Prepositions belong to the class of function words that play an important role in linking content words within a phrase. In Modern English that has no developed system of inflections to indicate the nature of semantic relationships between content words prepositions play a major role in performing the requisite semantic function. As noted by some researchers (see, for instance, [3, P. 200], [1, P. 259 — 260], [2, P. 122 – 123], [6, P. 116]), in specifying the relationships between content words prepositions play a major role in performing the requisite semantic function. In particular, it is shown that the choice of one preposition over another one within a phrase is motivated, on the one hand, by mental construal of entities and/or phenomena designated by content words and, on the other hand, by cognitive operations performed by a conceptualizer in bringing the two construals together in building up a phrase. Since the processes of mental construal and cognitive operations are predetermined by concrete contextual and discursive factors, the alternative uses of prepositions are regarded as cognitive-discursive oppositions that manifest the respective aspects of the prepositions' grammatical meaning.

**Keywords**: preposition; content word; grammatical meaning; mental construal; cognitive operation; discourse; cognitive-discursive opposition.

**Abstract**

The present paper suggests an account of alternative uses of phrases with the English preposition 'of' in official business discourse of the World Heritage Committee: 'details of / on the project', 'a plan of / for the property', 'deterioration of / to historic buildings'. The analyzed cases of alternations of prepositions within these phrases display their cognitive-discursive nature. In particular, it is shown that the choice of one preposition over another one within a phrase is motivated, on the one hand, by mental construal of entities and/or phenomena designated by content words and, on the other hand, by cognitive operations performed by a conceptualizer in bringing the two construals together in building up a phrase. Since the processes of mental construal and cognitive operations are predetermined by concrete contextual and discursive factors, the alternative uses of prepositions are regarded as cognitive-discursive oppositions that manifest the respective aspects of the prepositions' grammatical meaning.

**Introduction**

Prepositions belong to the class of function words that play an important role in linking content words within a phrase. In Modern English that has no developed system of inflections to indicate the nature of semantic relationships between content words prepositions play a major role in performing the requisite semantic function. As noted by some researchers (see, for instance, [3, P. 200], [1, P. 259 — 260], [2, P. 122 – 123], [6, P. 116]), in specifying the relationships between content words prepositions become analogous to inflections in synthetic languages.

However, the correlation of grammatical forms with different inflections is traditionally viewed as the basis of a grammatical opposition that underlies a particular grammatical category. When it comes to the correlation of phrases with different prepositions, researchers suggest two basic approaches. First, contrastive uses of prepositions are regarded as distinctions in their lexical meanings related to different spatial, temporal and other kinds of relations. **Cf.: on the table – under the table; before dinner – after dinner** [5, P. 149 — 150], [4, P. 92 — 93]. Second, the speaker’s choices of prepositions in the structuring of phrases are viewed as cases of distinctions drawn between the construals of nominal and/or verbal referents [7], in particular, topographical or functional construals of entities or phenomena [14], [16, P. 19 — 28], or as distinctions drawn between different facets of image-schemas, frames and concepts [18], [12]. Differentiated uses of prepositions in this case are also mostly treated as lexical distinctions.

Despite frequent uses of prepositions for the evocation of concrete spatial and temporal relations, they are also used to invoke some highly schematic and abstract relations. A case in point is the English preposition of. According to R.W. Langacker [15], this preposition invokes an “intrinsic relationship” between the referents of nominal phrases. In many cases the preposition of alternates with other prepositions, as in the following examples: **inform of / on the project, a plan of / for the building, deterioration of / to the buildings**. The prepositions in these examples convey structural meanings that are usually
associated with grammatical semantics. Thus, when the head-word of a phrase is represented by a verb (inform) or a deverbal noun (deterioration), the preposition contributes to the expression of the obligatory object valency. On the other hand, with a nominal head-word (a plan), the preposition in combination with an adjunct gives an attributive characteristics of the respective nominal referent and thus performs an attributive grammatical function. The alternations of the prepositions in the expression of object- and attributive relations (deterioration of / to the buildings and a plan of / for the building, respectively) suggests that there are some facets of their grammatical meaning that goes beyond the syntactic semantics as such.

This paper aims to establish the nature of alternations of the English preposition of as part of nominal and verbal phrases in the text of an official document. With this in view, the paper addresses the following two issues: (1) identification of those aspects of the alternating prepositions' grammatical meaning that are responsible for their choices in particular contexts of use; (2) establishing the conceptual basis for choosing a preposition for the structuring of a prepositional phrase.

