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## GRAMMATICALIZING AFFIXES OF SPATIAL ORIENTATION IN ENGLISH

The study dwells on aspects of the complexity of encoding space in language by focusing on affixes of spatial orientation in English. As a linguistic means of denoting space, prefixation is of higher productivity compared to suffixation in English. The affixes of spatial orientation in English are explored with reference to the process of grammaticalization in view of their origin in prepositions and spatial adverbs. The grammaticalization path of spatial affixes in English is outlined followed by a detailed study of their function with reference to derivation as a type of word formation. The lexical meanings of spatial affixes in English are also analysed, namely general lexical meanings of horizontal and vertical orientation and specific lexical meanings of degree, manner, direction, etc. The grammatical meanings of spatial affixes in English are also analysed mainly with reference to the category of aspectuality, drawing parallels with the aspectual function of adverbial particles of phrasal verbs.

**Keywords:** space, affixation, grammaticalization, lexicalization, word formation, derivation, language change

### 1. Introduction

The aim of the paper is to explore a set of affixes in English, which denote the positioning and orientation of entities, states, events, activities and properties in space as well as spatial relations. The affixes that are in the spotlight of attention throughout the study are mostly grammaticalized prefixes, which in present-day English have corresponding spatial adverbs and prepositions. Such affixes are significant in view of their origin, linguistic development, current functions and word formation properties. They represent a case of grammaticalization of spatial morphemes from linguistic units originally denoting spatial relations. Present-day English spatial prefixes largely correspond to adverbial particles of phrasal verbs, which have mostly aspectual properties but also indicate the spatio-temporal progress of the verbal activity. Through derivation, spatial affixes can function as the building blocks of nouns, verbs, adjectives and adverbs providing spatial modification of the root morpheme. Such affixes denote mainly horizontal or vertical orientation in space, beginning, continuation or termination of an activity or state as well as degree, manner, direction or relation. They encode the cognitive perception of ex-

istence in space, grounded in the spatio-temporal oppositions *back – forth, in – out, on – off, over – under, up – down*. Overall, in view of the origin and lexico-grammatical functions of spatial prefixes in English, they might be considered as a means of encoding spatial and spatio-temporal relations in language. Spatial suffixes existing in English are very few in number denoting mainly manner, direction or relation.

## 2. Stages of Grammaticalization with Reference to Affixation

In the process of language evolution, affixes may derive from notional words with vague lexical meaning, the lexico-grammatical status of which gradually changes from free morphemes into bound morphemes. In such cases lexemes lose their linguistic and structural autonomy and become constituent parts of words. Changes like these are usually preconditioned by the increased frequency of usage of the source notional word, which gradually transforms into affix. Apart from abstract lexical meaning, affixes also have grammatical functions and word formation properties constituting various parts of speech. Spatial affixes function as linguistic means of encoding human conceptualization of spatial relations. In English most spatial prefixes have corresponding spatial adverbs or prepositions, which highlights the grammaticalized status of the prefixes. The linguistic units in English which encode spatial relations are of four main types – prepositions, adverbs, prefixes and adverbial particles. The process of grammaticalization has affected prepositions and adverbs turning them into prefixes and adverbial particles, yet all four types of units encoding spatial relations are functional in English today. However, it is the spatial prefixes denoting mainly directions, location, position or movement that demonstrate a clear case of grammaticalization. Derivatives containing spatial prefixes exhibit various degrees of transparency and compositionality in relation to their lemma structure.

The process of grammaticalization presupposes semantic bleaching, i.e. the weakening of the lexical meaning of a lexeme, triggered by its increased frequency of use. In the course of time such a lexeme can develop structural fixedness and can gradually acquire a grammatical meaning (cf. Haspelmath 1998: 344, Hopper and Traugott 2003: xv, Croft 2006: 366, Bybee 2010: 166, Lehmann 2015: 13). The complex transformation of lexical meaning into grammatical meaning is a gradual process involving various stages and degrees, which reflect the shift in the functionality of a lexical item and its transition into a unit of grammar. Therefore, the unidirectional process of grammaticalization operates mainly within the lexical semantics – grammar continuum. Givón's (1971: 413) statement that "today's morphology is yesterday's syntax" clearly indicates the direction of language change in the process of grammaticalization. Diachronically the following major stages of grammaticalization have been outlined: discourse > syntax > morphology > morpho-phonemics > zero (Givón 1979: 209), content item > grammatical word > clitic > inflectional affix (Hopper and Traugott 2003: 7), free lexical unit > function word > affix > zero (Wischer 2006: 129). On the basis of these points of view the following general scale of grammaticalization can be outlined: **lexical word > grammatical item > affix or clitic > zero**. With each of the following stages, the unit keeps losing its lex-

ical meaning and structural autonomy until ultimately it is no longer functional and drops out of the language system. Therefore, each stage of the scale demonstrates a higher level of grammaticalization compared to the preceding one.

