Syntactic Devices of Information Structure in Persian Spoken Genres: Political, Scientific, and Everyday Conversation in Focus

Fatemeh Aghaei[1], Bahram Hadian[2*], Vali Rezaei[3]

[1] Ph.D. Candidate, English Department, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran

[2] Assistant Professor, English Department, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran

[3] Associate Professor, Department of Linguistics, Faculty of Foreign Languages, University of Isfahan, Isfahan, Iran

ABSTRACT

This descriptive and corpus-based study examined the role of genres and their discourse features in information structure and its syntactic representations in Persian. It aimed to investigate three genres of Persian spoken language, that is, political, scientific, and everyday conversation, in terms of their information structure as realized through four syntactic devices of clefting, pseudo-clefting, passive, and preposing. For this purpose, 1000 utterances related to each of the mentioned genres were extracted based on Lambrecht's theoretical framework for modeling the information structure. The collected data were then transcribed, and the most frequently-used syntactic structures of information structure in each genre were identified. Finally, the Mann-Whitney U test and descriptive statistics were used to see which of the three genre types has higher values than the other two in terms of the four syntactic devices. The results of data analysis revealed that there is a significant difference among the three genres in terms of the frequency of use of syntactic devices. In fact, preposing occurred most frequently in everyday conversations, passives in scientific texts, and clefting and pseudo-clefts in political texts. This finding has supportive implications for linguistic and educational experts as well as language theoreticians.

Keywords: Clefting; Genres; Information structure; Passive; Preposing; Pseudo-clefting; Syntactic devices

INTRODUCTION

In the realization of Information Structure, languages may employ different components of speech that are operative in the structuring of Information Structure. Past research shows that syntax and phonology, especially by means of word order and prosody, interact in the realization of Information Structure (Vallduví Botet & Engdahl, 1996).

Information Structure is one of the issues that have been considered in various linguistic approaches. Studies on this topic have shown that there are some devices to represent the Information Structure at different levels of language, from phoneme to word and sentence and even larger units. At the phonetic level, the speakers can emphasize a part of their message as new information using devices such as pauses and pitch and present it to the audience as they wish. In addition to phonetic devices, the marked syntactic structures that change the

---

* Corresponding Author's Email:
  bah_hadi@yahoo.com

unmarked structure of a sentence are also used by language speakers for this purpose.

According to Lambrecht (1996), Information Structure is "that component of sentence grammar in which propositions as conceptual representations of states of affairs are paired with lexico-grammatical structures, following the mental states of interlocutors who use and interpret these structures as units of information in given discourse contexts (p:5).

Halliday believes 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, Brown, Brown, Gillian, & Yule, 1983: 155).

In this respect, Halliday (1985) divides a clause into a theme and a rheme. The theme can be identified as that element that comes in the 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/her and what is new and unpredictable. In other words, as Brown et al. (1983) state, 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), (p.27).

In this way, the speaker or writer begins his/her sentence with the theme, that is, what he/she is talking about, which includes already known information about the subject in the news section of rheme. Therefore, the old information is expressed at the beginning of the sentence and then the new information. But in many cases, this order is changed with syntactic devices to emphasize more on a particular structure. These devices are clefting, pseudo-clefting, passive and preposing, which the following sentences represent:

1- The Mongols destroyed the city.
2- The city was destroyed by the Mongols. (Passive)
3- Davood broke the glass with a stone yesterday.
4- It was Davood who broke the glass with a stone yesterday. (cleft)
5. The one who broke the glass with a stone yesterday was David. (Pseudo-cleft)
6- Ali lost his book.
7- Ali's book was lost. (Preposing)

Each of these syntactic devices of Information Structure has its own application, and their frequency is different. Undoubtedly, the type of discourse and its specific genre are effective in this difference in the frequency of application. In other words, the frequency of the application of a structure such as passive in the Persian political speech genre may be different from its application in academic scientific speech. And this is definitely influenced by the purpose of the speakers.

