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A Functional Analysis of the Passive Structure in Persian

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Abstract

This paper investigates the frequency of occurrence of the passive structure in two registers of Persian, i.e. short story and scientific articles, regarding their information structure. The quantitative and qualitative study of the data shows that the occurrence of the passive is much more frequent in scientific articles than in short stories. By undertaking a contrastive analysis of the samples, and considering criteria such as *agent-orientation* and *information load* of sentences in the two registers, it can be concluded that, in order to observe the principle of objectivity (which is integral to scientific researches and writings) writers tend to use passive sentences frequently, since traditionally, the passive is considered as one of the principal means of achieving impersonality and objectivity in a text, as it enables the removal of any explicit agency. On the other hand, in comparison with the short stories, in the scientific

articles the information content is on a high level and the sentences are longer and more complex. As a consequence, the syntactic management of this information load requires the writers to use the passive structure in order to create a cohesive and coherent text.

Keywords: Passive structure, Persian, Register, Information structure

1. Introduction

The type of discourse employed in different registers tends to influence the type and frequency of occurrence of syntactic structures used in such registers. One of these structures is the passive, which changes the unmarked information structure of a sentence. In other words, through this structure, the speaker or writer can focus on a part of his/her message, which seems more important to him/her and introduce the other part as background of discourse. On the whole, information structure refers to the arrangement and order in which the speaker or writer presents his/her message in a series of information units and so it makes the comprehension of speech easier and indicates which part of the message is more important.

According to Lambrecht (1996:5), information structure is "that component of sentence grammar in which propositions as conceptual representations of states of affairs are paired with lexicogrammatical structures in accordance with the mental states of interlocutors who use and interpret these structures as units of information in given discourse contexts." It must be remembered that information structure has different syntactic representations in language, since "the speaker is obliged to chunk his speech into information units. He has to present his message in a series of packages. He is, however, free to decide how he wishes to package the information. He is free to decide where each information unit begins and ends, and how it is organized internally" (Halliday,1967 as cited in Brown and Yule 1983:155). In this regard, Halliday (1985) divides a clause into a theme and a rheme. The theme is what comes first in the clause and the rheme is the rest. On the other hand, he differentiates between new information and old information. It is worth noting that the first two concepts, i.e. theme and rheme, refer to the thematic structure of the sentence, whereas old and new information is addressee-oriented. In other words, old and new information is based on the addressee's background knowledge. As for new information, it is what the speaker or writer assumes the addressee does not know, but needs to know in order to follow the progression of an argument. By contrast, old information is the information which has already been mentioned somewhere in the text, or it is shared or based on mutual knowledge derived from the immediate context (Halliday, 1985:88). The configuration of information structure in Persian passives demonstrates how the frequency of passive structures in a text plays a crucial role in the formation of a specific register.

2. The Goals of Study

In representing information structure in sentences, speakers typically exploit phonetic parameters like pitch accent position and type, deaccentuation and short pauses, as well as syntactic means like clefting, pseudo-clefting, passive, extraposition and topicalisation. However, the goal of this research is to study the passive structure as a syntactic means of representing information structure in sentences in terms of its frequency of occurrence in two different registers of Persian. In other words, this research sets out to answer these questions: in which register does this structure occur more frequently and what is the explanation behind this difference? It is worth mentioning that different discoursal and contextual features of registers can result in different exploitations of syntactic means of information structure in

the corpus under study. Therefore, another relevant research question is what factors make the writer prefer the passive structure over other syntactic means in order to focus on an information unit in the sentence.