Data and the object of the study

The suggested analysis of linguistic material is based on data that come from business discourse of the UNESCO World Heritage Committee. Generally, the official languages of the Committee are English and French. The subsequent analysis in this paper will focus on the English document “Convention Concerning the Protection of the World Cultural and Natural Heritage” [11], adopted in Paris on the 15th of May 2015. The corpus of examples with prepositional phrases comes from the texts of resolutions on the objects of cultural heritage located in the countries of Europe and North America [11, P. 127 — 156]. It should be noted that business discourse of the World Heritage Committee is highly regulatory in nature, which is manifested in the prevalent uses of utterances with directive pragmatic functions. It can be expected in this context that alternations of prepositions in nominal phrases can be influenced by the nature of instructions given by the institutional subject of speech (the World Heritage Committee) and by dynamic conceptualizations of objects and entities being spoken about in these instructions.

The object of the proposed study is alternations of the preposition of in the following types of phrases: inform of / on the development of the project, details of / on / for the project, a plan of / for the property, deterioration of / to historic buildings. The number of examples is over 80 prepositional phrases that include both of-phases and phrases with the prepositions on, for and to.

Theoretical prerequisites and the working hypothesis of the study

Theoretically, it is assumed that prepositions make up a class of function words “that express different relations between head-words and adjuncts within a phrase and that manifest syntactic subordination within a phrase or a sentence” [9, P. 394]. It is also noted that the meaning of a preposition reflects its semantic interrelationship with the meanings of content words that it connects [9, P. 394].

As mentioned earlier, the analyzed uses of the preposition of involve the expression of meaning at the level of syntactic semantics. Namely, prepositional phrases with the alternating prepositions convey object- (inform of/on the project) and attributive (details of/ on the project) relations between the head-word and its adjunct. However, the distinctions between the prepositions as such are treated as lexical distinctions. Thus, it is noted by O.N. Seliverstova [10, P. 241] that in non-spatial uses of the Russian preposition “na” (on) “lexical components… are woven into the fabric of grammatical meaning creating its variants”. The author’s treatment is compatible with the approach of V. Evans [13, P. 158 – 174] who analyzes the meanings of the English prepositions in, on and at with reference to lexical concepts and cognitive models associated with content words that the prepositions connect. It could be noticed, however, that though the concepts discussed in the mentioned studies (such as, for instance, “support”, “place”, “means of conveyance”) are expressed by lexical items they still possess a sufficient degree of schematicity to subsume the whole groups of those items. Considering this fact, the facet of meaning of a preposition which is associated with a concept or construal of the denoted entity or phenomenon could be regarded as lexico-grammatical rather than lexical meaning per se. Interestingly, among the lexical “state” concepts associated with meanings of English prepositions V. Evans posits the sub-concept “state of existence” for the preposition at [13, P. 172]. This concept is shown to be activated in expressions like at rest, at peace, at ease, at liberty. On the other hand, the notion “state of existence” (though in a more abstract sense) is involved in the definition of grammatical meaning suggested by I.P. Ivanova. The author states, in

Heritage Committee. Generally, the official languages of the Committee are English and French. The subsequent analysis in this paper will focus on the English document “Convention Concerning the Protection of the World Cultural and Natural Heritage” [11], adopted in Paris on the 15th of May 2015. The corpus of examples with prepositional phrases comes from the texts of resolutions on the objects of cultural heritage located in the countries of Europe and North America [11, P. 127 — 156]. It should be noted that business discourse of the World Heritage Committee is highly regulatory in nature, which is manifested in the prevalent uses of utterances with directive pragmatic functions. It can be expected in this context that alternations of prepositions in nominal phrases can be influenced by the nature of instructions given by the institutional subject of speech (the World Heritage Committee) and by dynamic conceptualizations of objects and entities being spoken about in these instructions.

The object of the proposed study is alternations of the preposition of in the following types of phrases: inform of / on the development of the project, details of / on / for the project, a plan of / for the property, deterioration of / to historic buildings. The number of examples is over 80 prepositional phrases that include both of-phases and phrases with the prepositions on, for and to.

Theoretical prerequisites and the working hypothesis of the study

Theoretically, it is assumed that prepositions make up a class of function words “that express different relations between head-words and adjuncts within a phrase and that manifest syntactic subordination within a phrase or a sentence” [9, P. 394]. It is also noted that the meaning of a preposition reflects its semantic interrelationship with the meanings of content words that it connects [9, P. 394].

