non-lexicalized preposition has to appear in discourse first, then has to be used by a certain number of speakers. As mentioned by C. Lehmann [1991: 501]:

The formation of new prepositions through the combination of a (mostly relational) noun with either a preposition or a case suffix is one of the most common grammaticalization processes in the world.

Consequently, the prepositions that are closer to the grammatical end of the cline will have a higher frequency of use than prepositions that are closer to the lexical end because they have reached a higher degree of grammaticalization. A study conducted on the BNC and Google reveals that the five most frequently used prepositions in English are monosyllabic and fully grammaticalized. Interestingly, these studies on two different corpora give identical findings⁷.

Prepositions	BNC		Prepositions	Google
Of	3049246		In	25360000000
To	2599205		Of	25360000000
In	1931797		To	25360000000
For	880702		For	25320000000
On	731142		On	25230000000

As for prepositions that are nearer to the lexical end of the cline, Quirk *et al.* in *A Concise Grammar of Contemporary English* [1973: 145] write:

Most [complex prepositions] are in one of the following categories:

[A] ADVERB or PREP + PREP: along with, as for, away from, out of, up to

[B] VERB/ADJECTIVE/CONJUNCTION/etc + PREP: owing to, due to, because of, etc.

[C] PREP + NOUN + PREP: by means of, in comparison with, in front of, etc.

⁷ A more comprehensive list is to be found in the appendix.

In [C], *which is by far the most numerous category*, the noun in some complex prepositions is preceded by a definite or indefinite article.⁸

This implies various degrees of grammaticalization within the very category of prepositions. If the largest category is PREP + Noun + PREP, it means that this category is more open than that of prepositions and thus less grammaticalized. However, prepositions that belong to the category PREP + Noun + PREP, even if there are more members within this category, are far less frequently used than simple prepositions.

9. Finally, prepositions that are close to the lexical end of the cline do not undergo a real process of lexicalization, and therefore opacification, which accounts for the possible variations listed in 5. They pertain to more discursive uses, whereas prepositions that are closer to the grammatical end of the cline pertain to lexicalized uses; these are listed in the dictionary. “Grammatical” or “functional” prepositions may be found in “lexical” prepositions but only as inferior ranking constituents (see the recycling of linguistic material). As A. Borillo [2001: 154] rightly observes:

[L]a diversité que l’on peut relever sur les Prep comp quelles qu’elles soient [...] tient en grande partie au degré de grammaticalisation auquel est arrivée la préposition, dans le parcours qui la fait passer d’un syntagme nominal prépositionnel canonique construit à partir d’un Nli [Prep Det Nli de SN] à un syntagme, souvent condensé, qui a perdu une grande partie de son sémantisme spatial et qui vaut surtout par la valeur fonctionnelle qui est la sienne en tant qu’élément relationnel.

English prepositions are thus part of a heterogeneous category, among which prepositions ranging from the least grammaticalized to the most grammaticalized may be classified. We need to bear in mind that these prepositions have lexical origins, which are more or less retrievable according to the type of prepositions. For example, the prepositional status of low-frequency complex prepositions such as *for recognition of, by contrast to, in search for, at war with* etc. may be questioned: are these real prepositions or merely a preposition + a noun? Moreover, low frequency complex prepositions are perceived as more lexical than high frequency complex prepositions (*outside of, instead of, into* (with an obvious (ortho)graphic fusion)). High frequency complex prepositions are also more lexical than simple prepositions, for which the process of opacification is complete and synonymous with loss of origin, loss of compositional meaning and morpheme boundaries. Even within this very category that is closer to the

⁸ Our emphasis.

grammatical end of the cline, there is a degree going from the most transparent, such as the pair *within*, *without*, or *towards*, to the most grammaticalized, with a higher degree of fusion, like the monosyllabic preposition *but*, which results from the fusion of three morphemes: < O.E. butan, buton "unless, without, outside," from W.Gmc. *be- "by" + *utana "from without".