3. Register

Biber and Conrad (2009), describing the three concepts of genre, register, and style, define these concepts as three specific approaches to the study of different types of texts. Each approach deals with a specific aspect of text varieties. The register approach combines an analysis of linguistic characteristics to be found in a text variety with an analysis of the situation in which the variety is used. The underlying assumption of the register perspective is that core linguistic features like pronouns and verbs are functional, and, as a result, particular features are commonly used in association with the communicative purposes and situational contexts of texts. But a linguistic analysis of genre contrasts with the register approach in that it focuses on the conventional structures used to construct a complete text within the variety. (For example, the conventional way in which a letter begins and ends.) And finally the style approach studies aesthetic preferences associated with particular authors or historical periods (ibid:2). According to Biber and Conrad (ibid), the description of a register covers three major components: the situational context, the linguistic features, and the functional relationships between the first two components. “Registers are described for their typical lexical and grammatical characteristics: their linguistic features. But registers are also described for their situational contexts, for example whether they are produced in speech or writing, whether they are interactive, and what their primary communicative purposes are” (ibid).

Longacre (1983) and Biber (1988) classify different registers in terms of their specific features. Longacre classifies the text into four categories: narrative, procedural, behavioral, and expository. This categorization is based on two criteria that is, contingent temporal succession and agent orientation. Contingent temporal succession refers to “a framework of temporal succession in which some (often most) of the events or doings are contingent on previous events or doings” (Longacre, 1983:9). Agent orientation, on the other hand, refers to “orientation towards agents with at least a partial identity of agent reference running through the discourse” (ibid). It is interesting to note that these two parameters intersect so as to give us a four-fold categorization of discourse types: Narrative discourse (broadly conceived) is plus in regard to both parameters. Procedural discourse (i.e. how to do it, how it was done, how it takes place) is evaluated positively in view of contingent succession (the steps of a procedure are orders) but evaluated negatively in respect to the agent orientation (attention is on what is done or made, not on who does it). As for behavioral discourse (a broad category including exhortation, eulogy, and political speeches of candidates) is evaluated negatively in regard to contingent succession but has plus value in regard to agent orientation (it deals with how people did or should behave), whereas expository discourse has minus values in respect to both parameters. So narrative register is plus in terms of both values and includes text types like novels and short stories while expository register, which includes texts like scientific books and articles, is minus in regard to both parameters and therefore is at the other extreme of this continuum in comparison to narrative register.

Considering such dichotomies as informational versus involved production, narrative versus non-narrative concerns, elaborated versus situation-dependent reference, and abstract versus non-abstract style, Biber (1988) categorizes registers into newspaper reportage, academic prose, broadcasts, professional letters, fiction, spontaneous speeches, conversations, etc. In both types of classifications (i.e. Longacre and Biber), short stories and scientific writings have their own distinctive places. Thus, it is precisely in terms of these categorizations that the data investigated in the present paper have been collected from these two different registers. As far as the corpus of the short stories is concerned, ten short stories, nominated to be awarded the Defae-e-Moghaddas literature prize, have been selected. On the other hand, the corpus based on scientific articles includes seven items devoted to linguistics and discourse analysis. The size of the two samples is equal and is about 54830 words.

To undertake this research, the frequency of occurrence of passive sentences will be counted and then compared. However, it must be added that the approach of this paper is not merely statistically oriented but the ultimate goal of this study is to explain the observed differences between the two registers involved.

4. Review of Literature

Studies of information structure and its representation in the sentences date back to the Prague School of Linguistics. Introducing the concept of information structure in a paper entitled "Functional Sentence Perspective", Mathesius divides a sentence into two informative parts: given information, which is already known to the addressee and new information, which conveys new knowledge about the topic. In recent decades, information structure again has become the center of attention in functional linguistics like Hockett (1985), Givon (1984), Vallduvi (1990), Halliday (1985), and Lambrecht (1996). Hockett (1958:201) introduces the two concepts of topic and comment, defining topic as that part of a sentence which the speaker talks about. The rest of the sentence is comment.

In addition to theme and rheme, Halliday (1985) also differentiates between new information and old information. The first two concepts refer to the thematic structure of the sentence; i.e. the theme can be identified as that element which comes in first position in the clause, whilst the rheme is the remaining part which develops the theme (Halliday 1985: 39). However, the two notions of given and new information are addressee-oriented; what is known and predictable for him and what is new and unpredictable. In other words, "new information is information that the addressor believes is not known to the addressee, and given information is information that the addressor believes is known to addressee (either because it is physically present in the context or because it has already been mentioned in the discourse)" (Brown and Yule 1983:154).