LITERATURE REVIEW
Theoretical Background

There are a number of foundational works that provide valuable background information on Information Structure from different theoretical perspectives. The most widely-cited source on Information Structure is Lambrecht 1994, which introduces the important distinction between the mental representational aspects of information units, and the relational nature of Information Structure categories in information transfer. The seminal articles Chafe (1976) and Krifka (2008) and the handbook articles Büring (2007), Gundel and Fretheim (2004), also give concise overviews of Information Structure, the cognitive function and basic categories of Information Structure, and the effects of Information Structure on the structure of linguistic utterances. Of historical interest is Halliday (1967), which introduced the term Information Structure to linguistics. Another important monograph discussing the linguistic structure of sentences about Information Structure, context, and the knowledge states of interlocutors is Erteschik-Shir (2007), whereas Dik (1997) is a classical overview from a communication-based, functionalist

perspective. Finally, the online Oxford Handbook of Information Structure (Féry & Ishihara, 2014) provides the most comprehensive overview of Information Structure to date.

Gabelentz and Loebe (1843-1893) developed a theory of the psychological subject and psychological predicate, applying the traditional Aristotelian dichotomy to the temporary psychological states of the interlocutors. They were also the first to notice the interconnectedness of Information Structure and discourse context, as shown by Paul's use of the question-answer test to show different configurations of subject and predicate. At the turn of the centuries, the growth of Gestalt psychology, with its insistence on the perceptual dichotomy between figure and ground, triggered further interest in Information Structure.

The idea that human subjects are capable of understanding foregrounded objects only by relating them to their background naturally refers to the theory of psychological subjects and predicates. The decisive move from psychology to linguistics was undertaken by the linguists of the Prague School, especially Vilem Mathesius (1882-1945), who used the categories derived from psychology and philosophy to account for the phynomena of word order variation and prosody. The theme and rheme replaced the subject-predicate division (later topic and comment, or topic and focus). The Prague ideas of Information Structure were disseminated in the broader linguistic community through the work of Halliday (1967), who modified and refined the notion of theme–rheme partition. In his view, Information Structure (Halliday coined the term) is a grammar component separate from syntax and semantics, but it interacts with both in several complex ways. From the early 1970s, Information Structure has become an integral part of many grammatical theories and a frequent research topic in descriptive linguistics.

Information Structure Frameworks

Chafe (1976) developed a framework in which many of the notions discussed above have been systematized for the first time. Moreover, his work has spawned several approaches that share the view that Information Structure needs to be linked to the communicative and psychological reality of language users, no matter whether it is considered a proper part of grammar or a communicative, pragmatic phenomenon influencing grammar (e.g., Lambrecht, 1994; Vallduví, 1992; Van Valin Jr, 2005). Essential developments in this line of research are Vallduví's (1992) application of file change semantics to information-structural phenomena, where knowledge is conceived of as a set of file cards which get activated and deactivated, and Lambrecht's (1994) explicit embedding of Information Structure in the Stalnakerian model of communication.

Another line of research was conceived in the generative framework, most notably by Jackendoff (1972). The principal purpose is to find a way how categories like topic and focus can be represented in grammatical description so as to account for the range of grammatical structures influenced or triggered by Information Structure in a maximally economical way. A device that has been used almost universally to achieve this aim is the representation of information-structural categories as grammatical features (F-feature for focus was introduced by Jackendoff (1983) himself. It triggers word order permutations and determines sentence stress assignment and similar phenomena. Further developments include the postulation of dedicated hierarchical positions for topic and focus (Rizzi, 1997) and optimality-theoretical accounts of the interaction of the focus feature with sentence structure (Büring, 2006). In recent years, essential attempts have been made to formalize the relationship between discourse structure and Information Structure (Roberts, 2012). The basic idea is that the discourse develops through a series of implicit questions under discussion. The Information Structure relates the utterances to these underlying questions and thus renders the discourse structure transparent.

Halliday (1967), in his foundational article, introduced the notion of Information Structure in a systematic treatment of contextual factors

and prosody. For example, the different accent patterns of English sentences are derived from the complex interaction of two information struture levels: given-new (= information focus) and theme-rheme.

