The Comparative Analysis of the English and German Term-Formation in the Legislative Documents (Based on the Schengen Border Code)

Ihor Bloschchynskyi\textsuperscript{1a}, Lyubomyr Borakovskyy\textsuperscript{2b}, Ganna Prihodko\textsuperscript{3c}, Tetiana Novikova\textsuperscript{4a}, Nadiia Moroz\textsuperscript{5a}, Natalia Kalyniuk\textsuperscript{6a}

Abstract

In the era of globalization and the rapid development of all the spheres of human life, the analysis of the term-formation methods becomes particularly topical. The functioning of frontier and customs terminology in combination with the terminology of legal acts (in particular in legal documents, agreements, and works that contain certain legal recommendations, requirements, and provisions) plays an important role in the period of deepening integration of countries and international relations. The article presents the results of the analysis of the terminological units of the frontier sphere. We compared the professional terminology used in the English and German variant of the same document – the Schengen Borders Code, which is a regulation that modifies existing legislation on border checks carried out on people. It is intended to improve the legislative part of the integrated border management policy by setting out the rules on crossing external borders and on reintroducing checks at internal borders.

© 2021 IJSCL. All rights reserved.

\textsuperscript{1} Professor, Email: b.article2020@yahoo.com (Corresponding Author)
Tel: +38-067-727-3854
\textsuperscript{2} Associate Professor, Email: lyubomyr.borakovskyy@lnu.edu.ua
\textsuperscript{3} Professor, Email: anna.prikhodko.55@mail.ru
\textsuperscript{4} Associate Professor, Email: tasya_mistress@i.ua
\textsuperscript{5} Associate Professor, Email: moroznadiia29@gmail.com
\textsuperscript{6} Associate Professor, Email: kalynuk.nataiy@gmail.com
\textsuperscript{a} Bohdan Khmelnytskyi National Academy of the State Border Guard Service of Ukraine, Ukraine
\textsuperscript{b} Ivan Franko National University of Lviv, Ukraine
\textsuperscript{c} Zaporizhzhia National University, Ukraine

ARTICLE HISTORY:
Received June 2021
Received in Revised form August 2021
Accepted August 2021
Available online September 2021

KEYWORDS:
Comparative terminology
English-German term formation
Legislative documents
Comparative analysis
The Schengen Borders Code
1. Introduction

Linguistically, there are concepts known as linguistic universals. This word can have a number of different meanings. It refers to the characteristics that are common to almost all languages. It is a correct statement for all-natural languages from the standpoint of a comprehensive typological approach. As a result, linguistic typology is a field of linguistics that categorizes and analyses languages based on their structure. It attempted to clarify and characterize structural similarities and contrasts among the languages of the world. The study of how language structures differed arose from a desire to categorize the world’s language groups. Because there are many parallels between the English and German languages in terms of comparison, we will take a contrastive glance at this phenomenon to discover some of the contrasts. We investigated different books and legislative documents and discovered that each author has his own point of view upon comparison. Mostly every book has a distinct framework for comparison, but never in direct comparison to the German language; therefore, we chose to construct our own contrastive structure. Based on the Schengen Border Code, this study focuses on term formation.

The essence of the study lies in insufficient information on the comparative study of the syntactic way of term formation in English and German languages within the terminological system of the frontier sphere. The article examines general and specific features in the structure of English and German terminological units based on the terminological vocabulary of the frontier sphere and defines productive models of the syntactic way of term-formation in both languages (Chmarkh, 2021; Vovchanska, 2014; Zaripova & Taipova, 2020).

Professional language is the language of a professionally limited circle of people who use it to understand each other with the help of relevant terminology. Therefore, it is not surprising that modern linguistics is characterized by the increased interest in issues of systematic language research. Various fields examine terminological entities. Any paradigm of knowledge develops its own meanings, particular traits, and qualities. When defining goals for experts and researchers in the areas of terminology, the prominent terminologist, Leichik (2007), stresses their vital purpose, noting that, “the duty of terminologists is comprising of a terminological eruption, which is mainly uncontrolled, into a reversible reaction.” (p. 81). This scientist’s method is supported by the fact that terminological components are a material element of human brain function, representing “components of heterogeneity of theoretical frameworks, as well as such representational methods as terminology, common words, symbols, index, and their blends in verbal compositions, symbolic equations, diagrams, and so forth” (Leichik, 2007, p. 119).