Discussing information structure, Lambrecht (1996) defines it as an integral part of grammar which controls selection of sentences produced in syntax. He divides a proposition into two parts: *pragmatic presupposition* and *pragmatic assertion*. Pragmatic assertion is the proposition expressed by a sentence which the hearer is expected to know or take for granted as a result of hearing the sentence uttered. Pragmatic presupposition is the set of propositions lexicogrammatically evoked in a sentence which the speaker assumes that the hearer already

knows or is ready to take for granted at the time the sentence is uttered (Lambrecht, 2001: 474). In the theoretical framework proposed by Lambrecht, the notion of focus is introduced as part of the meaning of pragmatic assertion; that is to say, focus is a semantic-pragmatic concept whose presence in the sentence makes the utterance into an assertion, that is, makes it possible for a sentence to convey new information to the addressee. Thus, the focus component is an unpredictable part of the proposition (ibid). To illustrate this concept, consider the following example.

1- ❇■ A●❇ ❁◆❄ ✱❄ ❒❛■❊❄❒❄ ❒❁ ▲✣❄✱❛▲▼.

This Ali be-PAST who window o.m.[1] break-PAST

It was Ali who broke the window.

Pragmatic presupposition: “someone broke the window”

Pragmatic assertion: “Ali broke the window.”

Focus: “Ali”

At first glance, Lambrecht’s definition of pragmatic presupposition is analogous to Halliday’s concept of theme, but they differ since pragmatic presupposition is not necessarily the first constituent in a sentence. The notion of focus seems also to be overlapping with rheme, as Halliday puts it, but they are not necessarily co-occurrent, since the unmarked place of rheme is in the final position of a sentence while focus can come anywhere in it.

Focusing on the object marker “ra” in Persian, Dabir-Moghadam (1991) sets out to investigate topicalization and argues that it is one of the syntactic phenomena which change the unmarked structure of a sentence and convert it into a non-canonical and marked structure (ibid:40). According to him, through topicalization, a construction is moved from its original place to sentence-initial position, leaving a coreferential pronoun behind (ibid:41). He also differentiates between topicalization and left-dislocation, calling the first one “pronoun-leaving topicalization” and the second “non-pronoun-leaving topicalization”. He cites the following sentences as examples:

2- ✱✣❊❁✱✱❑❑ ❒❁ ❁❁▲✣ ❁❁▮❊ ■❛✱❑■. (pronoun-leaving topicalization)

knife-Sg O.M. (with-pronoun) play Neg-do-singular:imperative

Knife, don’t play with it.

3- ✱❍▲✣❛❁ ❒❑ ❇■❊❁ ❁❁▲✣! (non-pronoun-leaving topicalization)

tonight O.M here stay-IMP.

Tonight stay here!

[1] Object marker

Gholam-Alizadeh (1996) indicates that the canonical structure of a sentence in Persian can change as a result of movement or deletion. He ascribes these changes to transformations such as "extraposition", "topicalization", "clefting", "pseudo-clefting" "movement of modal verb", and "movement of auxiliary". Regarding topicalization, he points out that "the speaker moves a constituent to sentence-initial position when he/she wants to put emphasis on it. This movement is called topicalization"(ibid:207). Gholam-Alizadeh investigates these structures from a formal perspective without referring to their pragmatic aspects.

There are also other studies dealing with information structure in Persian from different points of view such as Rezai (2003), which studies the information structure of simple sentences within the framework of Role and Reference Grammar, and also Modarresi (2007), which studies Persian information structure within Lambrecht's framework, and Shokuhi (2008) and Amini (2010), which compare Persian information structure with that of English with implications for translation. However, as far as the writers of this this paper know, there still exists no systematic research into the role of registers and their associated discourse features in information structure and its syntactic representations in Persian. Hence the novelty of this research lies in the fact that it purports to explore two different registers of Persian in terms of their information structure as realized through passivization.