Conclusion

In conclusion, we would like to remind the reader that it is necessary to qualify the definitions of "preposition" in order to give an accurate picture of the subtleties of the possible linguistic realizations. Rather than opposing lexical and grammatical prepositions at all costs, what matters is to acknowledge that prepositions pertain both to the lexical and to the grammatical. This is certainly the reason why some linguists choose to use the term "semi-lexical", for if lexical means a "certain semantic content" and grammatical "devoid of semantic content", then prepositions, with the noticeable exception of *of*, (which is the most "colorless" of all) partly function as lexical items. However, prepositions also play a functional role, which can justify their classification as grammatical items.

Consequently, rather than two main categories of prepositions (simple and complex, weak and strong etc.), we posit that there are degrees of "prepositionality", from the more lexical to the more grammatical / functional. The traditional dichotomy between grammatical and lexical is thus questioned and has to be reconsidered. The boundary between the two types is sometimes blurred and this is even more blatant in the case of prepositions, wherever lexicalization processes are at work.

Appendix

Simple prepositions

about (O.E. onbutan "on the outside of," from on "on" + be "by" + utan "outside," from ut (see [out](#)))

above (O.E. abufan, from on "on" + bufan "over," compound of be "by" + ufan "over/high,"),

across (c.1300, from Anglo-Fr. an cros "in a crossed position," lit. "on cross."),

after (O.E. æfter "after, next, following in time," from O.E. of "off" (see [apo-](#)) + -ter a comparative suffix),

- against** (early 12c., *agenes* "in opposition to," a southern variant of *agen* "again"),
- along** (O.E. *andlang* "alongside of," from *and-* "opposite, against" (from P.Gmc. **andi-*, **anda-* from PIE **anti* "against," locative singular of **ant-* "front, forehead;" see [ante](#)) + *lang* "long" (see [long](#) (adj.))),
- amid** (late 14c., from *amidde* (c.1200), from O.E. *on middan* "in the middle," from dative singular of *midde* "mid, middle" (see [midde](#))),
- among** (O.E. *on gemang* "in a crowd," from *gemengan* "to mingle" (see [mingle](#)). Collective prefix *ge-* dropped 12c. leaving *onmong*, *among*, *among.*),
- around** (c.1300, from phrase *on round*),
- as** (late 12c., worn-down form of O.E. *alswa* "quite so" (see [also](#))),
- at** (O.E. *æt*, common P.Gmc. (cf. O.N., Goth. *at*, O.Fris. *et*, O.H.G. *az*), from PIE **ad-* "to, near, at" (cf. L. *ad* "to, toward" Skt. *adhi* "near")),
- before** (O.E. *beforan*, from P.Gmc. **bi-* "by" + **forana* "from the front," adv. derivative of **fora* (see [for](#))),
- behind** (O.E. *behindan*, from *bi* "by" + *hindan* "from behind" (see [hind](#))),
- below** (early 14c., *bilough*, from *be-* "by" + *logh*, *lou*, *lowe* "low." Apparently a variant of earlier *a-lowe* (influenced by other advs. in *be-*, cf. [before](#))),
- beneath** (O.E. *be* "by" + *neoðan* "below," originally "from below," from P.Gmc. **niþar* "lower, farther down, down" (see [nether](#))),
- beside** (O.E. *be sidan* "by the side of" (only as two words), from *sidan* dative of [side](#) (q.v.)),
- between** (O.E. *betweenum*, from *bi-* "by" + *tweonum* dat. pl. of **tweon* "two each" (cf. Goth. *tweih-nai* "two each")),
- beyond** (O.E. *begeondan* "from the farther side," from *be* "by" + *geond* "yonder" (prep.), from P.Gmc. **jandana*),
- but** (O.E. *butan*, *buton* "unless, without, outside," from W.Gmc. **be-* "by" + **utana* "from without."),
- by** (O.E. *be* (unstressed) or *bi* (stressed), from P.Gmc. **bi* "around, about" (cf. Du. *bij*, Ger. *bei* "by, at, near"), from **umbi*, (cognate with second element in PIE **ambhi* "around," cf. Skt. *abhi* "toward, to," Gk. *amphi-* "around, about")),

despite (c.1300, from O.Fr. *despit*, from L. *despectus* "a looking down on," from *despicere* (see [despise](#))),

down (O.E. *ofdune* "downwards," from *dune* "from the hill," dat. of *dun* "hill" (see [down](#) (n.2))),