In view of the scale of grammaticalization outlined above, affixes generally originate from notional words, which undergo semantic bleaching and gradually acquire a grammatical function. In the course of time such grammaticalized units lose their structural autonomy turning into bound morphemes and attach to the lexeme they modify functioning as affixes. The grammaticalization of content words into affixes exemplifies various degrees of preservation of the lexical meaning of the source words. As derivational morphemes, prefixes and suffixes have vague lexical meaning but also the most general grammatical meaning of denoting a particular part of speech. Inflections have a purely grammatical function and therefore demonstrate a higher degree of grammaticalization. Actually, inflections are the affixes with the highest degree of grammaticalization in language. Considering the word formation potential of derivational morphemes, they might be involved in the process of lexicalization as well functioning as constituents of newly coined lexical items (cf. Lehrer 1995: 144, Brinton and Traugott 2005: 96). Therefore, as derivational morphemes, prefixes and suffixes exemplify the two major processes of language change – grammaticalization and lexicalization, being grammaticalized units themselves but also functioning as means of coining new lexical items through word formation. The present study focuses mostly on the exploration of English spatial affixes as grammaticalized units originating from prepositions and spatial adverbs. However, since grammaticalization and lexicalization are in constant interaction, the general meanings of the spatial affixes in view of their word formation properties are to be considered as well.

### 3. The Grammaticalization of Spatial Affixes in English

The grammaticalization path of English spatial affixes, most of them prefixes, can be traced back to prepositions and spatial adverbs. All English spatial prefixes have their correlating prepositions, spatial adverbs or both. Some of the spatial prefixes in English also correlate with the particles of phrasal verbs. Diachronically both spatial prefixes and post-verbal particles function as grammaticalized units originating from preposition and spatial adverbs (Brinton 1985: 55–57, Ishikawa 2000, Sipőcz 2005, Josephson 2015, Bratanova 2020: 188). The stated correlation between prepositions, spatial adverbs, spatial prefixes and post-verbal particles in English is presented in Figure 1 below<sup>1</sup>:

<sup>1</sup> The data in Figure 1 is processed by using *Oxford Advanced Learner's Dictionary* 10<sup>th</sup> edition. The spatial affixes discussed in the study are: *back-*, *by-*, *in-*, *off-*, *out-*, *over*, *under-*, *up-*, *-ward(s)*, *-wise*, which are listed in *Oxford Advanced Learner's Dictionary* 10<sup>th</sup> edition and Sheehan (2021). The list of spatial affixes explored in the study has been extended by the addition of *down-*, *forth-*, and *on-* whenever there are grounds to consider them as affixes, namely lack of structural autonomy and semantic transparency, see the functional criterion introduced later on in the section.

	preposition	adverb	prefix	particle
above	✓	✓	×	×
across	✓	✓	×	✓
after	✓	✓	×	×
against	✓	×	×	×
along	✓	✓	×	✓
among	✓	×	×	×
apart	×	✓	×	✓
around	✓	✓	×	✓
at	✓	×	×	×
away	×	✓	×	✓
back	×	✓	✓	✓
before	✓	✓	×	×
behind	✓	✓	×	×
below	✓	✓	×	×

	preposition	adverb	prefix	particle
beneath	✓	✓	×	×
between	✓	✓	×	×
beyond	✓	✓	×	×
by	✓	✓	✓	✓
down	✓	✓	✓	✓
forth	×	✓	✓	✓
in	✓	✓	✓	✓
off	✓	✓	✓	✓
on	✓	✓	✓	✓
out	✓	✓	✓	✓
over	✓	✓	✓	✓
through	✓	✓	×	✓
under	✓	✓	✓	✓
up	✓	✓	✓	✓

*Figure 1. Correlation between prepositions, spatial adverbs, spatial prefixes and particles*