5. The Passive Structure

The passive structure can be approached from two distinct perspectives: formal and functional. However, since this research is discoursal in nature, we focus on functional criteria to identify the passive structure in Persian. As Givon (1990:566) points out, "the notion of voice is fundamentally pragmatic. The very same semantically-transitive event, coded by the very same verb, agent and patient, may be rendered from several discourse-pragmatic perspectives." Commenting on the passive structure, Halliday (1985:169) argues that besides agent, there are other participants such as the patient and the beneficiary, which can be selected as subject of the clause, as a result of which the verb will be in the passive form. Typically, in an active sentence, the agent is represented by the syntactic subject and the patient or the beneficiary is represented by a syntactic object. But in a passive sentence, it is the patient or the beneficiary, which is selected as the subject of the sentence.

4- 

subject object

Mongols city O.M. destroyed do-PAST.3P

The Mongols destroyed the city.

5- 

subject prepositional-Obj

city Prep-hand-Poss Mongols destroyed become-PAST-3.Sg.

The city became destructed by Mongols.

Perlmutter & Postal (1977) propose the following universal phenomena engendered by the transition of a clause from the active to the passive voice:

a. A direct object of an active is the (superficial) subject of the 'corresponding' passive.

b. The subject of an active clause is neither the (superficial) subject nor the (superficial) direct object of the 'corresponding' passive.

c. In the absence of another rule permitting some further nominal to be the direct object of the clause, a passive clause is a (superficially) intransitive clause. (ibid: 76)

The passive structure in Persian has always been controversial among linguists and there is still no agreement about its existence in Persian. Some linguists such as Marashi (1970:18), Palmer (1971:98), Soheyli-Esfahani (1976:164), and Hajati (1977:17) argue for the existence of this structure in Persian. For example, Soheyli-Esfahani (ibid) cites the following sentence as an instance of the passive in Persian;

6-

F❋❒❋❑◗▲❊ ✪❑▮❑❒❋▼❛❒❋■ ▲✣❁❋❒ ❋❛❍❁▲❊ ▲✣❋❍❑❒❋❋ ❍❊▲✣❛❖❁❋.

Ferdowsi greatest poet epic count-pp Pres.-become.3p.Sg

Ferdowsi is ranked as the greatest epic poet.

Vahidia-Kamyar (2003:53) claims that the occurrence of the passive in Persian is not frequent but is used only in following cases:

a. When the speaker does not know the agent or does not want to name him/her

b. When the speaker or writer thinks that the addressee knows the agent already.

c. In cases where speaker takes the information for granted; e.g. 'zamin va aseman afaride shod' (Heaven and earth were created.)

Other researchers like Moyne (1974) and Vahedi-Langrudi (1998) argue against the existence of this structure in Persian. Adopting a formal approach, Moyne (1974) maintains that there is no passive in Persian and that what is called passive, is in reality a kind of 'inchoative structure'. However, Dabir-Moghadam (1985), Jabbari (2003), and Rezai (2010) differentiate between passive and inchoative structures. As Richards (1992) points out, an inchoative verb expresses a change in the state of things, as exemplified by the verb *yellow* in *The leaves yellowed*. Inchoative and passive structures are similar because both, unlike the active, select the patient (or the beneficiary) as the syntactic subject of a sentence. However, despite this superficial overlapping, the agent (which has the feature 'volition') is present in the passive sentence, even if it is not expressed overtly. By contrast, in an inchoative sentence there is no agent or actor. The following examples are revealing:

7- The door opened (inchoative).

8- John opened the door (active).

9- The door is opened (passive).

Dabir-Moghadam (1985) points out that the passive and the inchoative are two distinct structures in Persian, although both are expressed with the light verb ▲✜❑❄❛■; for instance:

10. ❁✪ ▲❛❒❄ ▲✜❑❄ (inchotive)

Water cold become-PAST.3sg.