during (late 14c., prp. of obsolete verb *duren* "to last, endure" (late 13c.), from O.Fr. *durer*, from L. *durare* "endure."),

except (late 14c., from L. *exceptus*, pp. of *excipere* "take out," from *ex-* "out" + *capere* "to take" (see [capable](#))),

for (O.E. *for* "for, before, on account of," from P.Gmc. **fura* (cf. O.S. *furi*, Du. *voor* "for, before;" Ger. *für* "for;" Dan. *for* "for," *før* "before;" Goth. *faur* "for," *faura* "before")),

from (O.E. *fram*, originally "forward movement, advancement," evolving into sense of "movement away," from P.Gmc. **fr-* (cf. Goth. *fram* "from, away," O.N. *fra* "from," *fram* "forward"), corresponding to PIE **pr-* (see [pro](#))),

in (O.E. *in* "in," *inne* "within," from P.Gmc. **in* (cf. O.Fris. *in*, Du., Ger., Goth. *in*, O.N. *i*), from PIE **en-/*n* (cf. Gk. *en*, L. *in*, O.Ir. *in*, Welsh *yn-*, O.C.S. *on-*)),

inside (1392, *ynneside* "interior of the body," compound of *inne* (adv.) + *side*),

into (O.E. *into*, originally *in to*),

like ("having the same characteristics or qualities" (as another), M.E. shortening of O.E. *gelic* "like, similar," from P.Gmc. **galikaz* "having the same form," lit. "with a corresponding body" (cf. O.S. *gilik*, O.N. *glikr*, Du. *gelijk*, Ger. *gleich*, Goth. *galeiks* "equally, like"), a compound of **ga-* "with, together" + **likan* "body" (cf. O.E. *lic* "body," Ger. *Leiche* "corpse," Dan. *lig*, Swed. *lik*, Du. *lijk* "body, corpse")),

near (O.E. *near* "closer, nearer," comp. of *neah*, *neh* "nigh."),

of (O.E. *of*, unstressed form of *æf* (prep., adv.) "away, away from," from P.Gmc. **af-* (cf. O.N. *af*, O.Fris. *af*, of "of," Du. *af* "off, down," Ger. *ab* "off, from, down"), from PIE **apo-* "off, away" (see [apo-](#))),

off (by c.1200 as an emphatic form of O.E. *of* (see [of](#)), employed in the adverbial use of that word),

on (O.E. *on*, unstressed variant of *an* "in, on, into," from P.Gmc. (cf. Du. *aan*, Ger. *an*, Goth. *ana* "on, upon"), from PIE base **ano* "on" (cf. Avestan *ana* "on," Gk. *ana* "on, upon," L. *an-*, O.C.S. *na*, Lith. *nuo* "down from"). Also used in O.E. in many places where we would now use *in*.)

onto (1581, as on to, from on + to),

opposite (1391, "placed on the other side of (something)," from O.Fr. *oposite* (13c.), from L. *oppositus*, pp. of *opponere* "set against" (see [opponent](#))),

outside (1505 (n.), "outer side," from [out](#) + [side](#) (q.v.)),

over (O.E. *ofer*, from P.Gmc. **uberi* (cf. O.S. *obar*, O.Fris. *over*, O.N. *yfir*, O.H.G. *ubar*, Ger. *über*, Goth. *ufar* "over, above"), from PIE **uper-* (see [super-](#))),

past (c.1300, "done with, over," from pp. of *passen* "go by" (see [pass](#) (v.))),

round (c.1290, from Anglo-Fr. *rounde*, O.Fr. *roont*, probably originally **redond*, from V.L. **retundus* (cf. Prov. *redon*, Sp. *redondo*, O.It. *ritondo*), from L. *rotundus* "like a wheel, circular, round," related to *rota* "wheel" (see [rotary](#))),

since (c.1450, *synnes*, from *sithenes* "since," from *sithen* (plus adverbial genitive *-es*), from O.E. *siððan* "then, later, after that," originally *sið ðan* "after that," from *sið* "after" + *ðan*, weakened form of *ðam*, dative of *ðæt* (see [that](#))),

