Passive Voice in Scientific Texts: The Comparison of English Texts with Their Czech Translations

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Dušková, Libuše a kol. Mluvnice současné angličtiny na pozadí češtiny, Praha: Academia, 1994.

Greenbaum, Sidney. English Grammar, Oxford: Oxford University Press, 1996. Grepl, Miroslav a kol. Příruční mluvnice češtiny. Praha: Nakladatelství Lidové Noviny, 2000.

Huddleston, Rodney and Geoffrey K. Pullum. The Cambridge Grammar of the English Language: Cambridge University Press, 2002.

Komárek, Miroslav a kol. Mluvnice češtinγ (2) Tvarosloví, Praha: Academia, 1986. Quirk, Randolph et al. A Comprehensive Grammar of the English Language, Harlow: Longman Group Limited, 1985.

Veselovská, Ludmila, and Joseph Emonds. A course in English Morpho–Syntax, Syllabi for the Lectures, Examples and Exercises, Olomouc: Univerzita Palackého v Olomouci, 2009.

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ABSTRAKT

Tato bakalářská práce se zabývá popisem a srovnáním trpného rodu v anglickém a českém jazyce. Práce je rozdělena na dvě části. Cílem teoretické části je popsat tvoření a funkce trpného rodu v angličtině a češtině, s hledem na jeho užití v odborném stylu. Praktická část pracuje s korpusem anglických odborných textů a jejich ekvivalentními překlady do češtiny. Cílem praktické části je vysvětlit na příkladech nalezených v korpusu hlavní typy a funkce trpného rodu a ukázat odlišné použití a distribuci trpného rodu v anglických odborných texteh na srovnání s jejich českými překlady.

Klíčová slova: trpný a činný rod, odborný text, podmět, sloveso, předmět, agens, patiens, komunikativní dynamismus, funkční větná perspektiva (aktuální členění větné), téma, réma

ABSTRACT

The bachelor thesis deals with the description and comparison of the passive voice in English and Czech language. The thesis is divided into two parts. The aim of the theoretical part is to describe the formation and functions of the passive voice, both in English and Czech, with respect to its usage in the scientific writing. The practical part works with the corpus of English scientific texts and their equivalent translations into Czech. The purpose of the practical part is to demonstrate on the examples found in the corpus the main types and functions of the passive voice and to show the different usage and distribution of the passive voice in English scientific texts in comparison with their Czech translations.

Keywords: passive and active voice, scientific text, subject, verb, object, agent, patient, communicative dynamism, functional sentence perspective, theme, rheme

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INTRODUCTION

The focus of this bachelor thesis is to analyze the passive structures used in scientific texts, originally written and published in the English language, and to draw a comparison with their passive equivalents translated into Czech language. The primary aim of this thesis is to describe the formation, the types and the function of the passive voice, both in English and Czech language. The secondary aim is to explore the ways how is the English passive voice translated into Czech language and whether there can be found some differences in the usage of the passive voice in English and Czech scientific texts.

The bachelor thesis is divided into a theoretical and a practical part. The theoretical part focuses on the description of the passive voice and characteristics of scientific texts. Firstly, the attention is paid to the English passive constructions, their formation, main types of the passive clauses, function of the passive in different registers and factors influencing the choice of the passive constructions, especially Functional Sentence Perspective. Secondly, the formation and various types and functions of the Czech passive structures are described. Lastly, the key characteristics of scientific texts, more accurately English as a scientific language (ESL) are given.

The practical part is aimed at the usage of the passive voice in scientific texts. The analysis is based on particular texts chosen for this purpose. In the first section the use and function of the passive structures are demonstrated on specific examples taken from the corpus. Further, each type of the English passive clause is accompanied by the Czech translation found in the equivalent Czech texts and the explanations are given to clarify the choice of the particular Czech translation. Finally, the occurrence of the Czech translations and is provided.

I. THEORY

1 THE ENGLISH LANGUAGE

1.1 Introduction

Every language is a code where information is conveyed through the set of grammatical units. These units are represented by words and phrases which are combined into larger units, namely clauses and sentences. Communication is logical if certain grammatical rules are followed. "Grammatical units are described in terms of four factors: their structure, their syntactic role, their meaning, and the way they are used in discourse" (Biber et al, 1999, 13).

According to Biber et al. words are the cornerstones of language (Biber et al, 1999, 14). Words can be grouped according to semantic, morphological, syntactic and phonetic criteria that are "shared by specific groups of words" (Veselovská and Emonds, 3). These specific groups are called word categories or parts of speech and in Czech grammar they are represented by: Nouns, Adjectives, Pronouns, Numerals, Verbs, Adverbs, Prepositions, Conjunctions, Particles, and Interjections. In English grammar Articles and Modals can be included (Veselovská and Emonds, 3). Word categories can be divided into major/open/lexical/ and minor/closed/grammatical. The first category includes Nouns, Adjectives, Verbs, and some Adverbs, the second category comprises of Pronouns, Auxiliaries, Conjunctions, Determiners, Numerals, Prepositions and Interjections. From the perspective of the thesis only Verbs are to be dealt with.

1.2 Verb as a grammatical category

Verbs have the essential role in every clause, because the verb "determines the other elements that are required in that clause" (Biber et al, 199, 119). Quirk divides verbs "according to their function within the verb phrase" into three categories, full verbs, primary verbs (*be, do, have*), and modal auxiliary verbs (Quirk, 96). According to Dušková, "verb is a speech act defined by its morphological categories and a syntactic function" (Dušková, 165). Greenbaum enumerates seven categories that can be applied to verbs and that can affect the forms of the verbs, they are: mood (*indicative, imperative, subjunctive*), modality (*modal auxiliaries*), tense (*present, past*), aspect (*perfect, progressive*), number (*singular, plural*), person (*first, second, third*), and voice (*active, passive*) (Greenbaum, 40). Dušková claims that only person, number, tense, aspect and voice belong among morphological categories of the English verb (Dušková, 213).

1.3 Voice

The category of voice belongs to the linguistic features that can be found in majority of languages. According to Dušková the voice denotes the syntactic-semantic relationship between the verbal action and its participants (Dušková, 253). Huddleston emphasizes the fact that "the general term of voice applies to a system where the contrasting forms differ in the way semantic roles are aligned with syntactic functions" and therefore "the issue of which clauses in English are active and which are passive is to be determined by their syntactic properties" (Huddleston and Pullum, 1427). According to Veselovská (Veselovská and Emonds, 67) the category of voice is related to the distribution of the semantic roles among verbal arguments (sentence members). Quirk defines voice as a "grammatical category which makes it possible to view the action of a sentence in either of two ways, without change in the facts reported" (Quirk, 159).

Voice of the verb can be expressed either by active or passive construction. The active voice can be formed from almost all the verbs and has a broader meaning than the passive voice. The passive voice can be formed only from the verbs that have the object, i.e. transitive verbs (Dušková, 253). Biber et al denote the active voice as "the unmarked voice" and is the most common whereas the passive voice is less common and is used for "special discourse functions" (Biber et al, , 1999, 166).

According to Huddleston and Pullum voice is active when "the subject is aligned with an active role, with the role of agent" whereas the passive voice is typical by association of the subject "with a passive role, the role of patient" (Huddleston and Pullum, 1427). In other words, the subject of the active clause is the doer of the action whereas the subject of the passive clause is usually affected by the action.

Passive voice in English and Czech differ in the form, function and stylistic aspect. Veselovská claims that voice in English is "an optional feature of the verb" (Veselovská and Emonds, 67). The passive voice is a grammatical feature occurring both in English and Czech language, but its usage is different.

1.4 Formation of the passive

As already mentioned, the voice of the verb can be expressed either by active or passive construction. It depends on whether the subject of a sentence acts or is acted upon. The most English passive constructions are formed with the auxiliary verb be and the past participle of a lexical verb (*-ed* participle). However, in some passive clauses the auxiliary

verb be can be replaced by get or become. Quirk denotes this type of passives as getpassives and they will be described separately further in the thesis.

The contrast between active and passive voice is best seen by comparison of active and passive clause with an action verb carrying a direct object.

Active: [1] Oswald assassinated Kennedy.

Passive: [2] Kennedy was assassinated by Oswald.

From the syntactic point of view the passive structure can be described via the formula:

$$NP_2 + V_{aux} + V_{en} + by + NP_1$$

(where V_{aux} is an auxiliary (*be*), and V_{en} is the past participle of the lexical verb) (Svoboda, 84).

As can be seen from the example above, the difference between active and passive has two grammatical levels, the verb phrase and the clause (Quirk, 159).

Concerning the verb phrase level, the verb changed its form. The active sentence is transformed into passive by adding a form of an auxiliary verb be followed by the past participle of a full verb.