The water became cold.

11. ❁✪ ✈▼❛❖❛▲❑▼❄ M❛❊❍❑❑❄✉ ▲❛❒❄ ▲✜❑❄ (passive)

Water (Agent-by Mahmood) cold become-PAST-3.Sg.

Mahmood caused the water to become cold. (ibid)

As already mentioned, the semantic role of agent is implied in a passive sentence while inchoative sentences lack a volitional agent participant. In order to differentiate between passive and inchoative sentences, Dabir-Moghadam (ibid) proposes a test whereby passive sentences can be distinguished from inchoative ones. On the basis of this test, the expression *khod-be-khod* ('spontaneously or on its own') can be inserted into an inchoative sentence without creating semantic anomaly, whereas passive sentences do not admit of such insertion. Consider the following sentences:

12. ab (xod-be-xhod) s❛rd ▲✜❑❄. (inchotive)

Water (by itself) cold become-PAST-3.Sg.

The water became cold all by itself.

13.*mott❛h❛m (xod-be-xod) be dadgah av❛rde ▲✜❑❄. (passive)

culprit (by itself) to court brought become-PAST-3.Sg

*The culprit was brought to court spontaneously.

Besides this structure, as Dabir-Moghadam (ibid) and Sahrai (2006) point out, compound verbs which are made p of an adjective and the transitive auxiliary *kardan*, can turn into a passive structure through replacing the auxiliary *kardan* with the light verb *shodan*; for instance,

14. anha xane ra x❛rab k❛rd❛nd.

They house o.m destroyed do-PAST-3.Pl

They destroyed the house.

15. xane t❛v❛ssote anha kh❛rab ▲✜❑❄.

hous Agent-by them destroyed become-PAST-3.Sg

The house was destroyed by them.

So this structure is also treated as passive in the present paper and, in order to distinguish passive from inchoative structures, we use *xod-be-xod* as a diagnostic test, as well as the

information presented by the context of the discourse, since the ambiguity between the passive and the inchoative is due a to lack of information about the presence of an actor or agent in a specific event. In other words, regarding the information conveyed by the context of situation, it is clear whether that event or action happened by an agent or not. For instance, the verb ijad ▲✣❑❄❛■ in the following sentence, which is excerpted from the corpus of this research, is not regarded as passive since the action expressed in this sentence does not have any agent, and therefore, the sentence is a case of inchoative structure.

16. t❛nini ke az xord❛ne kerakere n❛m❛ki ijad ❍❄▲✣❛❖❛❄…

Resonance-Def that by eating-Poss cracker salty create Pres.become-PAST-3.Sg

The resonance which comes into existence by biting salty crackers…

As a further example, the verb *m❛fqood ▲✣odan* in the following sentence is not considered as passive, since the reader infers from the information provided by the context of situation of the short stories under study that the event is inchoative in nature.

17. ❛lb❛te ❛g❛r u m❛fqood n❛▲✣❑❄❄❄ ❁❁▲✣❛❄.

of course if he lost Neg-get-pp Subj-be.3.Sg.

Of course if he is not lost.

6. The Function of the Passive in Text

The passive structure plays an important role in the information structure of the clause by changing the unmarked word order of a sentence. According to Keenan & Dryer (2007:325), in contrast with the active structure, the primary function of the passive is 'foregrounding', as it topicalizes a semantic role like patient in the sentence. In other words, it moves this semantic role to the beginning of the sentence and so presents it as theme, which was originally part of rheme. To illustrate this point, consider the following sentence from the corpus of scientific articles, in which the writer begins the next paragraph in the article:

18. ❛vv❛lin goruh ❛z hon❛rm❛ndan ke ba ❋✣❑❑❁❄ n❛z❛riyeye nosxeb❛rdari ❛z

The first group of artists that with stick-Poss theory-Poss copying from

m❛dineye fazele rande ▲✣❑❄❛nd, ▲✣❁❄❒❁■❛■❄.

utopia expelled-pp become-PAST.3.Pl poets-be-Pres.3.Pl.

