The study aimed to demonstrate the structure of the lexico-semantic field “Natural Disasters” by the material of the English language. In addition to identifying certain groups, subgroups, and sub-subgroups within the topic under investigation, also the article takes into account different kinds of semantic relations within it. The scientific superiority of the article stems from the fact that it was the first to organize disaster vocabulary units using a field technique. The results of the findings revealed that the lexico-semantic field of the words denoting “Natural Disasters” contains multiple lexico-semantic groupings. Aspects such as synonymy, antonymy, hypo-hyperonymic, and part-whole relations are examples of paradigmatic relationships between lexemes that are shown in the classification scheme. These relationships highlight the organizational complexity and hierarchical structure of the studied field.

Key words: lexeme, lexical unit, lexico-semantic field, lexico-semantic group, semantic relations, natural disasters vocabulary.
properties: the presence of semantic relations (correlations) between the words composing it; the systemic nature of these relations; the interrelation of semantic fields within the entire lexical system (the entire dictionary).

Lyons [6] defines the notion of semantic structure in terms of certain relations that hold between the items in a particular lexical subsystem. They include such relations as sameness and difference of meaning, incompatibility, antonymy, etc. which are customarily held to fall within the scope of the theory of meaning.

In his article, Jolley proposed a field concept of his own with the help of correlation pairs like “right – left” and he was the first to include the structural relations of ‘oppositeness’ of meaning into his semantic fields, which he prefers to call “semantic groups” [7]. Some authors, including Filin proposes that it is possible to classify vocabulary into thematic groups for a variety of purposes, and in each case the composition of the group will change almost independently of the lexical and semantic connections of words [8].

Thus, Karaullov [9] writes about the need to divide various spheres of vocabulary into semantic fields, lexico-semantic groups, thematic groups, synonymic series, onomasiological groups. According to Egannazarov [10], the lexico-semantic field is based on lexico-semantic groups of words. There is an assumption that the elements of semantic fields are lexico–semantic groups (LSG), and the semantic field is a generic concept in relation to LSG.

**Research Methodology.** This study involves solving three tasks with the help of particular research methods. The first task is to gather English lexical units connected with the topic “Natural disasters” from a professional research paper focused on natural disasters using a continuous sample method. To carry out the research and analyze collected materials is the second task including a classification scheme that created the semantic features of the concepts as well as identifying semantic relationships within the lexical-semantic field the words denoting “Natural disasters”, where each obtained group and subgroup should be analyzed, i.e. the organization and semantic relations among groups, subgroups and lexical units, which demands conceptual and contextual analyses. The last task is to create a detailed description of semantic relationship in lexical-semantic field “Natural disasters”.

**Analysis and Results.** Above mentioned criteria, the following significant norms should be added: the classified organization of a group, core and close and far periphery. Thus, as long as lexico-semantic groups are considered as basic parts of a (lexico-)semantic field, then the semantic field should have the identical contrast criteria, but with minor shifts, such as: the existence in the field of words relating to different parts of speech and a larger size of the field. If subgroups and its own divisions are distinguished within a lexico-semantic group, then these subdivisions must meet the similar criteria of differentiation as the lexicosemantic group itself, differing from it only in size.

Lexico-semantic groups were exemplified in some studies, for example, the lexico-semantic group of fitness [11] or the lexico-semantic group of health [12]. Catastrophe vocabulary has been studied in terms of its systematic organization as well. To prove this, several relevant works in this regard were collected, which mainly show different aspects in the categorization and description of natural disasters vocabulary.

The results of the work “Linguistic Representation of Natural Disasters in Media Coverage” include some topic words for the one type of disasters: flood, its impact, needs, reaction, environmental concerns, material and economic loses [13]. The author of the article “Disaster linguicism: Linguistic minorities in disasters” [14] studied the disaster experiences in the 2010–2011 Canterbury and Tohoku disasters in order to show how immigrants and refugees were affected because of language barriers. The writer introduces the concept of disaster linguicism at that time she focused on linguistic minorities in particular those who are not native speakers of the de facto languages.

The work “Environmental Semantics” gives an illustration of environmental semantics in action through the English extreme weather words like flood and bushfire in explications, and an action model for “School Strikers” protesting for climate action. She also explores the proliferation of expressions eco-anxiety, climate anxiety, and climate grief.

Another paper “Semiotics of natural disaster discourse in post-tsunami world: A theoretical framework” [15] proposes a semiotic model on the natural catastrophic event particularly tsunami. The key concept here determines the transformation of natural disaster into structural human and cultural losses.

The authors of the article “Ecoloxicon” (Pamela Faber, Miriam Buendía Castro, 2014) illustrate three categories of conceptual relations in this field: hyponymous (generic-specific) relations, meronymic (partwhole) relations, and non-hierarchical relations. As a result, the conceptual relations include a set of 17 hierarchical (hypernymic and meronymic) and non-hierarchical relations, some of which are domain-specific.