At the clause level, Veselovská mentions the fact that "agent and patient acquire different sentence functions" (Veselovská, 30). According to Huddleston and Pullum, "the terms active and passive are applied on the basis of the alignment of roles with functions that express an action" (Huddleston and Pullum, 1427). The clause [1] is called active because the subject Oswald "is aligned with an active role, the role of agent": Oswald is responsible for the action, performed the action (the action of *assassination*). The clause [2] is called passive because the subject Kennedy "is associated with a passive role", and therefore it is usually called the patient. Kennedy was the one on whom the action was performed (Huddleston and Pullum, 1427). In some clauses, however, there is no action expressed in the clause: e.g. *The premier was hated by most members of the cabinet*. Therefore Huddleston and Pullum use the term <u>experiencer</u> for the agent and the term <u>stimulus</u> instead of the patient, but they are denoted as passive and active because they have the same syntactic value (Huddleston and Pullum, 1427).

1.5 Types of the passive

Passive voice constructions can be divided into various groups by using different criteria. Huddleston and Pullum describe the distinction based on the presence or absence of a *by*-phrase. They distinguish short and long passive.

1.5.1 Short vs. long passive

Passive voice in English can occur in two basic forms: short and long. The distinction is derived from the presence or absence of the agent in the passive clause.

SHORT: [3] *His plan was rejected*.

LONG : [4] *His plan was rejected by the board.*

The **short passive**, also called 'agentless' (Biber et al, 1999, 166), is characteristic by the omission of the agent. The most frequent passive structure in finite clauses is short dynamic *be*-passive. The main function of the short dynamic passive is to leave the initiator of an action (the agent) unexpressed because it is unknown, redundant, or irrelevant. Veselovská and Emonds call this process as 'deagentivisation' (Veselovská and Emonds, 30). Short dynamic passives are most common in academic prose (Biber et al, 2002, 938).

In the **long passive** the agent is expressed in a *by*-phrase (Biber et al, 2002, 935). As can be seen in example, the agent of the action in the long passive is expressed through a *by*-phrase. But Biber et al. point out that in some cases the *by*-phrase will specify a different semantic role (Biber et al, 1999, 167). Therefore Huddleston and Pullum refer to the PP by the board as the 'internalized complement' instead of the agent because in some sentences the agent denotes other semantic role than the agent (Huddleston and Pullum, 1428).

Due to the absence of the internalized complement the short passive cannot have an exact active equivalent. Huddleston and Pullum note that active clause preserves some information about the subject "that is not explicitly encoded in a short passive even if part or all of it is implied or suggested" (Huddleston and Pullum, 1428). This can be observed when the short passive (3) is transformed into the active:

[5] Somebody rejected the plan.

Contrary to this, the long passives express all the information of the active counterpart, although the information is presented in different order. It should be noted that the subject is inclined "to be shorter than the agent phrase in long passives" (Biber et al, 2002, 940).

1.5.2 Ditransitive passive

Ditransitive verbs are verbs carrying two objects, a direct and an indirect one. The passive is possible to be formed with both the direct and indirect object in the position of the subject. Thus, Huddleston and Pullum differ between the **first passive** and the **second passive** (Huddleston and Pullum, 1432). The first passive (6) is formed when the indirect object is placed in the subject position and the passive with the direct object in the position of the subject is called the second passive (7).

Active:	First passive:
[6] My father gave <u>me</u> this watch. \rightarrow	<u>I</u> was given this watch by my father.
Active:	Second passive:
[7] My father gave me <u>this watch</u> . \rightarrow	<u>This watch</u> was given to me by my father.

Huddleston and Pullum claim that the first passive prevails in the passive structures with ditransitive verbs. According to Jespersen only the direct object was originally used to form the passive, but over the past centuries the indirect object has been used more frequently as the subject in the passive. It was due to the fact that "the greater interest felt for persons than for things naturally leads to the placing of the indirect before the direct object" (Jespersen, 86).

1.5.3 *Be*-passive vs. *get*-passive

Get-passive is considered a stylistic variant of the *be*-passive although the usage of the get-passive is less frequent and is restricted primarily to informal English (Biber et al, 2002, 475). Huddleston and Pullum stress especially semantic difference between *be*-passive and *get*-passive, pointing out that "*get* tends to be preferred over *be* when the subject-referent is seen as having an agentive role in the situation, or at least as having some responsibility for it (Huddleston and Pullum, 1442). *Get*-passive is predominantly used in "constructions without an expressed animate agent" because "the meaning of the *get*-passive (...) puts emphasis on the subject rather than the agent, and on what happens to

the subject as a result of the event" (Quirk, 161). This implies the frequent omission of the agent in the *get*-passive constructions.

[8] James got beaten last night.

Get-passive is preferred instead of the *be*-passive in constructions to eliminate the ambiguity between 'stative' and 'dynamic' meaning of the passive because it puts the emphasis on "the subject referent's condition (usually an unfavourable condition) (Quirk, 162). Therefore *get*-passive is formed only with dynamic verbs (Huddleston and Pullum, 1442).

[9] The chair <u>was broken</u>.[10] The chair got broken.

Huddleston and Pullum also stress the use of the *get*-passive in constructions that represent situations with "an adverse or a beneficial effect on the subject-referent, or on someone associated with it, rather than in passives representing purely neutral situations" (Huddleston and Pullum, 1442). The examples of such types of passives can be: *get sacked*, *get promoted, get broken* or *get published*. The similar characteristic as *get* in pseudo-passive constructions have *become, grow* and *seem*.

1.5.4 Passive combined with modals

Modal passives are formed by combination modal auxiliary + be + past participle. There are nine central modals in English.

- [11] The methods could be refined and made more accurate.
- [12] Care <u>must be taken</u> to ensure that the diffusion in stator is kept...

Modal passives are relatively frequently used in academic prose. The most common form of modal passive in academic prose is *can/could/may* + passive to express 'logical possibility' [11], whereas passives with *must/should* denotes 'a kind of collective/personal obligation' [12] and modals *will/would* are used to express prediction. Biber et al conclude the passive voice with modals is useful because it allows "the writer to avoid explicitly identifying who has the obligation" (Biber et al, 1999, 184).

1.6 Special types of passive formation

1.6.1 Prepositional passives

Prepositional passives are formed from prepositional verbs. Prepositional verbs consist of a lexical verb followed by a preposition. Dušková stresses the fact that the possibility to form the passive from the prepositional verbs depends on the relation between the verb and the preposition (Dušková, 251). According to Huddleston and Pullum prepositional verbs can be divided into two categories: (a) prepositional passives with a preposition specified by the verb or verbal idiom and (b) prepositional passives where the preposition is less constrained (Huddleston and Pullum, 1433).

[13a] *The plan <u>was approved of</u> by the committee*.[14b] *My hat <u>has been sat on</u>.*

Among the prepositional passives with a preposition specified by the verb or verbal idiom there are included passive constructions where the preposition is specified by a prepositional verb (*approve of*), or the preposition belongs to verbal idiom either in the form V + PP + PP (*look up to*) or V + NP + P (*lose sight of*). When the prepositional passive is formed, the preposition is stranded and the object of the preposition is placed in the position of the subject. Prepositional passives cannot be formed with transitive prepositional verbs (*She explained the problem to me - * I was explained the problem to*), but only with verbal idioms with an object NP followed by the preposition (*The organizers seem to have lost sight of the main goal – the main goal seems to have been lost the sight of*) (Huddleston and Pullum, 1433).

Another consideration that has to be taken into account is the differentiation of prepositional verbs with regard to their concrete/abstract meaning. Quirk emphasizes that only abstract, figurative use of prepositional passives allows the passive formation (Quirk, 163).

[15] *The problem was gone into. *The tunnel was gone into.*

The prepositional passives where the preposition is less constrained have a 'locative' meaning and the passive here introduces a prepositional phrase of place. Quirk states that

the function of this type of prepositional passives "is not merely to obtain end focus, but to imply that the subject of the passive clause refers to an object affected by the (unspecified) agent's action" (Quirk, 1165).

[16a] *They must have played on <u>this field</u> last week.*[17b] *This field must have been played on last week.*

According to Biber et al (Biber et al, 1999, 129), prepositional verbs can be divided into to two groups: (i) with a single prepositional object (V + prep + NP) and (ii) with a direct object and a prepositional object (V + NP + prep + NP). Prepositional verbs with two objects (ii) are common in the passive. Usually the noun phrase corresponding to the direct object is placed in the subject position, but some two-object prepositional verbs can have a prepositional object in the place of subject, because the direct object is a part of the idiom (*pay attention to, make a fuss, get hold of, give rise to, etc.*) (Greenbaum, 284).

The occurrence of prepositional passives is very common across all registers. In connection with academic prose prepositional passives have mostly the double object pattern and denote 'physical activities' (*be derived from, be used in, be applied to, etc.*) and 'mental states' (*be regarded as, are considered as, etc.*). It is due to the fact that academic prose concerns more with the relations among inanimate entities and the use of prepositional passive (and the passive in general) enables to avoid mentioning people responsible for the actions (Biber et al, 1999, 132).

1.6.2 Phrasal passives

Phrasal passives are formed from transitive phrasal verbs consisting of a verb and adverb particle. The passive structure then has no direct object (Greenbaum, 282). The most common phrasal passive constructions are be + carried out, set up or pointed out.

[18] The test will be carried out next week.