through (c.1300, metathesis of O.E. *þurh*, from W.Gmc. **thurkh* (cf. O.S. *thuru*, O.Fris. *thurch*, M.Du. *dore*, Du. *door*, O.H.G. *thuruh*, Ger. *durch*, Goth. *þairh* "through"), from PIE base **tr-* "through" (cf. Skt. *tirah*, Avestan *taro* "through, beyond," L. *trans* "beyond," O.Ir. *tre*, Welsh *tra* "through")),

to (O.E. *to* "in the direction of, for the purpose of, furthermore," from W.Gmc. **to* (cf. O.S., O.Fris. *to*, Du. *too*, O.H.G. *zuo*, Ger. *zu* "to"), from PIE pronomial base **do-* "to, toward, upward" (cf. L. *donec* "as long as," O.C.S. *do* "as far as, to," Gk. suffix *-de* "to, toward," O.Ir. *do*, Lith. *da-*)),

toward(s) (O.E. *toward* "in the direction of," prepositional use of *toward* (adj.) "coming, approaching," from *to* (see [to](#)) + *-ward*, from P.Gmc. **-warth*, from PIE **wert* "turn" (see [-ward](#))),

under (O.E. *under*, from P.Gmc. **under-* (cf. O.Fris. *under*, Du. *onder*, O.H.G. *untar*, Ger. *unter*, O.N. *undir*, Goth. *undar*), from PIE **ndhero-* "lower" (cf. Skt. *adhah* "below;" Avestan *athara-* "lower;" L. *infernus* "lower," *infra* "below")),

underneath (O.E. *underneodan*, from *under* + *neodan* "below" (see [beneath](#))),

unlike (c.1200, "Not resembling," from [un-](#) (1) "not" + [like](#). Cf. O.E. *ungelic*, O.Fris. *unlik*, O.N. *ulikr*, M.Da. *ulige*. Unlikely "not likely to occur" is attested from late 14c. (cf. O.N. *ulikligr*, M.Da. *uligelig*)),

up (O.E. *up*, *uppe*, from P.Gmc. **upp-* "up" (cf. O.Fris. *up*; O.N. *upp*; Dan., Du. *op*; O.H.G. *uf*, Ger. *auf* "up"; Goth. *iup* "up, upward," *uf* "on, upon, under;" OHG *oba*, Ger. *ob* "over, above, on, upon"), from PIE base **upo* "up from below" (cf. Skt. *upa* "near, under, up to, on," Gk. *hypo* "under, below," L. *sub* "under;" see [sub-](#))),

upon (1121, from *up* + *on*, probably influenced by O.N. *upp* a. Distinct from O.E. *uppan* which merely meant "up."),

via (1779, from L. *via* "by way of," ablative form of *via* "way, road, channel, course," of uncertain origin),

with (O.E. *wið* "against, opposite, toward," a shortened form related to *wiðer*, from P.Gmc. **withro-* "against" (cf. O.S. *withar* "against," O.N. *viðr* "against, with, toward, at," M.Du., Du. *weder*, Du. *weer* "again," Goth. *wipra* "against, opposite"), from PIE **wi-tero-*, lit. "more apart," from base **wi-* "separation" (cf. Skt. *vi*, Avestan *vi-* "asunder," Skt. *vitaram* "further, farther," O.C.S. *vutoru* "other, second")),

within (O.E. *wiðinnan*, lit. "against the inside," see [with](#) + [in](#)),

without (O.E. *wiðutan*, lit. "against the outside" (opposite of *within*), see [with](#) + [out](#))

Complex prepositions

according to (late 14c., "agreeing," pp. adj. and adv. from [accord](#) (q.v.). *According to*, lit. "in a manner agreeing with" is attested from mid-15c.),

apart (late 14c., from O.Fr. *à part* "to the side," from L. *ad* "to" + *partem* accusative of *pars* "a side"),

from (O.E. *fram*, originally "forward movement, advancement," evolving into sense of "movement away," from P.Gmc. **fr-* (cf. Goth. *fram* "from, away," O.N. *fra* "from," *fram* "forward"), corresponding to PIE **pr-*),

because of (c.1305, *bi cause* "by cause," modeled on Fr. *par cause*. Originally a phrase, often followed by a subordinate clause introduced by *that* or *why*.)