Most of these studies dedicate solely one particular thematic group and many of them partly correlate with lexico-semantic groups as parts of the lexico-semantic field “Natural disasters”. In addition, the object of the mentioned studies was groups or lexical sets of natural disasters vocabulary. It is extremely significant when working with lexico-semantic groups and lexico-semantic fields, however, none of the studies explores semantic relations between the units of these groups.

Thereby, the present study is intended not only to explore lexico-semantic groups within the lexico-semantic field “Natural disasters”, but also to identify semantic relations between the units of these groups.

As a result of the empirical study, 83 different lexical units representing extreme event vocabulary was analyzed and classified (38 units were verbs, 23 lexical units were nouns and 22 units were word combinations). A classification scheme illustrating the structure of the lexico-semantic field of the words meaning “Natural disasters” was developed based on the data gathered. This scheme identifies six main lexico-semantic groups that make up the lexico-semantic field of extreme events: biological, geological, hydrological, meteorological, climatological, and extraterrestrial (Figure 1, Column 1).

**Figure 1. Scheme of the lexico-semantic field “Natural disasters”**

<table>
<thead>
<tr>
<th>Lexico-semantic field “Natural disasters”</th>
<th>Subgroups</th>
<th>Sub-subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological</td>
<td>Pandemics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Epidemics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zoonotic diseases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vector-borne diseases</td>
<td></td>
</tr>
<tr>
<td>Geological</td>
<td>Eruption</td>
<td>Volcanic eruption</td>
</tr>
<tr>
<td></td>
<td>Earthquake</td>
<td>Coastal eruption</td>
</tr>
<tr>
<td></td>
<td>Mass movement</td>
<td>Rockfall</td>
</tr>
<tr>
<td></td>
<td>Landslide</td>
<td>Surfact</td>
</tr>
<tr>
<td></td>
<td>Avalanche</td>
<td>Subsidence</td>
</tr>
</tbody>
</table>
Then, nearly all of these lexico-semantic groupings were split up into smaller groups. For instance, four subgroups comprise the lexico-semantic group Geographical as followings: earthquake, eruption, sinkhole and mass movement. Furthermore, some of the previously listed subgroups are further subgroups of themselves. The lexico-semantic group Geographical has a subgroup Extreme temperature, which in turn contains a sub-subgroup hot wave, cold wave, extreme winter condition. Thus, this divide illustrates inclusion relations, which occur when (sub) groups interact with one another.

Some lexical units demonstrate synonymous relations within the lexico-semantic field of the words denoting “Natural disasters”. Take the lexical units “earthquake” and “tremor”, for instance. According to the “Oxford Learner’s Dictionaries”, tremor is “a small earthquake in which the ground shakes slightly”, and earthquake is “a sudden, violent shaking of the earth’s surface” [16]. After examining these definitions, we may conclude that the term “earthquake” is more appropriate for use in disaster terminology; however “tremor” is also an option. Consequently, these two lexical units are partial synonyms in this instance. The verbs “devastate” and “ravage” are another instance of partial synonymy. The definitions of to devastate and to ravage, respectively, are “to completely destroy a place or an area” and “to damage something badly”, according to the Oxford Learner’s Dictionaries. These two terms can therefore be regarded as partial synonyms in this instance.

We can find antonymy relationships within the lexico-semantic group Climatological. Consider the terms “heat wave” and “cold wave”, for example. Heat wave is “a period of days during which the weather is much hotter than usual” [17]. Cold wave is “an unusually small and rapid drop in temperature over a short period of time such as 24 hours” [18].

There are also hypo-hypernymic relationships within the lexico-semantic field the words denoting “Natural Disasters”, in particular between the lexeme flood (hypernym) and such lexical units as heavy rainfall, river overflow, dam failure, coastal storm surge, and flash floods (hyponyms); between the lexeme volcanic eruption and lexical units magma chamber, volcanic vent, pyroclastic materials (like ash, rock fragments, and gases), lava flows, volcanic gases, and ash clouds are in the part-whole relations.

Therefore, the primary lexico-semantic groups of the semantic field of the words denoting “Natural Disasters” were identified and described in this article, together with their lexical units and the semantic relationships between specific units within the subcategories and sub-subcategories. The suggested description of the lexico-semantic groups that make up the lexico-semantic field of extreme event may be expanded and strengthened with the addition of more representative practical material to the study.

**Conclusion.** The results of the research demonstrate the complex and multicomponent organization of the lexico-semantic field of the words denoting “Natural Disasters” which is made up of several lexico-semantic groups, subgroups, and sub-subgroups. The following are the primary groupings identified: biological, geological, hydrological, meteorological, climatological, and extraterrestrial.

Inclusion and intersection relations that are founded on lexical unit paradigmatic relationships like part-whole, synonymy, antonymy, and hypo-hypernymic relationships are characteristic of the lexico-semantic field of the words denoting “Natural Disasters”. As we have seen, the most prevalent kinds of relationships are synonymy, inclusion and hypernymic relations. Rarer phenomena include part-whole, antonymy, and relations of intersection. It is hypothesized that similar kinds of semantic relations are characteristic not just of the lexico-semantic field of the words denoting “Natural Disasters”, but also representing other concepts too.

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