Contrary to prepositional passives, both phrasal verbs are extremely rare in academic prose, because they are used especially to express physical activities (Biber et al, 1999, 127). However, some forms of phrasal passives appear in academic prose on a regular basis (*be carried out or be set up*).

1.7 Function of the passive

In the active clause the subject is the doer, the causer or other originator of the action whereas in the passive clause the doer or the originator of the action is other than the subject. The omission of the agent has various functions. As mentioned previously there are two basic types of the passive: short passive and long passive.

1.7.1 Short passive

Short passive, i.e. the passive construction without an expressed agent, is preferred when the agent is unknown, irrelevant or unimportant. Short passive is used more frequently than the long passive, especially due to the fact that, as Dušková claims, the primary function of the passive is "the expression of the verbal action without mentioning the agent of the action" (Dušková, 259). Quirk estimates that the short passive represents almost 80 % of all passive structures (Quirk, 169). The choice of the short passive is governed by one of the following reasons:

- The short passive is used when the active subject (what would be the subject if we had chosen the active turn) is unknown or cannot easily be stated or the speaker have no interest in mentioning it:
- [19] The murderer was caught yesterday, and it is believed that he will be hanged.
- ii) The short passive is preferred when the active subject is self-evident from the context:
- [20] He was elected Member of Parliament for Leeds.
- iii) The short passive can express 'the general human knowledge' (Huddleston and Pullum, 1446).
- [21] Very little is known about the cause of the disease.
- iv) The short passive can be used to avoid mentioning the person responsible for some situation (Huddleston and Pullum, 1446).
- [22] Mom! The vase got broken!

v) The short passive is often used to avoid responsibility for giving advice, actions taken or disagreeable announcements. It provides an alternative means of general propositions beginning with *one*, *you* and it is typical especially in military and politics.

[23] Application forms can be obtained from the Departmental Secretary.[24] The delay to the material is regretted.

- vi) The short passive is used in scientific writing to avoid "making an explicit reference to the writer" and therefore it is regarded as more objective (Huddleston and Pullum, 1446).
- [25] The theory is widely accepted.

As previously mentioned the short passive is the most common type of passive construction and its main function is to leave out the initiator of the action, i.e. the agent. Veselovská and Emonds (Veselovská and Emonds, 30) call this process as 'deagentivisation', although in many cases the agent can be deduced from the context. Some explanation will be provided here to illustrate why is the short passive favoured.

According to Dušková the most frequent use of the short passive is in constructions that imply 'general human doer'. This type can be found especially in scientific style where the passive is preferred to active clauses with expressed agent '*man*' or '*people*' (Dušková, 259).

Another type of the short passive very often used in scientific style is so called '<u>authorial passive</u>'. In this passive the agent, usually the author of an article, book, report, scientific work etc., can be deduced but it is not explicit, because the focus is on the subject of the message (Dušková, 260).

The implied agent can stand for other identifiable or unidentifiable entity or person whose explicit expression is not important to the content of the message or it is intentionally avoided by the author. Sometimes the implied agent is indefinite, e.g. *someone, something* (Dušková, 260). Veselovská and Emonds denote this passive as 'hidden' (Veselovská and Emonds, 31), because in some instances the originator of the action is unknown, which is often the case of natural science, e.g. *genes are arranged in fixed positions* (Dušková, 260).

Contrary to the types of the short passive described above, there are also short passive constructions that have no implied doer. This is due to the fact that the agent is not evident from the context. Dušková describes that in connection with such passives there is almost no difference in meaning between active and passive constructions, because the active and passive clauses are more or less free variations, e.g. *the electric field is transferred/transfers along the lines of force* (Dušková, 260). She adds that this free variation between active and passive can be found in passives with an implied doer (*he counts/is counted among the best*) or even in passives with en expressed doer (*he was worried/he worried about his mother*) (Dušková, 260).

1.7.2 Long passive

Long passive is less common than the short passive, but contrary to the short passive it can be replaced by an active clause with the same meaning (Biber et al, 1999, 169). The choice of the long passive is often influenced by the three principles: information-flow principle, end-weight principle, topic/theme principle

- vii) According to the information-flow principle, new information is preferred to be placed at the end of a clause and the given information, i.e. the information already known, is put before new information (Biber et al, 1999, 169).
- [26] This painting is very valuable. It was painted by Van Gogh.
- viii) The long passive is preferred in accord with the **end-weight principle** when "a heavier (or more lengthy) element of the clause ... is placed at the end" (Biber et al, 1999, 169).

[27] The school will always be remembered and supported by the boys and girls who received their education here.

- ix) The long passive is used in situations where the greater interest is taken in the passive than in the active subject:
- [28] The house was struck by lightning.
- x) The long passive can be chosen to facilitate the connection of one sentence with another:

[29] He rose to speak, and was listened to with enthusiasm by the great crowd present.

It should be noted that the three principles mentioned are closely interconnected. Quirk claims that "there is commonly a one-to-one relation between 'given' in contrast to 'new' information on the one hand, and 'theme' in contrast to 'focus' or 'rheme' on the other" (Quirk, 1361).

The term 'theme' usually denotes the first element or the initial part of a clause and focus (or 'rheme') is placed at the end of the information unit, because "the new information ... is the focus of the message and it seems natural to place the new information after providing a context of given information" (Quirk, 1361). Moreover, the principle of end-focus correlates with the principle of end-weight, "since the new information (that is, with a longer, heavier structure) often needs to be stated more fully than the given" (Quirk, 1362).

1.8 Communicative dynamism

Communicative dynamism refers to the arrangement of the clause elements according to their communicative value within the utterance. It was introduced by Czech linguist Jan Firbas who integrated this term into Functional Sentence Perspective that determines the distribution of degrees of communicative dynamism of sentence members. Quirk describes communicative dynamism as "the variation in communicative value as between different parts of utterance that can range from very low, through medium to very strong stress where the subject, verb, and adverbial are uttered with sequentially increasing prominence, with the subject conveying the least information, the verb rather more, and the adverbial conveying most" (Quirk, 1356).

2 THE CZECH LANGUAGE

Compared to the passive voice in English, Czech passives have two different structures, namely periphrastic passive and reflexive passive.

2.1 Periphrastic passive

The periphrastic passive is composed of the verb $b\acute{y}t/b\acute{y}vat$ and a passive participle of a lexical verb. This construction corresponds to the English passive structure be + past participle. The periphrastic passive denotes a state as a result of some activity, it is typical for administrative and scientific style and it is often regarded as a 'bookish' (Havránek a Jedlička, 105).

Dušková claims that resemblance between English and Czech in formation of the passive is connected only with monotransitive verbs, i.e. verbs with a direct object. The passive clause with a monotransitive verb can have the object from the active clause in the position of the subject (Dušková, 250). For example:

[30] Some details have been omitted. – Některé podobnosti byly vynechány.

2.2 Reflexive passive

The reflexive passive structure consists of a lexical verb and reflexive particle '*se*' and expresses the continuity of an action (Grepl, 2000, 324). Reflexive passive in Czech language is regarded as rather problematic, especially with regard to its multiple functions. The use of the reflexive passive is restricted only to 3rd person with an inanimate subject (Grepl, 2000, 324). Moreover, other aspects also limit the formation of the reflexive passive. The reflexive form implies the existence of a personal agent (*jedlo se, pilo se*) but this agent cannot be expressed explicitly. Therefore, the verbs without a personal agent cannot form the reflexive passive (*pršet, sněžit*). Moreover, the verbs with a reflexive pronoun se cannot be transformed into passive (*bát se, přát si*) (Komárek, 177).

The reflexive passive is always dynamic and is usually formed from imperfective verbs (Komárek, 178). Thus, the use of periphrastic or reflexive passive denotes the state or the action, in English this distinction is missing in the passive and is usually implied only from the context (Dušková, 262).

In some cases the use of a reflexive form is ambiguous, because it can be either a part of a reflexive pronoun or a passive. The indicator for distinction is the possibility to form a reflexive passive with a subject transformed from a patient (*Dům se staví*). In other cases (*šlo se tam dlouho*) a reflexive form has an active meaning (Komárek, 176). The reflexive passive in Czech has no corresponding passive equivalent in English. It is translated by an active clause with general human agent (Dušková, 259).

2.3 Function of the Czech passive

According to Dušková, the most frequent English passive sentences without the explicit agent imply a 'general human agent'. This type is used mainly in academic style. In spoken English a passive construction with a general human agent has often an active equivalent. In Czech language, this type of 'agentless' clause can be expressed by both the reflexive and periphrastic passive.

[31] This theory is generally accepted.

[32] Tato teorie se všeobecně přijímá. / Tato teorie je všeobecně přijímána.

English passive construction always requires a subject as part of a clause whereas in Czech passive constructions can be formed without a subject. This impersonal, subjectless passive has no equivalent in English (Dušková, 265) but it can be expressed in different ways. One possibility is the use of the prepositional passive. The formation of prepositional passive is, on the other hand, not possible in Czech. In Czech the prepositional object remains unchanged in passive while in English the object in the active clause becomes the subject in the passive and a preposition immediately follows the verb (Dušková, 251).