Terminology as a special field of knowledge is attracting more and more attention of the researchers, due to the international nature of modern scientific knowledge, due to the global integration processes, and, consequently, the desire to unify terms as a means of overcoming language barriers in various areas of socio-economic activity. The usage of terminology begins with very definite patterns in our daily lives and progresses to greater communication degrees. Nevertheless, whereas terminology for non-professionals is a choice, it is a must for experts. Terminology is essential for all professions engaged in representing, expressing, communicating, and instructing specific information. Terms are needed by researchers, scientists, and experts in any area to express and communicate their knowledge to notify, transmit, or purchase and sell their goods. There is no specialization that does not have a particular unit to denote its notions (Cabré, 2002; Soodmand Afshar & Moradifar, 2021).

Various disciplines analyze terminological units. There are many paradigms of knowledge, with their own definitions, features, and characteristics. According to well-known terminologist Leichik (2007), when setting the tasks for specialists working in the terminology field, their pivotal mission is to transform a largely spontaneous process into a controlled process (Leichik, 2007). Scientists believe that the terminological units are a material element of human cognition which includes symbols such as nomenclature, proper names, symbols, indices, as well as their combinations, verbal formulations, symbolic formulas, diagrams, and so on.

Terminology is essential for comprehending settings and specialized writings. Recognizing the deep terminological intricacies of
technological and professional settings assists learners in understanding the primary message of the document and assists professionals in transmitting the material more efficiently. Terminology assists individuals in recognizing the connection between the components of specialized texts and the overall context, which is frequently an unconscious method of information accumulation. It also fosters curiosity in the creation of new words and phrases. Terminology is also required for supporting documents and information science experts, as well as linguists conducting language design and thematically specialized expertise. Even comprehensive or conceptual linguists who attempt to explain the global competency (general and specialized) of speakers and languages must be familiar with the terminology and highly specialized languages (Bagherzadeh, & Tajeddin, 2021; Cabré, 2002; Rboul, 2021).

2. Theoretical Framework

Chronologically, for the first time, the concept of “professional language” was introduced into scientific circulation in the 70s of the twentieth century in Germany by Hoffmann (1984) and got further development in the other linguistic works, in particular Fluck (Kurakh, 2016).

According to Farrell and Farrell (1998), professional language is “a complex area of language application, which conditionally indicates internal differentiation due to the specifics of various professional situations” (p. 18). The scientist notes that this language is used by the representatives of a particular profession in order to understand the professional status of things with other specialists in the field, with representatives of other disciplines for specific purposes. It covers a set of language tools and has its own characteristics at all intralinguistic levels, among which the lexical, morphological, and syntactic are the most profoundly studied (Beier, 1980; Lesmana, 2021; Segrave & Wonders, 2019).

Halliday (2002, p. 161) considers professional languages as limited use of language tools, believing that “professional languages do not have special grammatical structures that are not represented in other language subsystems; their difference lies in special lexical means; but professional language differs from general language by the statistical distribution of grammatical structures” (p. 161). Based on a critical analysis of existing approaches to the definition of professional languages, the following definition of professional language belongs to Hoffman (1984): Professional language is a set of all language tools used in professionally limited communication to ensure understanding between those involved and those not involved in this field. Roelcke (1999) defines a professional text as a tool that speech and communication tasks related to specialized social and productive activities. It consists of a finite ordered number of logical, syntactic, semantic, and coherent sentences or lexical units, which, acting as complex linguistic signs, correspond to complex expressions in the human mind and the state of things in the objective reality.

A language consists of subcodes that speakers use according to their expressive needs and the nature of the communicative situation. Despite all this diversity, however, all languages have a set of units and rules that all speakers know. The set of rules, units, and restrictions that form part of the knowledge of most speakers of a language constitute the common or general language (Cabre, 1999).