In view of the properties of the linguistic units presented in Figure 1, the following patterns of correlation between prepositions, spatial adverbs, spatial prefixes and post-verbal particles in English can be outlined:

- units functioning as prepositions only – *against*, *among*, and *at*;
- units functioning as prepositions and spatial adverbs – *above*, *after*, *before*, *behind*, *below*, *beneath*, *between* and *beyond*;
- units functioning as spatial adverbs and particles – *apart* and *away*;
- units functioning as prepositions, spatial adverbs and particles – *across*, *along*, *around* and *through*;
- units functioning as spatial adverbs, spatial prefixes and particles – *back* and *forth*;
- units functioning as prepositions, spatial adverbs, spatial prefixes and particles – *by*, *down*, *in*, *off*, *on*, *out*, *over*, *under* and *up*.

As far as spatial prefixes in English are concerned, they correlate mostly with prepositions, spatial adverbs, and adverbial particles or with spatial adverbs and particles. The correlation between prepositions, spatial adverbs and spatial prefixes clearly indicates the grammaticalization of the latter, having lost their structural autonomy and changed formally from free morphemes into bound morphemes. The source prepositions and spatial adverbs listed in Figure 1 are mostly of Germanic origin<sup>2</sup>. In view of the fact that space and time are fundamental concepts in human cognition, predominantly native linguistic units function as means of encoding those concepts in language (Evans 2003, Levinson 2004, Levinson and Wilkins 2006, Carlson 2010, Penakova 2012, Evans 2013). Considering the longer time span needed for the process of grammaticalization to become effective and the fundamental meaning and extensive use of prepositions and spatial adverbs, it is just natural for them to

<sup>2</sup> The etymological resource used in the study is <https://www.etymonline.com>

turn into grammaticalized spatial prefixes and postverbal particles. Spatial prefixes have mostly lexical meanings and word-formation functions, e.g. *outline*, *undergrowth*, *uprising*) while postverbal particles have mostly grammatical meaning and aspectual function, e.g. *eat up*, *turn down*, *put off* (Bratanova 2020). Diachronically in the process of language change from free morphemes to bound morphemes prepositions and spatial adverbs have preserved their lexical meanings to some extent so that synchronically spatial prefixes demonstrate degrees of grammaticalization in language.

The correlation between spatial prefixes and adverbial particles merits special attention because it provides evidence for their common origin in linguistic units denoting position or movement in space. Such correlation is to be found with: *back*, *by*, *down*, *forth*, *in*, *off*, *on*, *out*, *over*, *under*, *up*. Those correlating units demonstrate higher frequency of use denoting:

- directions as in *back* ↔ *forth*, *up* ↔ *down*, *in* ↔ *out*, *over* ↔ *under*
- the *start* → *continuation* → *end point* continuum as in *on* ↔ *off*

Due to the time span needed for those units to grammaticalize, it is not common to find semantic overlap and functional correspondence between spatial prefixes and adverbial particles of the type: *downfall* ↔ *fall down*, *infill* ↔ *fill in*, *inflow* ↔ *flow in*, *input* ↔ *put in*, *intake* ↔ *take in*, *offcut* ↔ *cut off*, *offprint* ↔ *print off*, *offset* ↔ *set off*, *onset* ↔ *set on*, *outbreak* ↔ *break out*, *outburst* ↔ *burst out*, *outcome* ↔ *come out*, *outcry* ↔ *cry out*, *outfit* ↔ *fit out*, *outflow* ↔ *flow out*, *outprint* ↔ *print out*, *outset* ↔ *set out*, etc. Such linguistic pairs show mostly prefixed noun ↔ phrasal verb correlations with related lexical meaning, i.e. the respective spatial prefix and corresponding postverbal particle modify the meaning of the root lexeme in a similar way. In the majority of cases, however, the spatial prefix and the verbal particle correspond semantically and functionally but with reference to various root morphemes. No matter the extent to which they correlate functionally, semantically the prefix and the particle share similar spatial meanings denoting direction, position or the progress of the verbal activity through space and time. The grammatical and semantic functionality of the spatial prefixes and their corresponding adverbial particles should invariably be accounted for with reference to their etymological origin in linguistic units denoting space.