[33] S touto možností se počítalo.

[34] This possibility has been reckoned with.

If the Czech impersonal passive clause has no object the English subject can be expressed either depending on the context (only with transitive verbs) [35] or the active clause is used with other general or concrete subject [36] or with a construction '*there*' in a place of a subject [37] (Dušková, 265).

[35] Na noc se nezamyká. - The house/the door/the gate is not locked for the night.
[36] Četlo se při svíčkách. - We/people used to read by candlelight.
[37] Dosud se nebojovalo. - There had been, as yet, no fighting.

Regarding the use of the long passive, certain differences between English and Czech language can be recognized. Due to the fixed word order in English the subject is always

placed at the beginning of the sentence. As Dušková points out that "in English the use of the long passive enables preverbal position of a patient and postverbal position of an agent" (Dušková, 261). She continues by stating that "in Czech the same structure (preverbal position of a patient and postverbal position of an agent) can be achieved by the change in a word order in the active sentence, without the change in the syntactic construction. This active sentence is then a counterpart to the English long passive, especially if the agent is animate" (Dušková, 261). Thus the Czech sentence with a thematic object in the initial position corresponds to the English passive sentence with an expressed agent. Thus the Czech active sentence corresponds to the English passive sentence and both sentences have a 'theme' in the initial and a 'rheme' in the final position though expressed by different sentence members.

[38] The first marketable typewriter was produced by E. Remington and Sons.
[39a] První prodejný psací stroj byl vyroben E. Remingtonem a syny.
[39b] První prodejný psací stroj vyrobil E. Remington a synové.

2.4 Usage of the Czech passive

Kopečný (Kopečný, 115) differs three different situations where the passive can be formed:

- i. The passive formed with the transitive verbs this is the passive in the strict sense, where the object becomes the subject in the passive.
 - [40] Dům je opravován, dům se opravuje
- ii. The passive formed with the transitive verbs with the direct object in such structures the object after the passivisation remains at the same place in the clause, the subject is 'deagentivisited', which results in the subjectless clause. Reflexive passive is more common:

- iii. The passive formed with the intransitive verbs the passive is constructed by 'deagentivisation', the periphrastic passive is rare.
 - [42] Ślo se cestou necestou X tady bylo chozeno.

^[41] Bývá mu spíláno, bylo tím hýbáno X bude se toho zneužívat, mluvilo se o něm

3 ENGLISH AS A SCIENTIFIC LANGUAGE

Scientific writing, or more precisely English for science and technology (EST), is recognized as an important subdivision of English for academic purposes (EAP) that is part of a larger linguistic area called English for special/specific purposes (ESP). EST texts are characterized by the neutral, unemotional and objective tone of scientific and academic prose, but there are differences in scholarly prose used in learned journals compared with that of popular science publications (Grambley and Pätzold, 157).

Although ESP/EST is also used in spoken form (scholarly colloquial or technical training classes, salesroom explanations), it is more strongly oriented towards written forms (Grambley and Pätzold, 158). ESP/EST has several features in common with General English, namely the grammar and the processes of morphology and word formation. On the contrary, the differences can be found in:

- i. Frequencies in the use of individual syntactic and morphological constructions as well as word formation processes;
- ii. The selection of vocabulary will be influenced by the field;
- iii. Terminology will be at least partially standardized to eliminate ambiguity;
- iv. Certain conventions will be observed with regard to the elements and structure of written texts;
- v. Special visual phenomena (symbols, graphs, tables, etc.) may be employed in written texts that are not a part of everyday English; (Grambley and Pätzold, 158).

3.1 Lexical features of EST

The vocabulary of EST is the most obvious distinguishing feature, because it often contains words which cannot be found outside the given field. The lexicon of EST is characteristic by the following features: (i) it is international, often based on Greek or Latin elements; (ii) it is standardized and as unambiguous as possible; (iii) it is non-emotive in tone; (iv) it favours certain processes of word formation; (v) it incorporates symbols (Grambley and Pätzold, 162).

In relation to these features, EST is typical by the use of terms, which are "special items of vocabulary whose meanings are fixed by convention in order to avoid ambiguity" (Grambley and Pätzold, 162). The process of coining new terms includes borrowing and word formation, which are of central importance. Terms can be borrowed from General

English or derived from other languages, especially Latin and Greek. In addition to this, EST also uses the normal derivational processes of General English, such as: (i) agglutination (prefixing or suffixing); (ii) conversion (*to dimension – dimension*); (iii) back formation (*to lase – laser*); (iv) clippings (*lab – laboratory*); (v) abbreviations (*FBR – fast breeder reactor*); (vi) acronyms (*laser*); (vii) blends (*pulsar – pulsating radio star*); (viii) composite forms (*aeroplane*) (Grambley and Pätzold, 163).

3.2 Stylistic features of EST

Grambley and Pätzold list five basic message types: dialogue, memo, reports, schedules, and essays. Apart from the dialogue, which is an exclusively spoken form, the other types are oriented towards the formal, the written, and objectivity and they can be found in published writing. More popular science texts will be relatively more accessible to the general public and hence less specifically cases of ESP (Grambley and Pätzold, 165).

ESP texts are also typical by their relatively strong structure that is usually composed of: an introduction, a review section, a method part, a result section, and a discussion part (Grambley and Pätzold, 165). In order to sustain the integrity of ESP texts, several cohesive devices are used, such as:

- i. The use of referential vocabulary (adverb, demonstratives)
- ii. The deictic use of tense and voice
- iii. The employment of enumeration, advance labeling, reporting, recapitulation, hypothesizing and rhetorical questions
- iv. Adopting recognizable patterns of logical development, such as problem and solution, statement and justification, generalization and exemplification (Grambley and Pätzold, 166).

3.3 Syntactic features of EST

Regarding the syntactic aspect, English for science and technology has some typical characteristics which include:

- i. The greater frequency of the passive
- ii. The greater frequency of non-defining relative clauses compared to specific ones

- iii. Specific, frequently employed, rhetorical devices such as anaphora, parallelism, parenthetical elements, emphatic inversion, rhetorical questions and ellipsis
- iv. Nominal style
- v. The selections of pronouns employed (more frequent than in General English: *we, this/these*; less so: *I, he*; and even less so *she, you*)
- vi. The occurrence of new plurals (e.g. *fats, oils, greases, etc.*) and Latin and Greek plurals (*bacterium/-ia*)
- vii. The use of telegram style

Apart from the passive voice, EST is characteristic by nominal style, which is the tendency to use the combinations of function verb + noun instead of simple verb (*to hypothesize – to make a hypothesis*) or to substitute clauses with finite verbs by complex structures composed of nouns and noun adjuncts (*because the sphericity of the retinal surface – because of the sphericity of the retinal surface*) (Grambley and Pätzold, 161). As Grambley and Pätzold further emphasize, nominalization is a part of the theme-rheme structure of English because it enables to put information shared by sender and addressee in pre-nominal position and what is new and is being introduced then occurs in post-nominal position (Grambley and Pätzold, 161).

3.4 Use of the passive in EST

Passive voice is the most frequently used in academic writing across different registers. Biber et al reveal that passive structures represent about 25% of all finite verbs in academic prose (Biber et al, 2002, 476) and Grambley and Pätzold state that the number of passives among finite verb forms in academic writing is even higher, ranging from on quarter to one third (Grambley and Pätzold, 159). The passive voice in academic texts is preferred for several reasons. One of the major reasons is that the use of passive voice gives the author possibility "to step back so that the work reported on stands at the centre of attention" (Grambley and Pätzold, 159). As Biber et al point out this process enables that the agent of the verb, usually the doer of the action, can be demoted and thus the topic status be given to the affected agent (Biber et al, 2002, 476). These passives are called 'author's passives', because they involve the action of the author(s) and they represent about one third of all passives used in academic writing (Grambley and Pätzold, 159).

[43] Several interviews were conducted to substantiate this hypothesis.

[44] We conducted several interviews...

It should be noted that short passives are much more frequent than long passives. Biber et al. describe short dynamic passives as 'impersonal passives' due to the human nature of the agent in the corresponding active sentence (Biber et al, 2002, 943). The short passive allows omitting mention of the specific researcher(s) and is used in long stretches of text (Biber et al, 2002, 943).

Contrary to short passives, the occurrence of long passives in academic text is not so common because they carry all the information expressed by the corresponding active counterpart and are "hardly ever maintained in the long stretches of text" (Biber et al, 2002, 943). The passive is also preferred in situations that are difficult to describe by active constructions.

[45] Very little is known about the cause of the disease.

From lexical perspective, Biber et al. enumerate the most frequent verbs used in passive voice in academic prose. According to the study passive structures such as *be* + *achieved*, *associated*, *defined*, *expressed* or *related* can be found in about a hundred from million constructions and another 50 constructions as *be* + *applied*, *calculated*, *chosen*, *derived* or *suggested* occur over '40 times per million words' (Biber et al, 2002, 479).