According to Maksimaitis (2014), special languages, conceived of as systems of communication, can be approached in two ways: via semiotics and via natural languages. The first approach is based on the fact that a special language is a system for transmitting and exchanging information that employs various codes at the same time, of which human language is undoubtedly the most important, but not the only one. Other systems that are three-dimensional (models, reliefs, etc.), two-dimensional (maps and drawings), iconic (ideographic signs, photographs, diagrams, or illustrations), or symbolic (nomenclatures, tables of symbols, numbers, etc.) share with human language the function of means of communication in technical and scientific contexts. The other approach, which relates special languages to natural languages, raises questions about whether special languages function autonomously from general language, about the difference between special languages and the common language, and about the relationship between special languages and the so-called artificial languages, especially symbolic languages (Cabre, 1999).
Sager (2004) argues that the morphological structures of terms used in special languages are the same as those of words used in general languages. The specialized vocabulary, on the other hand, displays considerably higher uniformity as a consequence of the purposeful and, in some cases, systematic procedures of word-formation. In fact, English uses different methods and processes for forming words. English can be expressed in many different ways, but the distinctions between using existing forms and creating new ones (refining existing resources) are often more important than using external resources (creating new resources). Sager (2004) first proposed a classification of the principal methods of term formation in 1990 and later modified it to describe them as language-independent methods of designation. He expressed a slightly different understanding of the definition or a similar one when he discussed methods of term-formation. In these works, Sager (2004) discusses the methods for forming terms for special English languages; generally, that is, in other specialized subject domains. Moreover, Sager (2004) claims that the means of expressing the terms he explains are not meant to be exhaustive; rather, they represent the range of possibilities. Sager (2004) argues that terms can be formed in three ways:

- use of available records,
- alteration of available records, and
- utilization of new resources (to create new lexical entities)

By using current resources, Sager (2004) refers to the provision of the meaning of a term that already exists in the English language. This can be accomplished through the use of a simile (calling an idea in analogy to another known one), a metaphor (named a concept by the object it most matches), or a proper name. The modification of existing sources is another method of term formation, according to Sager (2004), which includes affixation (or derivation), backformation, compounding, creating phrasal terms, as well as conversion and compression.

It has been argued that the affixation of terms (i.e., suffixation and/or prefixation) is a very important method for the systematic development of terms since affixation contributes significantly to the precise expression and systematic reference of terms. According to Sager (2004), special languages have a greater variety of affixes than general English because English has borrowed and assimilated many words from neoclassical languages, such as Greek and Latin, especially in the area of Science and Technology.

The compounding process is also an essential step for the systematic development of specialized vocabulary. Taking two words or more and joining them together, we create a compound. The result is a syntagma that has an entirely new meaning that is independent of its constituent parts and expresses a concept to be understood within a certain field (Sager, 1997). The determinant, the first constituent of a compound, usually modifies the second constituent, the nucleus. Although compounds can vary from two to five elements, he claims they can also be composed of five and six elements, which is unusual. There are also compounds of phrases that contain prepositions, articles, conjunctions, and adverbs (Sager, 1990) and compounds of rhetorical phrases combined by prepositions (Sager, 2004). A separate category for the formation of phrasal terms is identified in another source (Sager, 1997), although they are closely related to compounding. In reality, there is no clear difference between compound and phrasal terms.

In conversion, morphological changes do not occur in the word inflection; the word just changes its category. It is not always possible to detect the direction of conversion when nouns are formed following verbal and adjectival conversion, as Sager (2004) claims. Furthermore, in scientific English, this method of term formation produces less output than the other methods due to the fact that many terms derive from Latin and Greek nouns that cannot be converted into terms (Sager, 2004). Additionally, multiple forms of compression are used to create the terms of special languages. Acronymy, abbreviation, and clipping are the most common and most effective methods of compression. Next, Sager (2004) discusses backformation, which is a process of making new terms from existing terms. According to Sager (2004), backformation is mostly used in the sciences, i.e., in math and engineering, to create complex verbs referring to processes or nouns, and combination with compounding is common. The last way to create new terms is by establishing new resources (noun neologisms),
which can occur in two ways: by establishing completely new entities and by borrowing from other languages (direct borrowing or loan translation). Unique naming of new concepts is the result of this process in science and technology. Special language rarely creates totally new terms due to the fact that new terms should reflect differences in relation to existing concepts. As we discussed above, affixation and compounding are both ideal ways to create new terms. According to Sager (2004), it is often difficult to distinguish between the creations of true neologisms that derive from Latin, Greek, or French as opposed to borrowing them directly from those languages. Furthermore, the original source of borrows is not always obvious, since English has borrowed from all three languages for so long that it is very difficult to discern whether a term came into English via French or whether it came directly from the classic literature (Sager, 1990). In addition, modern English borrows comparatively very infrequently from other languages. Technology and new terminology are usually borrowed from English by other languages. In loan translations or calques, the lexical components of compounds are literally substituted word-for-word to achieve literal translation. Sager (1990) states that direct borrowing is preferred over loan translation, but neither is acceptable if it violates the natural process of a linguistic community’s word-formation. As a result, either direct borrowings or loan translations must be adapted to the recipient’s language, something that is rather straightforward in English. According to Sager (1997), loan translations could eventually be replaced by more traditional native forms in order to fully exploit the language’s creativity.