due to (mid-14c., from O.Fr. *deu*, pp. of *devoir* "to owe," from L. *debere* "to owe" (see [debt](#))),

except for (late 14c., from L. *exceptus*, pp. of *excipere* "take out," from *ex-* "out" + *capere* "to take" (see [capable](#)). Adjectival function led to use as a preposition, conjunction.),

inside of (1392, *ynneside* "interior of the body," compound of *inne* (adv.) + *side*. *inside of*, in ref. to time, is from 1839.),

in front of (c.1290, from O.Fr. *front* "forehead, brow," from L. *frontem* (nom. *frons*) "forehead," perhaps lit. "that which projects," from PIE **bhront-*, from base **bhren-* "to project, stand out."),

in spite of (c.1300, shortened form of *despit* "malice" (see [despite](#)). Corresponding to M.Du. *spijt*, M.L.G. *spyt*, M.Swed. *spit*. Commonly spelled *spight* c.1575-1700. The verb is attested from c.1400. Phrase *in spite of* is recorded from c.1400.),

instead of (< OE *in stede of* 'in place of'),

near to (O.E. *near* "closer, nearer," comp. of *neah*, *neh* "nigh." Influenced by O.N. *naer* "near," it came to be used as a positive form c.1250, and new comp. *nearer* developed 1500s (see [nigh](#)). Originally an adv., but now supplanted in most such senses by *nearly*; it has in turn supplanted correct *nigh* as an adjective.

out of (O.E. *ut*, common Gmc. (cf. O.N., O.Fris., Goth. *ut*, Du. *uit*, Ger. *aus*), from PIE base **ud-* "up, up away" (cf. Skt. *ut* "up, out," *uttarah* "higher, upper, later, northern," Avestan *uz-* "up, out," O.Ir. *ud-* "out," L. *usque* "all the way to, without interruption," Gk. *hysteros* "the latter," Rus. *vy-* "out"),,

outside of (1505 (n.), "outer side," from [out](#) + [side](#) (q.v.). The adj. is attested from 1634; the prep. from 1826; the adv. from 1813.),

owing to (O.E. *agan* (pt. *ahte*) "to have, own," from P.Gmc. **aiganan* "to possess" (cf. O.Fris. *aga*, O.N. *eiga*, O.H.G. *eigan*, Goth. *aigan* "to possess, have"), from PIE **aik-* "to be master of, possess" (cf. Skt. *ise* "he owns," *isah* "owner, lord, ruler;" Avestan *is-* "riches," *isvan-* "well-off, rich"). Sense of "to have to repay" began in late O.E. with the phrase *agan to geldanne* lit. "to own to yield," which was used to translate L. *debere* (earlier in O.E. this would have been *sceal* "shall"); by c.1175 the phrase had been shortened to simply *agan*, and [own](#) (v.) took over this word's original sense. An original Gmc. preterite-present verb (cf. *can*, *dare*, *may*, etc.). New past tense form *owed* arose 15c. to replace *oughte*, which developed into [ought](#) (1).),

such as (O.E. *swylc*, *swilc* from a P.Gmc. compound **swalikaz* "so formed" (cf. O.S. *sulik*, O.N. *slikr*, O.Fris. *selik*, M.Du. *selc*, Du. *zulk*, O.H.G. *sulih*, Ger. *solch*, Goth. *swaleiks*), from *swa* "so" (see [so](#)) + **likan* "form," source of O.E. *gelic* "similar" (see [like](#)),

thanks to (O.E. *þancian* "to give thanks," from P.Gmc. **thankojan* (cf. O.S. *thancon*, O.N. *þakka*, Dan. *takke*, O.Fris. *thankia*, M.Du., Ger. *danken* "to thank"), from **thankoz* "thought, gratitude," from PIE base **tong-* "to think, feel." For sense evolution, cf. related O.E. noun *þanc*, *þonc*, originally "thought," but by c.1000 "good thoughts, gratitude." The whole group is from the same root as [think](#) (q.v.),

up to (O.E. *up*, *uppe*, from P.Gmc. **upp-* "up" (cf. O.Fris. *up*; O.N. *upp*; Dan., Du. *op*; O.H.G. *uf*, Ger. *auf* "up"; Goth. *iup* "up, upward," *uf* "on, upon, under;" OHG *oba*, Ger. *ob* "over, above, on, upon"), from PIE base **upo* "up from below" (cf. Skt. *upa* "near, under, up to, on," Gk. *hypo* "under, below," L. *sub* "under;" see [sub-](#)).