Biber et al conclude by stating that short and long passives are similar "in their tendency to place given information in subject position" (Biber et al, 2002, 939). It is closely connected with 'the thematic focus' of a sentence, because the topic in English sentence occupies the initial position and what is said about it is placed at the end of a sentence. Therefore a direct or an indirect object as the topic in passive structures occupies 'the initial thematic position' which "helps to realize the desired thematic focus of the sentence" (Grambley and Pätzold, 159).

II. ANALYSIS

INTRODUCTION

The aim of the practical part of this bachelor thesis is to describe how the passive voice is being dealt with in scientific works written originally in English and find out the ways how it is translated into Czech language. Another aim is to find out if there can be traced some aspects with regard to the use of the passive voice in scientific text originally written in English and their Czech translations that can be similar, although it can be expected that the scientific texts and the use of the passive voice will be different.

The research sample used for the purpose of this thesis is based on 12 extracts of 7 different authors and their Czech translations, namely George James Fraser – The Golden Bough, Bertrand Russell – An Inquiry into Meaning and Truth, Stephen Hawking – A Brief History of Time, Thorsten Veblen – The Theory of Leisure Class, John Dewey – Democracy and Education, Charles Wright Mills – The Power Elite, Charles Darwin – The Expression of the Emotions in Man and Animals. Texts cover various fields of scientific knowledge, particularly biology, sociology, philosophy, linguistics and anthropology. In the original texts I have found and analyzed more than five hundred passive constructions.

Firstly, I would like to provide the analysis of English passive constructions based on the theory described in the previous part of the thesis and to relate passive forms to different functions of the passive. Secondly, English passive constructions will be compared with their Czech equivalents.

4 FORMS OF THE PASSIVE ANALYZED

Regarding the form of the passive, the main distinction used here is between short and long passive.

4.1 Short passive

According to many linguists (Quirk, Grambley and Pätzold), the passive voice predominantly occurs in constructions with unexpressed agent. They estimate that short passive accounts for almost 80% of all passive clauses. This estimation is in accordance with the findings of my analysis, since roughly four out of five passive structures in the corpus had the agent unexpressed. This result verifies the fact that the main function of the passive is the omission of the agent, for example:

[46] After all allowance has been made...

[47] As has already been noticed under the head of manners...

[48] And it is not denied that effects having some substantial aesthetic value are sometimes attained.

When the fact why is the short passive used so frequently is considered, the first assumption should be made regarding the agent of the clause. The agent in the sentence with the short passive is omitted, because its identity is unknown, unimportant, or not evident from the context. But contrary to this hypothesis, in majority of the short passive clauses it was possible to deduce the agent, although it was not explicitly expressed. This possibility results from the two main functions of the short passive in scientific texts, namely to express of 'general human knowledge' and to avoid mentioning of the author of the text, so called 'authorial passive'.

Regarding the use of the shot passive in constructions implying general human knowledge, several examples found in the texts can be provided:

[49a] It is said that Galileo demonstrated...

[50a] As tabooed persons are believed to be in a perilous state...

[51a] Education in accord with nature was thought to be the first step in ...

In every sentence above the agent is not expressed but it can be deduced. As mentioned in the theoretical part, the short passive expressing the general human knowledge can be transformed into active clause with expressed agent '*people*' or '*man*':

[49b] <u>People</u> say that Galileo demonstrated...

- [50b] People believe that tabooed persons are in a perilous state...
- [51b] <u>People</u> thought that education in accord with nature was the first step in...

In these examples the nature of the agent also results from the semantic character of the verbs (*think, assume, say, believe*) because these verbs require human agent and it is logical to expect that only human beings are able to *understand, think, believe, etc.* Therefore the agent represents 'general human doer'.

Another very frequent function of the short passive, especially in scientific texts, is the use of 'authorial passive'. As described previously, this type enables the author "to step back so that the work reported on stands at the centre of attention" (Quirk, 169). The examples taken from the corpus and representing this type can be:

[52a] To the illustrations of these general principles which have been already given...
[53a] And the examples will be chosen with special reference to...
[54a] Subsequent chapters will be devoted to making explicit the implications...
[55a] Much which has been said so far is borrowed from what Plato...

In these examples it can be seen that the short passive is preferred when the author wishes not to mention himself/herself as the originator of the action and focuses primarily on the action itself. From the context it is obvious that the author is responsible for the actions described. Again, it can be clearly seen, when the passive clauses are turned into active, for example:

[52b] To the illustrations of these general principles which <u>I</u> have already given to you...

[53b] And <u>I</u> will choose the examples with special reference to...
[54b] <u>I</u> will devote subsequent chapters to making explicit the implications...
[55b] Much which <u>I</u> have said so far <u>I</u> borrowed from Plato...

As can be observed, in the active sentences the use of the pronoun *I* distracts the attention. Therefore it is preferable to use the short passive because "more objective description of reality is achieved and a direct reference to the person responsible for some action is avoided" (Fernández, 5). Thus the authorial passive is employed when the author wants to leave the agent unspecified because it is unneeded or implicit in the context.

Another instances when the short passive is used, are passive constructions where the agent is 'hidden', because the originator of the action is unknown or its explicit expression is not important, for example:

[56a] A few other children have been observed for me...
[57a] And whenever his local habituation is pictured in poetic poetry...
[58a] When the famous Dr. Johnson was told of Berkeley's opinion, he cried...

Dušková states that the mentioning of the agent in such cases is not relevant for the message of the utterance or it is intentionally avoided by the author (Dušková, 260). Usually the implied agent can be expressed in the active clause by indefinite pronoun (*someone, something*):

[56b] <u>Someone</u> observed a few other children for me.
[57b] And whenever <u>someone</u> pictures his local habituation in poetic poetry...
[58b] When <u>someone</u> told Dr. Johnson of Berkeley's opinion, he cried...

The other frequent usage of the short passive is also in structures where no agent can be implied and therefore it is impossible to manage the transformation from passive to active. Examples can be:

[59a] Part of the pulse is reflected back at the event and...

[60a] But the taste to which these effects of...is a taste which **has been formed** under the selective guidance of a canon of propriety...

As pointed out by Dušková, such passive constructions are similar to active structures without any significant change in meaning.

[59b] Part of the pulse reflects back at the event and...

[60b] But the taste to which these effects of... is a taste which **has formed** under the selective guidance of a canon of propriety...

Regarding the utilization of the short passive in scientific texts, the passive structures with unexpressed agent are used to maintain the coherence of the utterance in long stretches of texts which enables to preserve the discursive continuity of speech acts (Fernández, 5). The examples can be:

[61] Whilst thus screaming their eyes **are** firmly **closed**, so that the skin round them **is wrinkled**, and the forehead **contracted** into a frown.

[62] The various muscles of the face which have been strongly contracted, still twitch a little, and the upper lip is still slightly drawn up or everted...

In these examples [61] and [62] it is obvious that the short passive is used to link the clauses or sentences without violating the cohesion of the text. Biber et al state that "the passive serves the discourse functions of cohesion and contextual fit through ordering of information" (Biber et al, 2002 935).

In English language the information which comes first in a sentence is its theme and what is placed at the end is the rheme. Biber et al (Biber et al, 2002 939) claim that "it is the verb which most of the time conveys new information" and therefore it is natural for the information in the sentence to progress from old to new, which is achieved by the use of the passive with unexpressed agent. Firbas adds that "all finite verbs convey irretrievable information, but a finite verb completes the development of the communication and hence serves as the most dynamic element only if it operates in the absence of an element expressing a phenomenon to be presented or one expressing a specification. In this way, such elements act as successful competitors of the finite verb in the dynamics of communication" (Firbas, 7).

[63] ...then its regulations could be preserved.
[64] The order and unity of the whole would be maintained.
[65] This impression must now be qualified.

4.1.1 Translation of the short passive

Regarding the translation of the short passive into Czech language, the main attention will be paid to the short passives expressing 'general human knowledge' and 'authorial passives', since their occurrence in scientific texts is the most frequent.

4.1.1.1 General human knowledge:

Short passive expressing the general human knowledge was predominantly translated via using reflexive passive in Czech. Although sentences can be translated also by active voice in Czech, the reflexive passive was preferred, presumably due to the preservation of the impersonal character of the passive, because it enables not mentioning of the agent when the reflexive passive is used. This can be regarded as the typical feature:

[66] Traduje se, že dokázal neplatnost...

[67] Protože se věří, že tabuizované osoby jsou ve stavu nebezpečí.
[68] věřilo se, že výchova shodující se s přírodou je...

4.1.1.2 Authorial passive:

On the other hand, for the translation of the authorial passive into Czech mainly active voice and periphrastic passive were preferred. When the active voice was used, the person was either in 1st person singular (I - [69], [70]) or 1st person plural (we - [71]):

[69] Pro ilustraci těchto obecných zásad, které jsem uvedl...
[70] Příklady volím se zvláštním zřetelem k...
[71] Zde netvrdíme v podstatě nic jiného, než že...

The use of the Czech active voice for the translation of the short authorial passive is beneficial because flexible word order in Czech active clause enables the same arrangement of the sentence elements in accordance with FSP linearity principle, which is in English achieved by the use of the passive construction.