The first group of artists, who were expelled from utopia using the truncheon of copying theory, was poets.

Now the question is: why does the writer begin this paragraph with a passive sentence? Why did he select the passive structure among other syntactic alternatives? In other words, what is the characteristic of this structure that made the writer select it to begin the new paragraph? To answer these questions, we would do well to invoke to the concepts of theme and rheme proposed by Halliday (1985). As already mentioned, for Halliday theme contains old information in unmarked sentences and rheme contains new information. However, this order

is changed in a passive sentence, and new information is placed in theme position. In sentence (18), the writer selects the semantic role of patient as theme and presents it as the syntactic subject of the sentence in order to focus on it. Besides, as Hockett (1958) points out, the first construction in a sentence is topic, about which the speaker gives further information. So the writer of sentence (18) uses a passive construction to place the semantic role of the patient in topic position and then describes it. Song (2001: 183) refers to this function of the passive as creation of coherence and cohesion in text.

Shibatani (1985) describes the prototypical function of passivization as 'agent de-focusing'. Passivization is therefore crucially different from topicalization or clefting, which do not involve the demotion of the logical subject, or the agent. "The essential property of the passive is thus solely the de-topicalization of the agent; the topicalization of the patient is only the consequence" (Keenan & Dryer 2007:325).

7. Data Analysis

As already mentioned, this research aims to investigate the frequency of occurrence of the passive structure in two registers: the short story and scientific articles. In this respect, the number of passives in the samples of the two registers is counted. As the following diagram illustrates, there is a considerable difference in the frequency of occurrence of the passive in the two registers; while there are 202 passive structures among the 1462 sentences found in the sample of the scientific articles, only 19 passive structures can be identified among 8040 sentences of the sample of short stories. Statistically speaking, the percentage of the passive sentences in the scientific articles is 13%, which is significant in comparison with the 0/5% in the short stories.

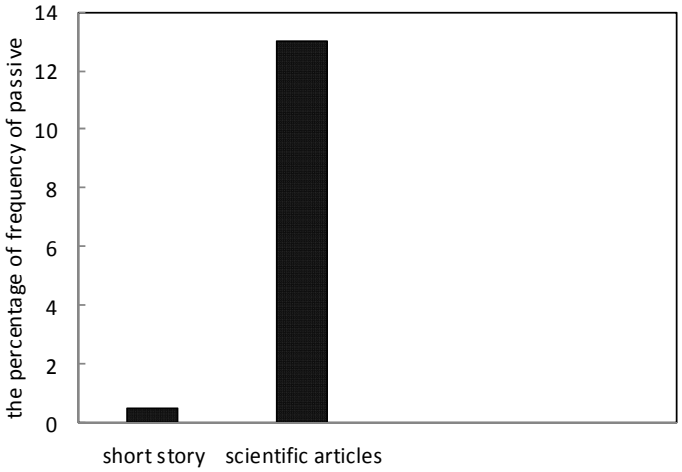


Figure 1. frequency of occurrence of passive sentences in scientific articles and short stories

As is shown in the Figure 1, there is a significant difference between the two samples in this respect. This runs counter to the idea of a group of linguists who entirely reject the existence of this structure in Persian. So by doing this research, the writers claim that sheer formal theorizing about the passive structure without referring to discoursal and pragmatic

considerations is unfounded, since, as the data show, this structure has a fairly high frequency in academic and scientific writings but its occurrence is rare in short stories. However, there are several explanations for the frequent application of this structure in the scientific articles that will be discussed here.

More than any other text types in Persian, scientific and research-based articles are influenced by English as today's language of science due to the existence of a huge body of books and papers translated from English, whereas the texts of short stories as part of Persian literature are the brainchild of Persian writers and, unlike scientific texts, need not have come under the influence of English.