Spatial affixes in English are grammaticalized in the sense that they have lost their structural autonomy and have developed a grammatical (aspectual) meaning designating the stages of progress of the verbal activity. However, spatial affixes in English have a lexical meaning demonstrated in their function of derivational morphemes employed in word formation. In such cases it is common for the derivative to develop lexical meaning of its own and thus become lexicalized. This is just to demonstrate the complexity of the diachronic pathways of grammaticalization and lexicalization and the complex interaction between grammar and vocabulary as their synchronic result. Regarding derivation, the following word-formation patterns of spatial affixes in English can be outlined:

- Pattern A: spatial prefix + nominal root – *backlash, byword, inbox*;
- Pattern B: spatial prefix + verbal root – *backdate, download, outlast*;
- Pattern C: spatial prefix + adjectival root – *outright, overdue, upfront*;
- Pattern D: spatial prefix + adverbial/prepositional root – *forthwith, outwith*;
- Pattern E: nominal root + spatial suffix – *clockwise, landward, windward*;
- Pattern F: adverbial/prepositional root + spatial suffix – *backward, downward, likewise*;
- Pattern G: nouns correlating with phrasal verbs – *downfall, intake, outlook*;
- Pattern H: lexicalized units – *downbeat, downcast, forthright, income, inlay, offbeat, offhand, offline, offprint, off-putting, offspring, online, outlaw, outlay, outlet, outline, output, outside, outskirts, overall, overcome, overlook, overrun, oversee, overshoot, upright, uprush, upsell, upstart, upswell*.

Concerning spatial prefixation, patterns A – C above with nominal, verbal and adjectival root respectively, are transparent, well established and productive in English. With these patterns the prefix has preserved the spatial meaning of the corresponding preposition or spatial adverb to a higher degree but has no structural autonomy and functions only as a bound morpheme. Pattern D is of very limited use, the combination of spatial prefix and adverbial or prepositional root not being common in English. Spatial prefixes in English denote the spatial orientation of the entity, activity or feature denoted by the root. Since adverbs and especially prepositions might share spatial meanings with the prefixes, the combination between such units with reference to derivation is of low semantic probability.

Patterns E – F above demonstrate the derivational functionality of spatial suffixes denoting mainly direction. They attach to nominal roots and designate the direction of or towards the root noun. Spatial suffixes attach also to adverbial or prepositional roots and have mostly emphatic function, the root usually having spatial meaning itself. Pattern G features semantic and structural correlation of the type *verb + adverbial particle* → *spatial prefix + noun*, i.e. the adverbial particle of phrasal verbs corresponds to a spatial prefix with the correlating noun, for example *downturn, onfall, uptake*. This type of correlation can be accounted for with reference to the origin of postverbal particles in spatial adverbs and prepositions (Bratanova 2020: 154–184). There is also a close structural and semantic correlation between phrasal verbs and corresponding nouns of the type: *back up* → *backup*, *break down* → *breakdown*, *break through* → *breakthrough*, *clean up* → *cleanup*, *set up* → *setup*, *shut down* → *shutdown*, *start up* → *startup*, *stop over* → *stopover*, *take away* → *takeaway*, etc. However, the spatial constituents of such nouns, which correspond to postverbal particles, are not listed as suffixes in *Oxford Advanced Learner's Dictionary* 10<sup>th</sup> edition and Sheehan (2021). Therefore, such nouns should be treated as compound lexemes. There are also triplets of the type *downturn – turn down – turndown*, *offcut – cut off – cut-off*, *outbreak – break out – breakout* where the structural and semantic correlation between the two nouns related to the same phrasal verb is of even higher degree of complexity.

The structural and semantic complexity of the analysed lexemes requires the introduction of some **functional criteria to distinguish between derivatives consisting of spatial affixes and root morphemes and compound words consisting of two root morphemes, one of which has a spatial meaning**. In the case of compound words there is semantic transparency since the meaning of the compound clearly results from the meaning of its constituents, as in *afterlife*, *shutdown*, *understate*, etc. In the case of derivatives consisting of a spatial affix and root morpheme, the affix modifies the root in terms of spatial orientation, direction, relation, etc., as in *backfire*, *inbound*, *in-house*, *on-site*, *outbound*, *upkeep*, etc. Apart from semantic transparency, another criterion for considering nouns, structurally corresponding with phrasal verbs as compounds, is the structural autonomy of the particle within the phrasal verb. With nouns resulting from phrasal verbs by conversion the particle functioning as spatial adverb has attached to the root or is hyphenated, for example *breakout*, *chill-out*, *follow-up*, *wrap-up*, etc. Since grammaticalization is largely considered to be a unidirectional and irreversible process and in view also of the scale of grammaticalization outlined in Section 2, it is of low level of probability for a grammaticalized particle to continue its grammaticalization path as suffix. On the contrary, it is the corresponding spatial adverb that becomes constituent in the noun formed from a phrasal verb by conversion. Thus both structure and meaning provide grounds to consider such nouns as compounds rather than as derivatives containing a spatial affix. Special attention merits the new coinage *in-person*, which should also be considered a compound, possibly in the process of grammaticalization, due to the structural and semantic autonomy of the spatial unit. Applying the aforementioned criteria to the triplets listed above, the first noun (*downturn*, *offcut*, *outbreak*) should be considered as a derivative containing a spatial affix while the second noun (*turn-down*, *cut-off*, *breakout*) should rather be considered as compound.