When the periphrastic passive was used, the order of sentence members was retained and was the same as in original English sentence. Thus, the same communicative value of the sentence was achieved:

[72] Následující kapitoly budou věnovány výkladu o demokratických ideách...

I have come across a sentence with more passive structures, where the first passive clause was translated by using active voice and the second clause by the periphrastic passive.

[73a] Mnoho z toho, co jsme až dosud řekli, je vypůjčeno z toho, čemu Platón ...

Such a combination of different translations in one sentence was preferred because by using the same structures, either both active or both in periphrastic passive would seem awkward:

[73b] Mnoho z toho, co jsme až dosud řekli, jsme si vypůjčili z toho...
[73c] Mnoho z toho, co bylo až dosud řečeno, je vypůjčeno z toho...

4.2 Long passive

Quirk states that the long passive can generally be replaced by an active clause with the same meaning (Quirk, 169). In the corpus analyzed more than one hundred passive clauses with the expressed agent have been detected. This number accounts for approximately 20 % of all passive structures, which is in accordance with general estimations. The following analysis shows the clauses where the agent is expressed and tries to provide some explanation for their being mentioned.

4.2.1 Function of the long passive

As mentioned in the theoretical part, the use of the long passive is not so frequently distributed as the short passive. However, the long passive is being preferred for several reasons. The long passive is the exact reproduction of the active clause but presented in a different order and its choice is influenced by the principle of information flow, the principle of end weight and the topic/theme principle (Biber et al, 1999, 169).

Regarding the **end-weight principle**, the long passive is preferred when the subject tends to be shorter than the agent by-phrase or when the agent needs to be specified in order to understand the full meaning of utterance. For example in the clauses:

[74] A partial solution to this problem **was found** by <u>the Danish scientist Niels Bohr</u> in 1913.

[75] A similar point **was made** a few weeks later by <u>a leading French mathematician</u>, <u>Henri Poincare</u>.

The principles influencing the choice of the long passive are in reciprocal interaction. This can be seen in the example [74] where the subject is equally long as the agent *by*-phrase. In such cases the position of the subject and the agent in the long passive is influenced by the **information-flow principle**. This principle means that the information already known is placed at the beginning of the clause and the information, which is new, is put towards the end. In the example [74] the discourse-old status of the information of the subject in the sentence is signaled by the use of cohesive devices (here the demonstrative pronoun *this - this problem*) which refer to the previous mention of this information in the text.

Moreover, the principles of end-weight and information-flow tend to support one another, because a discourse-old element will generally be shorter than a new element. Biber et al point out that the subject is often a personal pronoun [76], which is a clear instance of given information, referring back to someone or something already mentioned (Biber et al, 1999, 169).

[76] It is represented in fig. 2.

Furthermore, according to Biber et al, in majority of clauses the subject differs more in information status than the agent phrase because about 90% of the agent phrases bring in new information (Biber et al, 2002, 941).

4.2.2 Translation of the long passive

The use of the long passive is not so distributed as the short passive. However, the long passive is being preferred for several reasons. Firstly, the English passive with expressed agent enables the preverbal position of the patient and postverbal position of the agent which is used as a means of functional sentence perspective (Dušková, 261). This can be seen when the example [74] is translated into Czech [77a, b]. In Czech translation

the same communicative dynamism can be achieved by active construction, especially if the agent is animate. This translation was found in the corpus:

[77a] Částečně tento problém vyřešil roku 1913 dánský vědec...

Besides, the same meaning and communicative dynamism in the Czech language can be expressed by passive clause with different word order:

[77b] Částečně byl tento problém vyřešen roku 1913 dánským vědcem...

In both English and Czech sentence the distribution of communicative dynamism is the same, i.e. theme occupies the initial and rheme in the final position.

In passive constructions with inanimate agent there are again two possible ways of translating the long passive into Czech. The first translation is with the inanimate agent as the subject after the active verb:

[78] Head of the middle-class household **has been reduced** by <u>economic</u> <u>circumstances</u>... - Hlavu domácnosti ve střední třídě **přiměly** <u>ekonomické okolnosti</u> k tomu, aby...

[79] ...consumption of ... as **is demanded** by <u>the standard of pecuniary decency</u>... spotřebu ... v takových rozměrech, jaké **požaduje** <u>kritérium slušného majetkového</u> <u>postavení</u>...

The second possibility is to preserve the passive in Czech as well, which is according to Dušková more frequent:

[80] The place of the individual in society **should not be determined** by <u>birth</u>. - Místo vykázané někomu ve společnosti **nesmí býti určováno** <u>rodem</u>.

[81] Their limit **is fixed** by <u>their lack of reason</u>. - Jejich hranice **je určena** <u>nedostatkem</u> <u>rozumu</u>.

4.3 Stylistic use of short and long passive

Although the analysis was based on the corpus which comprised predominantly of various extracts of texts a few conclusions can be made. As mentioned above, the short passive was very frequently used in the long stretches of texts. On the contrary, the long passive was utilized in such long stretches of text rather seldom. According to the assumptions the short passive, namely the authorial short passive, was predominantly employed in the introductory part, where the writer presented the readers with the purpose of the investigation or research. Such examples can be:

[82] My observations will be arranged according to...[83] Tabooed things will be illustrated in the present chapter...

Furthermore, the higher percentage of the authorial passive was employed in the result section, in which the author described the findings of the research conducted:

[84] After all allowance has been made...[85] Pretty much that is here insisted on is that...

Regarding the use of the short passive expressing the general human knowledge, it was distributed rather equally throughout the text, although one conclusion can be made. This type of the short passive was predominantly expressed by the passive construction, containing the statal verbs, usually *say, assume, suppose, know, etc.*:

[86] In the democratic society of publics it was assumed that...
[87] This idea ... is known as Newton's first law.
[88] It is said that Galileo demonstrated that Aristotle's belief was false...

Finally, the short passives with the 'hidden' agent or the structures, where no agent is implied, were employed especially in parts of the text, in which the author evaluated criteria or described the procedures.

4.4 *Get*-passive

Concerning the *get*-passive, no example among more than five hundred passive constructions was found. This results from the fact that the use of the *get*-passive is restricted primarily to informal English. Apart from this, the *get*-passive can be formed only with dynamic verbs and since the scientific language is aimed predominantly at the description of facts, which is achieved via statal verbs, the use of the *get*-passive in scientific English is restrained. Moreover, the passive clauses constructed of the verbs *become*, *grow* or *seem* were not found in the corpus.

4.5 **Prepositional passive**

With regard to the prepositional and phrasal passives, they were used very frequently in the texts. But it should be added that the occurrence of the prepositional passives was much higher in comparison to phrasal passives. It is due to the fact that prepositional passives are very common in all registers, including scientific texts, compared to phrasal passives which prevail in conversation and fiction, although some exceptions can be found (Biber et al, 1999, 128). Prepositional verbs are often used in the passive form. They include structures such as *be based on/upon, be attributed to, be viewed as, be associated with, classified as, be composed of, etc.*, many of these were found in the corpus. The use of the prepositional passive in scientific writing is beneficial because the originator of the action can be omitted and the focus placed on relations among inanimate entities. Such passives mainly denote physical activities and mental states. Examples of prepositional passives can be the following:

- denoting physical activities:

- [89] it has to be added to and subtracted from...
- [90] such as wreaths are made of...

- denoting mental states:

[91] Where only a single outcome has been thought of...

[92] Such an end can only be insisted on...

Several prepositional passive clauses were complemented by both direct and indirect object so they can be denoted as ditransitive prepositional passives:

[93] The rite was sometimes interpreted as a commemoration.[94] These muscles will generally be spoken of as the orbiculars...

From the view of the functional sentence perspective, it is more beneficial to express that "these muscles will be generally spoken of as orbiculars" or "the rite was sometimes interpreted as a commemoration" than to weaken these facts by stating that "I (the author) will generally speak of these muscles as the orbiculars" or "people/scientists sometimes interpreted the rite as a commemoration". As can be seen unnecessary information (I - the author, people/scientists) makes the sentence sound heavier and the communicative dynamism of the sentence is thus violated. Therefore it is not so important if the preposition is stranded or not, but if the order of the clause elements according to their communicative value is preserved. As Quirk claims, "the function of the passive is not merely to obtain end focus, but to imply that the subject of the passive clause refers to an object affected by the (unspecified) agent's action" (Quirk, 1165).

4.5.1 Translation of the prepositional passive

As Dušková (Dušková, 251) points out the prepositional passive does not exist in Czech language. Therefore the prepositional object remains unchanged and the verb forms the 'subjectless' passive. This construction is expressed by the reflexive passive in Czech:

[95] kde **se myslilo** jen na jediný výsledek...

[96] takový cíl je tedy něco, na čem se může jen pevně lpěti...