Amouzadeh and House (2010) investigated the influence of English on Persian scientific texts as a language contact phenomenon, and came to the conclusion that because of this phenomenon, the Persian passive, which used to follow impersonal patterns in its initial stages of contact, has now moved towards the adaptation of the canonical passive. However, the authors do not refer to other reasons for the relatively high frequency of passive structures in scientific texts.

Moreover, the frequent occurrence of the passive structure in the scientific texts, on the other hand, is due to its pragmatic function in the text. Traditionally, the passive has been considered as one of the principal means of achieving impersonality in a text, as it involves the removal of any explicit agency. It has therefore often been presented as a structure particularly suitable for scientific writings. Hinkel (2004:161) comments on the role of the passive voice in creating objectivity in text and adds that writers use the passive in order to project academic indirectness, detachment, and objectivity. As he points out, objectivity and indirectness are the principles underlying the tradition of scientific writings. So, in order to observe this principle, Persian writers of scientific articles use this structure more frequently than what is common in literary texts. As mentioned earlier, Longacre (1996: 245) also supports this idea by maintaining that "while narrative discourse is agent-oriented and, furthermore, deals with the actions of particular agents, expository discourse lacks this agent orientation and deals more with generalities".

To sum up, another explanation for the observed difference between the frequencies of the passive in the two samples under investigation is that the short stories deal more with the description of people and their actions and that, consequently, agency is an important factor in narrative register. As a result, writers use the active voice in narrative texts and thus the occurrence of the passive is rare, whereas the scientific writings are concerned with the description of ideas and conclusions, and try to be impartial and objective.

A further point that explains the different behavior of this structure in the two registers is the difference in the information load of sentences in the registers, which is much heavier in scientific texts than in short stories. The reason for this is that the level of information content is high and the syntactic management of this information load is therefore a primary consideration. Evidence for this claim is provided by the long, complex, and compound sentences occurring in the scientific articles. What needs stressing at this stage is that it is the heavy information load, which results in the creation of complex and compound sentences

that require readers to pay more attention in order to construe the high level of information content behind the syntactic complexity of the text. To illustrate this point, we could consider the following Figures (2) which illustrate the ratio of compound sentences to that of simple sentences in the two samples under investigation.

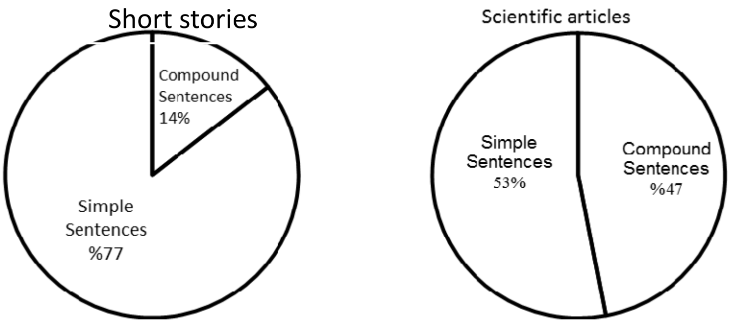


Figure 2. The ratio of simple to compound sentences in short stories and scientific articles

To the heavy information load in the scientific articles which requires the writer to use long complex sentences. To illustrate this, two randomly selected paragraphs from the corpus are given below. The sentences in the first paragraph are long in the sense that they are either compound or complex, whereas those in the second paragraph belonging to the register of short stories are short and simple.