Furthermore, the need to establish relations and to communicate with others that has led to modern economic growth and the appearance of international bodies has given rise to language issues that were unheard of in other times. For example, today, we need to have constantly updated and exchangeable information, and we must be able to express ourselves in several languages. With the subsequent need to standardize the formulae for designations, the standardization of economic, scientific, and cultural exchanges between organizations is also new. This situation has resulted in a strong demand for specialists in language able to respond to the multilingual requirements of industrialized societies. This situation is also the cause for the new technologies related to communication and information (Cabre, 1999; Dekkers, 2019; Gundhus & Franko, 2016).

Many international and local linguists researched word formation in German. Schmidt (2005) contributed significantly to its investigation. Word formation, along with borrowing, is the essential method of expanding a language’s vocabulary. Word-building constructs are created by analogies (models and patterns) with previously existing lexemes and the use of morphemic and lexical content. Because linguistics does not have a uniform interpretation and definition of the word-formation model as a unit of word-formation, there are many models of word-building structures that often vary in different manners among various scholars (Stepanova, 2007). The classification is based on different sorts of word-building components, their combinations, and therefore the consequent word-formative meaning (Stepanova, 2007).

3. Methodology

3.1. Term and its Characteristics

In order to compare the terminological units in the frontier sphere in the English and the German language, we have to define the peculiar feature of the linguistic notion “term”:

a. secondary use of lexical units, which develops on the basis of their initial general use;

b. special formation of artificial symbols;

c. limited scope of use;

d. the impossibility of direct translation into other languages;

e. the impossibility of arbitrary replacement of individual elements without coordination with the tradition of the field (sphere);

f. a peculiar attitude to such linguistic phenomena as polysemy and antonymy;

g. increased denotative connection.

The main point in the specifics of the term lies in its special, professional application. Its scope is limited to a certain area of knowledge. The term is usually understood as a word (or group of words) that have a specific and unique meaning within a given field or specialization, which excludes any possibility of another one that differs from the author’s understanding or interpretation. The term can be monosyllabic
and consist of a keyword or be a terminological group, which includes the keyword or core of the group, one or more left definitions that specify or modify the meaning of the term.

3.2. Procedure

Since the study is of qualitative type, the data collection and analysis procedure are basically different from the common quantitative ones. To be more specific, our study predetermines the use of the following methods: scientific literature analysis (to analyze the approaches of different scientists to the issue of term determination, description, and functioning), comparative method (to compare the ways of term formation in English and German) and statistics (to define the productivity of different syntactic models of term-formation based on the terminological system of the frontier sphere in both languages). In general, the task of the comparative method is to detect a set of different and similar characteristics of the systems, subsystems, and microsystems of the languages under study.

4. Results

In our work, the material of the study is the terminology systems of the frontier terms of English and German variants of the Schengen Borders Code. We analyzed 152 lexical units from the structural, semantic, and morphological points of view. One hundred twenty-seven lexical units are nominal phrases; 25 lexemes are verbal ones. In contrast to the English language, which is not characterized by gender, the German nominative terminological lexemes of the frontier sphere refer to the masculine (46 units, 36.2%), feminine (59 units, 46.5%), and neutral (20 units, 15.8%) gender. Two of them are used in plural form.