4.6 Phrasal passive

As Biber et al point out the occurrence of the phrasal and phrasal-prepositional verbs in scientific texts is marginal, compared to prepositional verbs (Biber et al, 1999, 127). It is due to their restricted meaning since the phrasal and phrasal-prepositional verbs denote mainly physical activities and scientific texts deal predominantly with the description of the reality and processes studied. However, some phrasal passives are used in this type of writing and they were found also in the corpus: [97] Conceits may be pointed out.

[98] Resolution that is then carried out by public action...

Contrary to prepositional passives, phrasal passives were not so frequently distributed throughout the corpus. Biber et al count be pointed out and be carried out among the most frequent phrasal passives used in scientific texts (Biber et al, 1999, 129). Similarly to prepositional passives, when the phrasal verb is passivized the object of the active clause becomes the subject of the passive structure. Thus, the communicative dynamism of a sentence is retained and the redundant information is omitted.

4.7 Passive with modals

In the corpus, more than one fifth of all passives was combined with modals and semimodals, which is rather a high percentage compared to the number of all passives. There were found passive structures combined with all nine central modals in the scientific texts. *May, can, must, will, would,* and *could* were the most frequently used central modals, especially *may* which represented nearly one third on all modals in the text:

[99] It is only the observations of the world that may be described in those terms.

[100] If a powerful ruler should form a state after these patterns, then its regulations could be preserved...

[101] Such an end can be only insisted upon.

[102] The rule holds that these offices **must be performed** in some such manner.

According to Biber et al, modal *may*, together with *could* and *might* are used almost exclusively for showing logical possibility (Biber et al, 1999, 176), which can be seen in examples [99] and [100]. As can be observed, the combination of modal with the passive structure expresses the possibility of the action to be performed. If the sentences would be turned into the active the communicative dynamism of these sentences would be completely changed and the FSP-linearity principle would be violated by inserting the subjects, which were omitted in the passive:

[100b] If a powerful ruler should form a state after these patterns, then <u>he</u> could preserve its regulations.

[101b] <u>I (the author)</u> can only insist upon such an end.

By using active subjects these sentences sound redundantly heavier. Similarly, the use of other central modals in combination with passive voice is preferred to active counterparts for the same reasons, although it denotes different levels of modality. *Must* [102] and *should* are employed in scientific writing for expression of 'collective obligation' (Biber et al, 1999, 184).

4.7.1 Translation of the passive with modals

The translation of the passive combined with modals and can be transformed into Czech via wide range of constructions. It is noteworthy that the majority of these structures was translated into Czech equally by periphrastic passive and different constructions, with reflexive passive representing about one tenth of the Czech passive. This result can attributed to the fact that most of the passive verbs combined with modals and semi-modals are statal verbs, which are very rarely translated via the reflexive passive, for example:

[103] Such an end can be only insisted upon. - Takový cíl je tedy něco, na čem se může jen pevně lpěti.

Among the passive clauses which were translated by periphrastic passive were for example:

[104] The rule holds that these offices **must be performed** in some such manner. – Pravidlo že tyto úřady **musí být vykonávány** takovým způsobem...

[105] ...annual kingship, which **may have been awarded** as a prize... - závodem o roční království, které **mohlo být udělováno** jako cena...

Several passive clauses with modals were translated into Czech by using the word '*lze*' + infinitive. Grepl classifies them as 'modal modificators' and they express possibility, desirability or necessity of the action (Grepl and Karlík, 153), for example:

[106] ...one race, which may be considered a part of the... - závod, který lze považovat za součást

[107] ... as may be seen in the photographs. - ... jak lze vidět na fotografiích.

[108] Law cannot be preserved without principle. - Zákon nelze zachovat bez principu.

Similarly, the passive construction with modals can be translated via so called 'modal predicators'. They have the same meaning as modal modificators, but they can be followed by both infinitive and subordinate clause (Grepl and Karlík, 154). Examples found in the texts are '*je třeba*' and '*je možno*':

[109] Gentle blood may be transmitted without goods. - Urozenou krev je možno předávat bez dostatečného množství statků.

[110] This impression **must** now **be qualified**. - Tento dojem **je** nyní **třeba** podrobněji vyznačiti.

4.8 Ditransitive passives

Another interesting feature is the formation of the passive with ditransitive verbs, i.e. verbs carrying two objects, one direct and another indirect. When transformed into the passive, either of the two objects can become the subject of the clause. Based on this differentiation Huddleston and Pullum (Huddleston and Pullum, 1433) distinguish between first ([111] - with indirect object as the subject) and second passive ([112] - direct object as the subject) and they observe that the first passive is more common variant with ditransitive verbs. Both forms were found in the corpus:

First passive:

[111] Einstein was awarded the Nobel Prize for his contribution to quantum theory. Second passive:

[112] In Crete sacrifices were offered to Menedemus.

When the transition into active voice is made, the clauses would be:

[111a] The Academy **awarded** Einstein the Nobel Prize for his contribution to quantum theory.

[112a] People offered Menedemus sacrifices.

From the structure of the active clause it can be seen that the subject is the agent performing the action, the direct object is the object affected by the action and the indirect object is the recipient of the action. Dušková states that the indirect object is usually human agent which is put before the direct object and has a semantic role of a factual or intended recipient of the verbal action. And more accurately, as the result of the verbal action the recipient holds (or do not) in possession the direct object (Dušková, 433). When the structure is passivized and the first passive [111] is formed, which means that the indirect object (*Einstein*) is placed in the subject position, then the recipient becomes also the patient. The subject of the passive structure formed by ditransitive verb is chosen in accordance with functional sentence perspective, which means that the object with less degree of communicative dynamism is placed in the subject position in the passive construction (Dušková, 252).

4.8.1 Translation of the passive formed from ditransitive verbs

Regarding the translation of these structures into Czech language via periphrastic passive, the subject of the passive clause can be formed only from the direct object, as can be seen in the translation of [111]:

[113] Nobelova cena mu vlastně byla udělena právě za výzkumy na tomto poli.

In this sentence the indirect object '*mu*' is expressed by personal pronoun in dative (3rd case). It is also the recipient of the action and has the semantic role of the patient. Other possibility is the expression of the English passive via reflexive passive in Czech, as in translation of [112]:

[114] Na Krétě se přinášely oběti Menedémovi.

Although the Czech verb is not the exact equivalent, the indirect object is also expressed by the noun in dative (*Menedémovi*).

4.9 Summary of translation of the passive voice into Czech

The English passive constructions can be translated into Czech language via periphrastic and reflexive passive or by the use of different constructions. After the comparisons of all passives and their translations have been made and numbers were counted, the results were:

4.9.1 Translation via periphrastic passive

More than 40% of the passive voice constructions in English texts were translated via periphrastic passive. It means that the passive voice was preserved in Czech translation, although in few cases the translation of the passive verb was changed, but these verbs are not included in the analysis. Here are some examples:

[115] He was severely criticized for this irrational belief by many people. – Za tento nelogický krok byl mnoha lidmi tvrdě kritizován.

[116] This idea **is known** as Newton's first law. - Tato myšlenka **je známa** jako Newtonův první zákon.

4.9.2 Translation via reflexive passive

About one quarter of all passive constructions were translated by the reflexive passive, for example:

[117] This showed that ... as **was** previously **thought**. – To ukazovalo, že ... jak **se** dříve **myslelo**.

[118] A mode of execution **is devised** by which ... - **Vymyslí se** takový způsob popravy, aby...

As can be seen from examples above the use of the reflexive passive in Czech translations is beneficial when compared to potential use of the periphrastic passive. If the periphrastic passive had been used the translation of [117] and [118] would have seemed awkward, archaic or rather bookish:

[117b] To ukazovalo, že ... jak bylo dříve myšleno.
[118b] Bude vymyšlen takový způsob popravy, aby...

The use of periphrastic passive also enables the translator to leave the subject position empty:

[119] Term is commonly used. – Termínu se běžně užívá.

[120] It was plainly seen that... - Vidělo se docela jasně, že...

4.9.3 Translation via different constructions

The rest of the passive constructions were translated into Czech by different structures. They include the use of the active voice, translations by nouns, adjectives, via other structures or the original passive was completely omitted in translation.

4.9.3.1 Passive voice replaced by Noun

[121] ... time between when the reflection **was sent** and the time between the reflection **was received** back. – ... události, o níž řekneme, že nastala přesně uprostřed doby mezi **odesláním** signálu a **přijetím** jeho odrazu.

It should be noted that the English passive was translated via noun in Czech very rarely. More often it was replaced by adjective.

4.9.3.2 Passive voice replaced by Adjective

[122] Theories that up to then had been used to describe the forces... - Teorie, používané do té doby k popisu sil...

[123] Certain quantity, which **is known** as Planck's constant... - hodnota, dnes **známá** jako Planckova konstanta...

[124] When the number of persons by whom these duties are customarily performed...
- kdy se okruh lidí tradičně vykonávajících tyto funkce...

Translations of the passive voice by an adjective in Czech were employed mainly in situations, where the passive voice occurred in subordinate clause. This can be clearly seen when the examples [116] and [123] are compared. In the example [116] the passive construction *is known* appears in the main clause whereas in [123] the passive *is known* is a part of a subordinate clause which specifies the meaning of a preceding noun phrase *Certain quality*.