As mentioned earlier, the analyzed uses of the preposition of involve the expression of meaning at the level of syntactic semantics. Namely, prepositional phrases with the alternating prepositions convey object- (inform of/on the project) and attributive (details of/ on the project) relations between the head-word and its adjunct. However, the distinctions between the prepositions as such are treated as lexical distinctions. Thus, it is noted by O.N. Seliverstova [10, P. 241] that in non-spatial uses of the Russian preposition “na” (on) “lexical components… are woven into the fabric of grammatical meaning creating its variants”. The author's treatment is compatible with the approach of V. Evans [13, P. 158 – 174] who analyzes the meanings of the English prepositions in, on and at with reference to lexical concepts and cognitive models associated with content words that the prepositions connect. It could be noticed, however, that though the concepts discussed in the mentioned studies (such as, for instance, “support”, “place”, “means of conveyance”) are expressed by lexical items they still possess a sufficient degree of schematicity to subsume the whole groups of those items. Considering this fact, the facet of meaning of a preposition which is associated with a concept or construal of the denoted entity or phenomenon could be regarded as lexico-grammatical rather than lexical meaning per se. Interestingly, among the lexical “state” concepts associated with meanings of English prepositions V. Evans posits the sub-concept “state of existence” for the preposition at [13, P. 172]. This concept is shown to be activated in expressions like at rest, at peace, at ease, at liberty. On the other hand, the notion “state of existence” (though in a more abstract sense) is involved in the definition of grammatical meaning suggested by I.P. Ivanova. The author states, in particular, that the grammatical meaning of a (content) word “conveys the form of existence of a given entity (phenomenon...)” [4, P. 8]. In any case, the construal of a “state of existence” (be it a lexical or a lexico-grammatical concept) which is subjectively attributed to an entity or phenomenon designated by a content word depends on the nature of mental actions experienced or enacted by a conceptualizer in the process of creating the construal.

The possibility of associating the grammatical meaning of a lexical item with physical and mental actions directed towards the designated entity is mentioned in A.R. Luria’s study “Language and Cognition” [17]. It is noted that grammatical inflections “enable us not only to correlate the object to a certain category, but also to indicate the form of the action which the object performs in a given context” [17, P. 39]. From a psychological perspective, A.R. Luria’s observation correlates with V.N. Pushkin’s [8] conclusions concerning the nature of “the situational conceptualization” of an object. The scholar shows (with reference to experimental data) that an object or entity is situationally construed depending on physical and/or mental actions with it that are predetermined by certain “practical tasks” of working with the object or transforming it.

The above-mentioned views on the close link between mental action, (situational) conceptualization and grammatical meaning give grounds for the supposition that the content of mental actions that are responsible for particular construals of entities or phenomena designated by a prepositional phrase make up part of the grammatical meaning of the respective preposition.
In what follows the paper will substantiate the working hypothesis according to which the analyzed alternations of the preposition of are motivated by those distinctions in the grammatical meanings of the alternating prepositions that are based on the conceptualizer's mental actions and the associated construals of lexically designated entities or phenomena.

Discussion and results

The prepositions of and on

The prepositions of and on are used alternatively with both nominal and verbal head-words. The latter case can be illustrated by the following examples: Requests the State Party to keep the World Heritage Centre informed of the state of conservation of the property […] [11, P. 133]; Requests the State Party to keep the World Heritage Centre informed on the development of the project [11, P. 156]. In the given examples the predicate keep informed is followed by of in the context of the positive evaluation of the cultural object, whereas the verbal phrase with on is preceded by the expression of concern and demand that the given instruction be strictly followed. Besides, the preposition on appears in this context twice, which helps to focus the recipient's attention on the matters discussed: Also notes with serious concern that no reconsideration has been made on the Elizabeth House development scheme […] and requests the State Party to keep the World Heritage Centre informed on the development of the project [11, P. 156].

One of the reasons for alternative uses of the prepositions of and on in the above examples may come from different construals associated with the predicate keep informed. Generally, the verb to inform has an incorporated argument in its semantic structure that is expressed in dictionary definitions by such nouns as information, facts, data.

In other words informing someone always presupposes providing someone with some data. Data in turn can have two different construals. First, data can be construed as a composite whole with an internal structure. In this case, structural elements of data are related to the gathering of them as parts and whole. Second, data can be thought of as an object of one's activity centred around a certain content that has to be singled out from the surrounding information medium, as well as be collected and/or organized and presented in a certain form. Obviously, the first construal of data with the verb to inform invokes a whole structure (a set of data) which is intrinsically related to its parts. According to Langacker (as mentioned earlier), an intrinsic relationship between one entity and another (including a part-whole relationship) constitutes the core meaning of the preposition of. By contrast, the second construal of data presupposes a salient area in the information medium to which one's attention is directed.