Pattern H is to be found with lexemes containing spatial prefixes, where the derivative has developed a lexical meaning of its own, which cannot be inferred from the meaning of the prefix and the root. Such derivatives demonstrate a case of lexicalization in English. The spatial prefixes have grammaticalized first from the source adverbs or prepositions and then as a second-order change the derivative has also lexicalized and has developed a lexical meaning of its own. With lexicalization the degree of opacity of the lexical meaning of words varies. In some derivatives the lexical meaning is more transparent as in *downbeat*, *downcast*, *online*, *offline*, *offprint*, *outlaw*, *outline*, *overall*, *overcome*, while with others it is less transparent or rather opaque as in *income*, *inlay*, *offbeat*, *offspring*, *outlet*, *output*, *outskirts*, *upright*. The pathway of grammaticalization triggers scalar changes in language but so does lexicalization. Both processes interact in shaping the linguistic expression exemplifying degrees of grammatical and lexical meaning respectively.

#### **4. Lexical Meanings of Spatial Affixes in English**

Having elucidated the formal characteristics of spatial affixes and the major structural patterns of derivatives containing affixes of spatial orientation, the research focus turns towards their most generalized as well as their specific lexical meanings.

#### 4.1 Generalized Spatial Meanings of Horizontal vs. Vertical Orientation

The main spatial coordinates are represented by the adverbial pairs *back* ↔ *forth* and *up* ↔ *down*, which have grammaticalized but preserved their spatial meanings in the correlating prefixes of horizontal orientation *back-*, *forth-* and vertical orientation – *up-*, *down-*. In this case, both adverbs and spatial prefixes denote movement or activity in open spaces. Horizontal orientation and vertical orientation can also be denoted by the adverbial pairs *in* ↔ *out*, *over* ↔ *under* and the correlating grammaticalized prefixes *in-*, *out-* and *over-*, *under-* respectively. However, the orientation of the movement or activity in this case presupposes the existence of a horizontal or vertical partition in space, which might be real or imaginary. So the following specifications are to be considered with reference to horizontal orientation and vertical orientation in space:

- Horizontal orientation, no partition in space exemplified by the prefixes *back-* and *forth-*, as in *backdraught*, *backfill*, *backfire*, *backtrack*, *forthcoming*, *forthgoing*;
- Horizontal orientation with partition in space exemplified by the prefixes *in-* and *out-*, as in *inlay*, *infill*, *inscribe*, *outflow*, *outsource*, *outstretch*;
- Vertical orientation, no partition in space exemplified by the prefixes *up-* and *down-*, as in *uphold*, *uplift*, *uproot*, *upside*, *upskill*, *upwind*, *downgrade*, *downplay*, *downside*, *downsize*;
- Vertical orientation with partition in space exemplified by the prefixes *over-* and *under-*, as in *overcome*, *overflow*, *overthrow*, *overturn*, *undercut*, *undergo*, *undertake*;
- Location, contiguity or spatial proximity exemplified by the prefixes *by-*, *down-* *in-*, *on-* and *up-*, as in *bypass*, *by-product*, *bystander*, *downstairs*, *downtown*, *inbox*, *inland*, *inshore*, *onboard*, *online*, *onshore*, *onstage*, *upland*, *upstairs*.

The grammaticalized affixes listed above are fully functional in denoting the spatial orientation of an activity or movement as well as the location of an entity in space. However, apart from their generalized spatial meanings, English spatial affixes also have specific meanings denoting the manner or direction of an activity in space, the degree or stage of accomplishment of an activity as well as aspectual and causative meanings. These specific meanings of the spatial prefixes in English as well as the prefixes exemplifying each meaning are discussed below.