In the English terminology of the frontier sphere, 46 identified terminological units consist of two or three components. We analyzed the models of terminological combinations formations, and thus we can conclude that:

a. The most productive type of terminological combination is a two-component word combination (41 unit) consisting of a head that is expressed by a noun and a premodifier that is expressed by a noun (member state, the Schengen area, visa authority, entry stamp, exit stamp, etc.) or an adjective (internal border, external border, internal flight, and maritime traffic).

b. A less productive way of word-formation within the study is a three-component word combination (5 units), consisting of a head that is expressed by a noun, and premodifiers that are expressed by a noun or an adjective (border crossing point, Visa Information System, Member State of destination, individual movement order, collective movement order).

In the analyzed section of the German terms, the above-mentioned 46 terminological units are presented by two-, three- and four-component compound nouns. Among them, 34 units are two-component terms (die Binnengrenze, die Grenzkontrolle, der Mitgliedstaat, die Personenkontrollen, die Visumbehörde etc.), 11 three-component terms (die Grenzübergangsstelle, die Binnenseegrenze, das Visa-Informationssystem, der Bestimmungsmitgliedstaat, der Sammelmarschbefehl etc.) and 1 four-component term (Der Zwischenlandeiflughafen). Thus, the following are the examples of rendering the same notions in both languages and the frequency of their use:

a. border authority (two-component syntactic construction) - die Grenzbehörde (two-component compound noun) – 34 units;

b. lake border (two-component syntactic construction) - die Binnenseegrenze (three-component compound noun) – 6 units;

c. border crossing point (three-component syntactic construction) - die Grenzübergangsstelle (three-component compound noun) – 5 units;

d. stop-over airport (two-component syntactic construction) - der Zwischenlandeiflughafen (four-component compound noun) – 1 unit.

The use of genitive case in German is another issue of particular attention within our study. We singled out the English nominative syntactic constructions, which are rendered into German with the help of genitive case:

a. land border crossing point - die Grenzübergangsstelle der Landgrenzen;

b. sea border crossing points - die Grenzübergangsstelle der Seegrenzen;

c. third-country border guard - der Grenzschutzbeamte eines Drittstaats;

It should be noted that the typical feature of the English terminological constructions of the frontier sphere is the use of the preposition “of” which mostly expresses belonging to somebody (holder of diplomatic passport), relating to somebody (free movement of persons), and relating to something (a sign of counterfeiting).

A total of 29 terminological combinations of this type were identified in the process of analysis. In the German version of the Schengen Borders Code, they function as:

1. compound nouns (13 terminological units) country of origin - der Herkunftsstaat; sign of falsification - das Fälschungsmerkmal; sign of counterfeiting - das Verfälschungsmerkmal;
2. genitive case (7 terminological units) means of subsistence - die Mittel zur Bestreitung des Lebensunterhalts; prevention of unauthorized border crossings - die Verhinderung des unbefugten Grenzübertritts; purpose of stay - der Zweck des Aufenthalts;
3. prepositional construction with “von” (6 terminological units) holder of diplomatic passport - der Inhaber von Diplomatenpass; holder of official passport - der Inhaber von Amtspass; holder of service passport - der Inhaber von Dienstpass;
4. other syntactic constructions (2 terminological units) the right of free movement - den Anspruch auf freien Personenverkehr; port of call - der angelaufene Hafen.

It should be noted that there is one German correspondence der Ankunftsflughafen for the two English terms: airport of entry and airport of arrival.

Within the vocabulary under consideration, we detected one case of rendering an English syntactic construction into German with the help of the descriptive method: eng. person enjoying the right of free movement – ger. die Person, die nach dem Unionsrecht Anspruch auf freien Personenverkehr hat. Thus, the above-mentioned case is not typical of English and German frontier defense vocabulary.

Some terminological units are highly productive in creating new combinations since they carry the main informative content. Yang (2010) calls such terms nuclear and defines them as formal semantic centers in charge of forming groups of different terminological combinations. The number of components of terminological combinations may vary.