The suggested two types of construing data with the verb to inform – either as a whole structure or a salient area within a wider domain – allows to interpret the difference between to inform of and to inform on as a distinction between the relation of whole to its parts (of) and the directedness of an action towards its material object, in this case – salient area or focus of directed attention (on). The establishment of a part-whole relationship standing behind the phrase to inform of something does not require any intentional mental action. Rather, it is a subconscious cognitive operation which is activated every time a composite unit is perceived. More specifically, a phrase like information of something implies the cognitive operation of linking the whole (information) to its parts or content (something). So when an organization, such as World Heritage Committee, requires that a country keeps the organization informed of something it specifies – in a more or less neutral way – the kind of information it needs by indicating a link (of) between what the organization needs in general (information) and specifically (the content of this information). On the other hand, when the requirement is to keep informed on something the implied cognitive operation would be directing the addressee's attention towards what is construed as cognitively salient (on) to the addressee. Directing one's attention is a dynamic cognitive operation, which motivates the choice of inform on in the context of such dynamic cognitive and emotional states as concern, anxiety or insistence (illustrated earlier in the examples).

Among phrases with nominal head-words that display alternative uses of the prepositions of and on are those with the word details. In most cases this word is followed by the preposition of; as in the following examples: details of the project, details of measures, details of developments. This can be explained by the natural construal of the word's referent as a collected whole which is intrinsically related to its constituent parts or content. So in cases of requesting from an institutional addressee details of the project, details of measures or details of measurement, the subject of request makes emphasis on the conceptualization of details as a whole composite entity that should contain the requisite parts or components. Illustrative in this respect is the following example: Further requests the State Party to […] provide details of the project […] [11, P. 127]. On the other hand, the noun details can also be followed by the preposition on. Consider the following expression of request: Also requests the State Party to provide information on the Nelbuck Viaduct Rainerstrasse / Bahnhofsvorplatz project as well as details on the Residential Building Priesterhausgarten […] [11, P. 130]. Obviously, in the given example the noun details functions as a very close synonym of information which in turn is construed in the same way as set of data with to inform on, that is, as a salient area within the information medium. In other words, the use of on with the head nouns information and details in the given example implies that both nominal referents are conceptualized processually, that is, as information objects in the process of their creation, which involves directing the addressee's attention to the information area (some issues or items) that is cognitively salient to the addressee.

Generally, words like details are seldom associated with created or compiled objects, which explains why phrases like details on the project occur much less frequently than details of the project. On the other hand, nouns derived from verbs regularly refer to states and their associated processes, which results in uses of the preposition on for introducing object complements with nouns like report, regulation, study and some others, cf.: Finally requests the State Party to submit an updated report […] on the state of conservation of the property […] [11, P. 145]. Among the most common prepositional phrases with on that specify the nature of information required by the World Heritage Committee are the following: a report on the state of conservation, a regulation on the conservation of the historic centre, information on the project, guidelines on the project, a study on the stability of the buildings. In all the given phrases, the use of on signals that the recipient of the instruction should organize the process of constructing the information object with special focus on its requisite content or facets of content. In case of replacing on with of in some of the phrases (a regulation of the conservation,
The prepositions of and for

The situational conceptualization of an object expressed by a head noun plays a significant role in the distinction of the prepositions of and for in phrases like a plan of / for the property. With both prepositions, these phrases refer to the content of the document designated by the head noun, for instance: Requests the State Party to finalize, as soon as possible, the Management Plan of the property […] [11, P. 137]; Commends the State Party for the actions it has undertaken […] to complete the New Municipal Urban Development Plan for the property […] [11, P. 142]. However, with of, the nominal group the management plan conjures up a static construal of the document that is supposed to have a particular structure, or content (a plan of something). By contrast, with the preposition for, the referent of the urban development plan is conceptualized dynamically, that is, as an object that fits a specific purpose (a plan for something) – the conservation and restoration of the cultural property. The function of the preposition for here is thus to connect two dynamic conceptualizations – that of the plan which presupposes a document intended for something and that of the property which is conceived as the key component of the restoration event. Two different types of the situational construal associated with the plan of as opposed to the plan for are accompanied by the discursively driven distinction of two cognitive operations. Namely, the prepositional phrase with of serves to evoke and designate the operation of linking a statically construed document (the plan of) with its content (the property), whereas the phrase with for implies the operation of projection of the dynamically conceptualized entity (the plan for) onto the subsequent event in which the cultural object (the property) is involved. Since business documentation of regulatory nature that is represented by the analyzed texts is characterized by the projection of different types of papers and regulations onto concrete measures aimed at the preservation of cultural heritage, the number of prepositional phrases with for exceeds the number of occurrences of nominal groups with of. The quantitative assessment of the data under analysis yields the following statistics of occurrences: a program of – 1, a program for – 2; details of – 5, details for – 6; a plan of – 4, a plan for – 9.