Most frequent prepositions in the BNC and on Google

Prépositions	BNC		Prépositions	Google
Of	3049246		In	25360000000
To	2599205		Of	25360000000
In	1931797		To	25360000000
For	880702		For	25320000000
On	731142		On	25230000000
With	659799		By	24240000000
As	653137		With	16600000000
At	522790		From	16000000000
By	513362		At	15940000000
But	446614		As	15730000000
From	425917		About	13210000000
Up	207709		Up	12730000000
Out	197273		Over	30800000000
About	192000		Out	27500000000

Into	157875		But	2520000000
Like	147873		Like	2250000000
Over	130923		Since	1730000000
After	114007		Out of	1640000000
Down	92285		Off	1530000000
Between	90612		Into	1520000000
Before	85076		After	1490000000
Through	81215		Through	1370000000
Off	67977		Before	1170000000
Under	61002		Under	1170000000
Against	55284		Down	1140000000
Since	49004		Instead of	1010000000
Out of	46889		In front of	925000000
Owing to	46889		Within	923000000
Within	45702		Without	902000000
Without	44806		Between	891000000
During	43530		Around	860000000
Around	43391		During	816000000
Such as	31760		Near	754000000
Round	30821		Below	752000000
Towards	27272		Via	736000000
Above	25179		Such as	690000000
Across	24053		Due to	661000000
Along	23510		Above	582000000
Upon	22802		Outside	551000000
Among	22441		Against	526000000
Behind	22439		Along	433000000
Outside	21106		Upon	426000000
Near	17873		Because of	394000000
Because of	17446		Inside	387000000

According to	15522		Across	377000000
Despite	14359		Among	357000000
Below	14111		According to	342000000
Inside	13623		Behind	310000000
Beyond	11365		Beyond	296000000
Except	10133		Round	296000000
Due to	7702		Except	250000000
As to	7184		In spite of	236000000
Instead of	6985		Beneath	224000000
Apart from	6379		As to	177000000
In front of	6122		Towards	176000000
Onto	6047		Despite	157000000
Opposite	5812		Toward	144000000
Beside	5383		Onto	143000000
Beneath	4779		Thanks to	114000000
Via	4604		Except for	110000000
Unlike	4553		Apart from	99100000
Amongst	4447		Opposite	90000000
In spite of	2696		Unlike	85000000
As for	2450		As for	79600000
Except for	1919		Amongst	47000000
Underneath	1821		Beside	41300000
Toward	1165		Amid	26200000
Amid	1068		Underneath	25400000
Near to	825		Near to	19500000
Amidst	484		Owing to	18000000
Thanks to	387		Amidst	11500000

Criteria of "prepositionality"

+ lexical	+ grammatical
Open class	Closed class
More lexical, hence a more semantic role	More grammatical(ized), hence a more functional role and therefore more specific roles (e.g. verbs governing a given preposition)
Fairly specific meaning	Fairly ill-defined, vague, broad meaning, (see <i>desemanticization, semantic bleaching, semantic attrition</i>)
Perceptibility of the compositional meaning	Loss of the compositional meaning
Morphologically long items	Morphologically short items
Some flexibility in the use of complex prepositions. Therefore, it remains possible to insert elements, hence the possibility to separate or alter the elements.	Distributional properties are blocked, hence impossibility to separate or alter elements. (see <i>process of decategorialization and automatization due to syntactic reanalysis</i> . The structure is perceived as a single unit and not made up of several distinct elements).
Strong forms	Phonological attrition or erosion
Low frequency	High frequency (<i>process of generalization</i>)
+ discursive (no real lexicalization, to be understood as prepositions that are not seen as single units ; Non lexicalized structures, hence possible variations)	+ lexicalized (lexicalization to be understood as prepositions, which come to be seen as single units and for which there are entries in the dictionary)

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