#### 4.2 Specific Spatial Meanings of Progress Through Space

Some of the affixes of spatial orientation in English have both generalized and specific lexical meanings, i.e. the two types of meanings overlap. The following specific meanings denoting peculiarities of progress through space can be outlined:

- Higher or lower degree of accomplishment of the verbal activity exemplified by the prefixes *out-*, *over-*, *under-*, as in *outbid*, *outdo*, *outgrow*, *outlast*, *outlive*, *outperform*, *outrun*, *outweigh*, *outwit*, *overachieve*, *overbook*, *overcharge*, *overcook*, *overdevelop*, *overdo*, *overeat*, *overestimate*, *overload*, *overwork*, *underachieve*, *underbid*, *undercharge*, *undercook*, *underestimate*, *underpay*, *undersell* ;

- Aspectual meaning denoting completion of the verbal activity exemplified by the prefixes *down-*, *in-*, *off-*, *out-*, *over-*, *up-*, as in *download*, *downgrade*, *downplay*, *inflamm*, *infringe*, *input*, *offload*, *offset*, *offshore*, *outlaw*, *outline*, *outstrip*, *overtake*, *overturn*, *overwrite*, *upanchor*, *update*, *upgrade*, *upload*;
- Coming into state, continuation or termination of state exemplified by the prefixes *on-*, *off-* and *up-*, as in *on-air*, *oncoming*, *ongoing*, *onlooker*, *onrush*, *on-screen*, *off-air*, *off-duty*, *off-line*, *off-road*, *off-sale*, *off-screen*, *off-season*, *offside*, *offstage*, *upcoming*, *uptime*, *upturn*;
- Direction or sequence exemplified by the suffix *-ward(s)*, as in *afterward*, *backward*, *downward*, *eastward*, *forward*, *homeward*, *inward*, *leeward*, *landward*, *onward*, *outward*, *rearward*, *seaward*, *sideward*, *toward*, *upward*, *westward*, *windward*;
- Manner or relation exemplified by the suffix *-wise*, as in *clockwise*, *contrariwise*, *crosswise*, *edgewise*, *endwise*, *lengthwise*, *likewise*, *otherwise*, *stepwise*, *worldly-wise*.

Both the general and the specific meanings of spatial affixes in English largely correlate with the prepositions and spatial adverbs from which these affixes have originated through the process of grammaticalization. Apart from spatial and closely related aspectual meanings, prefixes of spatial orientation also demonstrate causative meanings, as a result of which the derived prefixed verbs function as lexical causatives such as *downsize*, *inflamm*, *offload*, *outsmart*, *overstate*, *undercut*, *uplift*, etc. Regarding the very few spatial suffixes in English, they also function as grammaticalized units but have a rather limited use compared to the functionality and wide variety of meanings that spatial prefixes in English demonstrate.

### 5. Conclusion

The analysis of affixes of spatial orientation in English with reference to grammaticalization shows complex interaction between prepositions, spatial adverbs, spatial prefixes and postverbal particles with mainly aspectual functions. The grammaticalization of prefixes of spatial orientation in English follows the general grammaticalization path in language. The analysis of spatial prefixation in English with reference to word formation shows major patterns of derivation. Some of the derivatives containing spatial prefixes have also developed lexical meanings of their own. In such cases the grammaticalization of the spatial prefix is further complemented by the subsequent lexicalization of the derivative itself. The study of the lexical meanings of spatial affixes in English shows that they demonstrate both general and specific spatial meanings. The general meanings have to do mostly with the horizontal and vertical orientation in space while the specific meanings are associated mostly with the additional shades of meaning characteristic of progress through space. Semantically spatial prefixes in English mostly shape the meaning of the root morpheme providing information on the spatial orientation of the referent without morphologically modifying the part of speech of the derivative.

The general conclusion of the study is that regarding their functionality, spatial affixes in English are located along the lexico-grammatical continuum and exhibit a case of the constant interaction between vocabulary and grammar. Their lexical meanings designate the complexity of encoding location, position or movement through space while their grammatical meanings designate mostly the complexity of the verbal category of aspectuality related to the progress of the activity through space. As a whole, the findings in the study provide reasonable grounds to consider the analysed English affixes as a type of linguistic units employed to encode space in language.

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