The prepositions of and to

Another cognitive-discursive opposition to be found in the analyzed text is that between of- and to-phrases. The oppositions involve phrases headed by the nominals improvement and deterioration. The latter noun is followed by of in the following examples: Welcomes the efforts made by the State Party […] and encourages it […] to ensure that no […] deterioration of historic buildings […] occur in the property and its buffer zone [11, P. 137]; Welcomes the efforts made by the State Party […] and requests it to […] adopt regulatory regimes thus ensuring that no […] deterioration of the heritage buildings […] will take place [11, P. 147]. On the other hand, in many cases an identical process of deterioration is described by to-phrases: Welcomes the efforts made by the State Party […] and encourages it […] to ensure no […] deterioration to the heritage buildings which could constitute a threat to the property and its buffer zone [11, P. 145]. The same applies to phrases headed by the noun improvement, for example: […] further urges the State Party […] to use their infrastructure programs in order to […] support technical improvements to train tracks and tunnels [11, P. 135].

The prevalent use of to with the head-words improvement and deterioration in the analyzed texts of resolutions can be explained, again, with reference to some aspects of situational conceptualization of the phenomena and entities designated by content words. As mentioned earlier, the preposition of serves to signal the cognitive operation of linking the general idea of a process (here improvement and deterioration) to particular material entities that this process is intrinsically related to (historic buildings). Put in another way, phrases like deterioration of historic buildings imply that the process of deterioration involves historic buildings as its material constituent. The process as it were gets materialized through a different state of the object(s) involved in it. So, the of-phrases in this case invoke a link between the general idea of a process (deterioration) and its material result (a state of historic buildings).

Different cognitive operations and construed entities are involved in uses of to-phrases with the same head-words (as in deterioration to historic buildings). The important factor here is that the preposition to has a directional meaning, which entails the construal of the process of deterioration not in a summary way (as was the case with deterioration of) but as a dynamic sequence of events developing in a certain direction. In terms of cognitive operations, this corresponds to the dynamic scanning of an event in the direction of its target or end-points. So, with to-phrases, entities involved in the process are construed not so much as its material results or consequences but as changed entities at the point where the process ends. Since the discourse of the World Heritage Committee is more concerned with current states of cultural objects and changes that they may undergo through time, nouns like improvement and deterioration collocate with to- rather than of-complements. The cognitive-discursive opposition between of- and to-phrases is based here, again, on the conceptual distinctions between cognitive operations and mental construals that make part of the prepositions’ grammatical meaning.

information of the project, a study of the stability of the building) the resulting request would lose the emphasis on the activity of constructing the information and would construe the nominal referent in the most general way, with respect to its content or constituent parts.

To sum up the above discussion on the distinction between phrases with of and on, it can be concluded that the prepositions are distinguished from, and opposed to each other in constructing their respective phrases and utterances with these phrases. The prepositions in the analyzed cases build up a cognitive-discursive opposition. The cognitive nature of this opposition consists in the fact that it results from the distinction between the cognitive operations indicated by the prepositions as connecting elements of phrases, as well as from the differentiation between mental construals of nominal referents designated by prepositional phrases. The discursive character of the opposition consists in the fact that the mental construals in question arise in particular contexts of (official) discourse. In the next two subsections it will be shown that in the analyzed official document the preposition of enters similar cognitive-discursive oppositions with the prepositions for and to.
Conclusion
The conducted study of linguistic material has shown that prepositional phrases play an important role in the formal and conceptual structuring of official discourse. The analyzed cases of alternations of prepositions within these phrases display their cognitive-discursive nature. In particular, it has been shown that the choice of one preposition over another one within a phrase is motivated, on the one hand, by mental construal of entities and/or phenomena designated by content words and, on the other hand, — by cognitive operations performed by a conceptualizer in bringing the two construals together in building up a phrase. Since the processes of mental construal and cognitive operations are predetermined by concrete contextual and discursive factors, the alternative uses of prepositions can be regarded as cognitive-discursive oppositions that manifest the respective aspects of the prepositions’ grammatical meaning.

Conflict of Interest
None declared.

References