Nuclear terms of frontier terminology in English and German demonstrate different productivity in the formation of syntactical terminological combinations and compounds. According to the results of the study, the following English nuclear terms serve as a basis for the formation of terminological combinations and combine them into certain subject groups:

a. ‘Border’ (29 units are formed with its help): internal border, external border, border control, border crossing point, reintroduction of border control, land border, river border, lake border, etc.
b. ‘Person’ (14 units): free movement of persons, check on persons, border checks on persons, discriminate against persons on the grounds of sex, discriminate against persons on the grounds of racial origin, discriminate against persons on the grounds of ethnic origin, discriminate against persons on the grounds of religion, etc.
c. ‘Port’ (13 units): port of call, port of arrival, port of departure, port authorities, third-country port, stop-over airport, airport, riverport, seaport, lakeport, etc.
d. ‘Cross’ (13 units): external border crossing points, shared border crossing point cross-border criminality, land border crossing point, sea border crossing points, the unauthorized crossing of external borders, etc.
e. ‘Check’ (12 units): check on persons, carry out entry check, carry out exit check, checks on foot passengers, checks on vehicle occupants, checks on rail traffic, initial check, etc.

The prevalent nuclear terms of frontier terminology in German include:

a. ‘Border’ (29 units): the internal border, the external border, the land border, the river border, the inland sea border, the air border, the sea border, etc.
b. ‘Travel’ (17 units): the travel document, the travel paper, carry out the entry control,
carry out the exit control, transit to a third country, stamp on entry, stamp on exit, pass the exit control etc.

c. ‘Control’ (15 units): border control, person control, border control of people, minimum control, detailed control, control of rail traffic, control of car occupants, etc.

Thus, we can conclude that the nuclear components of the same terminological units in English and German do not always coincide. For example, a productive nuclear term in German is ‘Reise’ (it is used 17 times in the terminological system under consideration). The English correspondence ‘travel’ is used in 5 terminological units. It proves that the nuclear terms and components of terminological compounds are not the same in both languages. For example, ‘travel document’=‘das Reisedokument’, but ‘entry conditions’≠ ‘die Einreisevoraussetzungen’.

Judging by the results of our study, the main sources of formation of German terminological units of the frontier sphere are not only syntactic and semantic methods but also borrowings from the English language and international fund (term formation based on English), taking into account cognitive potential of the German language. It is important to note that the appeal to English terminological fund contributes to the creation of a single terminological space for German and English with a unified terminological vocabulary. There are 35 cases of using international lexemes and borrowings in the English and German specialized vocabulary within our study: asylum- bilateral, control-discriminate- document, European, fingerprint, Information System, international, land border, military, organization, organized crime, person, Schengen, seaport, sexual, verification, visa, etc.

5. Concluding Remarks

The analysis of English and German terminological units of the frontier sphere (based on the Schengen Borders Code) shows that both terminological systems possess common and different features. The most common type of terminological combinations in English is the two-component syntactic combinations, while the German equivalents are compound nouns. The peculiar feature of the English and German terms under consideration is the fact that English two- and three-component syntactic combinations function German as two-, three- and four-component compounds, and the correspondence is not always identical, i.e., two-component English combinations can be three-component German compounds and vice versa.

Thirty-five identical borrowings and internationalisms were detected in the analyzed selection of the frontier terminology in English and German languages, which means that terminological systems of the kindred languages are characterized by similarity and mutual transference.

While working with the given legislative documents, we noted that some nuclear terms that are most productive in the formation of terminology units. The nuclear terms of the English variant of Schengen Border Code are ‘border’, ‘person’, ‘port’, ‘cross’ and ‘check’. The nuclear German terms are ‘Grenze’, ‘Reise’ and ‘Kontrolle’.

The typical feature of both languages is the generic relation between the components of syntactic combinations. In the English terminological systems, they are rendered with the help of the preposition ‘of’, and the German equivalents are the ones with the genitive case, with the preposition ‘von’ or the compound nouns.

We can conclude that both terminological systems are characterized by general and specific features, which is due to the fact that terms must not only render the professional notions precisely but also comply with the rules of the given language system.

References


Cabré, M. T. (2002). Linguistic terminology and normalization: Specialty terminology and languages. Leioa, Spain: EHU-
I. Bloschchynskyi et al./ International Journal of Society, Culture & Language, 9(3), 2021  ISSN 2329-2210

LEIOAKO CAMPUSA País Basc Press.