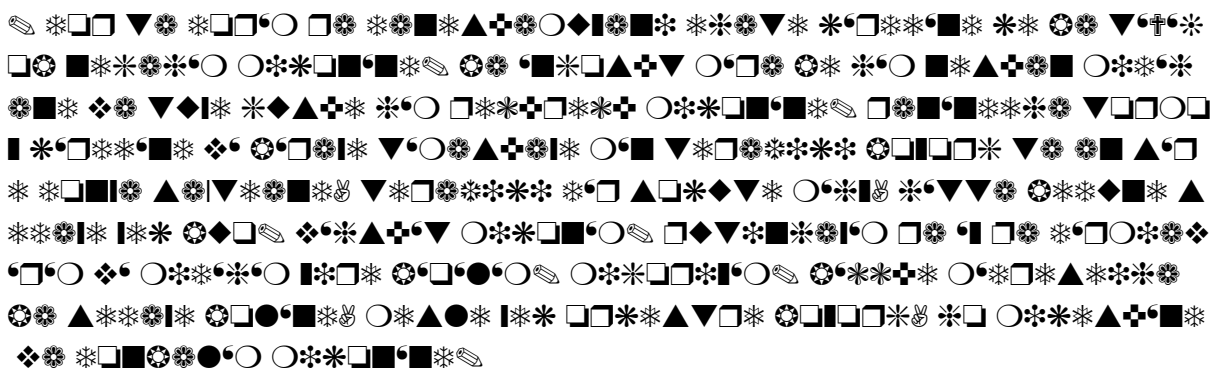
Text A: scientific article

[illegible]

It is the right of the speakers of a language to be able to comprehend the purport of the legal edicts written in their mother tongue and to understand whether they have been convicted or have won the case and why. So far no measure has been taken to solve the problem of the complexity of legal texts while in English, some attempts have been made to simplify legal texts through a legibility formula and the rhetorical edition of them. However, given the inherently complicated nature of legal language, no palpable change has yet come about.

Text B: short story

[illegible]



I am standing on a zebra crossing in the middle of the street. I am surrounded by pupils looking at me in surprise. They point to me and whisper into each other's ears. Drivers have stopped and gotten out of cars. To watch me, they have made a traffic jam as far as the other side of the world, a dead silent traffic, even without a single hoot. I get horrified. I take off my boots and stick them under my arm. I take to my heels. School children boo loudly, like a big orchestra, and follow me.

The low proportion of passives is correlated with a correspondingly high proportion of personal pronouns as syntactic subjects used as themes in the short stories[2]. The frequent use of personal pronouns, which represent the agent as the syntactic subject and the theme of a sentence, serves to divide the discourse into smaller and more cognitively manageable chunks, seeing that short stories are at least supposed to be entertaining and therefore the cognitive processing of sentences should be simple for the mind of readers. However, as mentioned earlier, the information load of scientific articles is heavy and, as a result, the sentences are compound and complex. Thus, in order to create coherence and cohesion among these sentences, writers are obliged to use the passive structure, since, as we have already mentioned, one of the functions of such structures is thematization of the object of the active sentences as old information in the passive equivalents. This function of the passive allows the writer to maintain thematic continuity between sentences and thus smooth the information flow in the discourse of scientific articles.

8. Conclusion

The comparative analysis of the frequency of the passive structure in the short stories as a narrative register and the scientific articles as an expository register indicates that the occurrence of this structure in scientific articles is relatively frequent and makes up 13% of the whole sentences in the sample, whereas this proportion in the sample of short stories is only 0/5%. Therefore it can be concluded that the type of register and its discourse has a strong influence on the syntactically preferred structures in the text.

There are several explanations for the relatively frequent use of the passive in scientific articles, among them the observance of the principle of objectivity, which is one of the tenets of scientific research. As already mentioned, more than any other syntactic phenomena, the

[2] - For a detailed correlation of the frequency of the passive with the personal pronouns as a syntactic subject in Persian see Amouzadeh and House (2010)

passive is suitable for the syntactic management of this principle since the major function of the passive is the demotion or removal of the agent and focusing on the event itself. Thus, in order to be objective and impartial, writers normally use this structure in scientific writings. In addition, as the load of information content in scientific articles is heavy, sentences are typically long in the sense that they are complex or compound or a combination of the two. Consequently, in order to create coherence and cohesion among the sentences, writers use the passive structure since it can thematise the object, which is part of the rheme in active sentences, and present it as old information, thus enabling the writer to smooth the information flow.

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