4.9.3.3 Passive voice replaced by Active clause

[125] They chew betel over which an incarnation **has been uttered** by the exorcist. – Žvýkají betel, nad nímž **zamumlal** své zaříkání zaklínač duchů.

[126] At the beginning of the century it **was thought** that... - Počátkem našeho století se lidé domnívali, že ...

[127] Shorter waves are known as microwaves. – Kratší vlny známe jako mikrovlny.

When the active clause in Czech language is formed from English passive voice structure, this formation can be created from structures where the agent is either expressed [125] or implied [127]. The agent in Czech clause is then added or it is transformed into the subject. The example of the added agent can be [126]. Here, the general agent in Czech clause is evolved from the context because generally only humans are regarded to be able of thinking. The example illustrating the transformation from the passive with expressed agent phrase to active clause can be [125]. In this example the active Czech clause has the agent at the end of the structure and it also functions as the subject. Free word order in Czech language enables different sentence elements to occupy various functions in a sentence. Contrary to this, in every English sentence it is required for both subject and predicate to be present in the clause. It is due to strict word order in English that SVO pattern has to be followed. Therefore the subject has to be expressed in each clause, which sometimes leads in using pronoun it functioning as formal subject of the clause with a cataphoric reference (forward reference) to a clause (Quirk, 349).

[128] It may be noted also... - Všimněme si také...
[129] If it is added that... - Zjistíme-li navíc...
[130] And it should be added that... - A dodejme také...

It can be added that in examples [128] and [130] the short passives with modals are translated into Czech by imperative the 1st person plural.

4.9.3.4 Omission or transformation of the passive

In connection with pronoun it in the subject position few passive constructions were found, that can be denoted as 'impersonal' passives. These types of passive are used when the action referred to is more important than the subject who is performing the action. It is connected usually with sensational verbs such as think, say, know, expect or believe. Impersonal passive has two forms:

It + *passive opinion verb* + *that clause* – examples [131], [134]

Personal subject + *passive opinion verb* + *to infinitive* – examples [132], [133]

The examples found in texts can be:

[133] It is said that one king suffered terrible. - Jinému králi prý působil strašné utrpení.

[132] ...what the King and Queen of May were believed to do in days of old. - co prý činili za starých časů Král a Královna máje.

[133] Romulus is said to have been descended... - Romulus prý pocházel...

[134] It is said that he was offering a sacrifice... - ten prý přinášel oběť...

This construction is almost exclusively translated into Czech by using the word 'pry''. According to Grepl et al, this word is used by an author to signal that he does not take over the responsibility for verity of the statement, which can imply dubiety or disapproval to it, because he has read or heard it from someone. Regarding the transformation of the impersonal passive into Czech, it is often common to be translated via reflexive passive. If the reflexive passive is used the originator of the statement is 'anonymisized' (Grepl et al, 2000, 626).

Finally, it should be added that several passive constructions were translated by completely different constructions or the clause with the passive voice was entirely omitted. In these cases it is arguable whether this omission was translator's intention or it was caused by redundancy of such clause. Here are some examples of the former cases:

[136] As a general rule iron **might not be brought** into Greek sanctuaries. - V Řecku platil všeobecný **zákaz** nosit železo do svatyň.

[137] Although light **is made up** of waves... - Přestože jsme o světle zatím hovořili **jako** o vlnách...

[138] After all allowance has been made... - Navzdory všem těmto výhradám...

CONCLUSION

The aim of my bachelor thesis has been to describe and analyze the passive structures employed in scientific texts, which were written in English and translated into Czech language. The main distinction of the English passive voice has been drawn between short and long passive. My analysis has shown that the short passive in English scientific texts is preferred over the long passive, which has been in accord with the findings in the theoretical part. More frequent use of the short passive in scientific texts can be associated with the main functions of the short passive, namely the expression of general human knowledge and authorial passive. It can be concluded, that the short passive is used in situations, where the agent is redundant, or as a means of functional sentence perspective, because the passive voice enables to line the sentence elements according to the degree of communicative dynamism.

Furthermore, I have described different types of the passives and analyzed their occurrence in scientific texts. The results have shown that some types of the passive appear in scientific text quite frequently, such as prepositional passives or passive structures with modals, while the other are used very rarely or are practically omitted, namely *get*-passives.

Another aim of the thesis has been to find out, in what way is the English passive translated into Czech. Relating to this aspect, several similarities have been found, especially those concerning the form of the Czech periphrastic passive. On the other hand, the Czech language disposes of other devices for translation of the English passive voice. It is especially the reflexive passive which does not exist in English. Moreover, the active voice in Czech can express the same communicative dynamism in a sentence as the passive voice in English.

In the original and translated texts the frequency of the passive voice in both original scientific works and their translations has been analyzed. The frequency of the passive voice in English texts is higher than in their Czech translations. This is in accordance with the general assumption that the passive voice is used more frequently in English than Czech.

BIBLIOGRAPHY

Primary sources:

Darwin, Charles Robert. Výraz emocí u člověka a zvířat. Praha: Nakladatelství Československé akademie věd, 1964. Z anglického originálu přeložil Josef Král, Václav Příhoda. 115-121

Darwin, Charles Robert. *The Expression of Emotions in Man and Animals*. London: John Murray, 1872.

Dewey, John. Demokracie a výchova. Přeložil Josef Hrůša. 118-125, 136-143

Dewey, John. *Democracy and Education. An Introduction to the Philosophy of Education.* New York: The Macmillan Company, 1916. 8-11, 26-33

Frazer, James George Sir. *Zlatá ratolest*. Praha: Mladá fronta, 1994. Z anglického originálu přeložil Erich Herold, Věra Heroldová-Šťovíčková.

Frazer, James George Sir. The Golden Bough. London, 1922.

Hawking, Stephen W. *Stručná historie času. Od velkého třesku k černým dírám.* Praha: Mladá fronta, 1991. Přeložil RNDr. Vladimír Karas, CSc. 24-31, 61-68

Hawking, Stephen W. A Brief History of Time. From the Big Bang to Black Holes. New York: Bantam Books, 1988. 10-12, 31-34

Mills, Charles Wright. Mocenská elita. Praha: Orbis, 1966. 355-359

Mills, Charles Wright. The Power Elite. Oxford: Oxford Press, 1956.

Russell, Bertrand. *Zkoumání o smyslu a pravdivosti*. Praha: Academia, 1975. Z anglického originálu přeložil Jindřich Husák.

Russell, Bertrand. An Inquiry into Meaning and Truth. London: George Allen and Unwin Ltd., 1940. 289-293

Veblen, Thorstein. *Teorie zahálčivé třídy*. Praha: Sociologické nakladatelství, 1999. Z anglického originálu přeložila Jana Orgocká. 64-69, 92-101

Veblen, Thorstein. *The Theory of the Leisure Class. An Economic Study of Institutions*. New York: MacMillan, 1915. 28-33, 46-50

Secondary sources:

Biber, Douglas et al. *Longman Grammar of Spoken and Written English*. Harlow: Longman Publications Group, 1999.

Biber, Douglas, Susan Conrad and Geoffrey Leech. *Student Grammar of Spoken and Written English.* Harlow: Pearson Education Limited, 2002.

Dušková, Libuše a kol. *Mluvnice angličtiny na pozadí češtiny*. Praha: Academia, 1994.

Fernandéz, Lorena Barreta. "Short and Long Passive in English Discourse: a corpus-based approach". Interlingüística, 16, 2011, pp. 171-177

http://www.spertus.es/publications.html

Firbas, Jan. *Functional sentence perspective in written and spoken communication*. Cambridge: Cambridge university press, 1992.

Grambley, Stephan and Kurt-Michael Pätzold. *A survey of modern English*. London: Routledge, 2004.

Greenbaum, Sidney. English Grammar. Oxford: Oxford University Press, 1996.

Grepl, Miroslav, a kol. *Příruční mluvnice češtiny*. Praha: Nakladatelství Lidové Noviny, 2000.

Grepl, Miroslav a Petr Karlík. Skladba češtiny. Olomouc: Votobia, 1998.

Havránek, Bohuslav a Alois Jedlička. Stručná mluvnice česká. Praha: Fortuna: 2002.

Huddleston, Rodney and Geoffrey K. Pullum. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press, 2002.

Jespersen, Otto. Essentials of English Grammar. London: Routledge, 2006.

Kopečný, František. Základy české skladby. Praha: Státní pedagogické nakladatelství: 1958.

Komárek, Miroslav a kol. Mluvnice češtiny (2) Tvarosloví. Praha: Academia, 1986.

Quirk, Randolph, et al. *A Comprehensive Grammar of the English Language*. Harlow: Longman Group Limited, 1985.

Svoboda, Aleš. Lectures on English syntax: Handouts for lecturers on English syntax for the second year students of English. Ostrava: Ostravská univerzita v Ostravě, 2004.

Veselovská, Ludmila, and Joseph Emonds. A Course in English Morpho-Syntax: Syllabi for the Lectures. Olomouc: Univerzita Palackého, 2005