Lambrecht (1994), combined formal and functional approaches to grammatical analysis in his framework. He provided a detailed discussion of topic and focus, the cognitive representation of discourse referents, and their effect on the structure of linguistic utterances, and distinguished between the referential and cognitive properties and the inherent relational nature of topic and focus.

Samko (2016), in his dissertation examines the relationship between form and function in VP-initial word orders in English through Minimalist model of syntax. The analysis is built on a close examination of patterns that are instantiated across hundreds of inversions in hundreds of contexts. The approach leads to several important insights into the relationship between syntax and pragmatics. The overall picture that emerges is one in which the syntax makes both direct and indirect reference to discourse context.

Banon and Martin (2019) used event-related potentials to investigate the role of prediction in the processing of Information Structure and examine the assignment of Focus, which represents new or relevant information to the discourse. They studied the contribution of prediction to focus study in a design manipulating the phonological properties of focused nouns and their preceding articles.

Jiménez-Fernández (2020), in *Syntax-Information Structure Interactions in the Sentential, Verbal and Nominal Peripheries*, considers the connection between Information Structure and syntax. She explores formal explanations to account for the distribution of discourse-based phenomena such as topic preposing and focus fronting across languages, with a particular focus on English and Spanish. She discusses issues such as word order and the diverse conditions under which types of topics and foci are licensed in different contexts. She shows other behaviors of languages concerning specific discourse-oriented operations as the consequence of feature inheritance, which

occurs in the various peripheries detected in the sentence.

Herdiana, Hidayat, Alek and Husna (2020), showed how specific new and given information as Information Structure of syntactic forms are revealed in Barack Obama's remarks in Jakarta. They analyzed the syntactic forms of article "a" (indefinite) and "the" (definite) and also the rhyme and theme of the script and the video of the remarks using close textual analysis. Their results indicate that the uses of these articles construct specific messages whose tones are either distancing, getting close, or neutralizing the speaker against the audience. Furthermore, the information contained in Obama's speech reflected the speaker's context-awareness and the audience.

With reference to what was stated above and based on the goals of the study, the following research question was addressed:

RQ. *Is there any significant difference between the three Persian spoken genres— political, scientific and everyday conversation, in terms of syntactic devices frequency of use?*

METHOD
Design of the Study
This study is corpus-based, content analysis in nature, with a non-experimental descriptive-comparative design. Sousa, Driessnack, and Mendes (2007) explain non-experimental methods as non-random manipulation of variables or comparison groups. This design is used to observe what occurs naturally; that is, when little is known about a specific phenomenon, descriptive or exploratory studies are utilized to observe, describe, and document different aspects of a phenomenon. The descriptive design describes what exists, determines the frequency with which it occurs, and categorizes the information. The present research, therefore, makes use of a descriptive method to compare the use of four different syntactic devices of Information Structure: clefting, pseudo-clefting, passive and preposing, used in three different Persian spoken genres: political speech, scientific speech and regular everyday conversation.

Corpus of the Study

Since the present study is a corpus-based one, it seems appropriate here to first have a cursory glance at corpus linguistics approaches to language study. In these approaches, language in use through corpora is focused. A corpus is a large, principled collection of naturally occurring examples of language stored manually or electronically. This sort of collection aims to answer two fundamental research questions: 1) what particular patterns are associated with lexical or grammatical features? and 2) how do these patterns differ within varieties and registers. On this basis and, concerning the focus of the present study, the needed corpora for scientific and political genres were collected from the multi-media archive of IRNA (Iranian News Agency) website. As for everyday conversation, everyday talks of the researchers' family members and friends were recorded and transcribed.

Model of the Study

This study followed Lambrecht (2001) in modelling the Information Structure. According to this model, the study of Information Structure is investigating how a speaker organizes a sentence so that it can relate *new* information to the *given* discourse context by being informed of the presuppositions. In this way, it is believed that different languages are equipped with different morphology, syntactic, and phonetic devices to represent Information Structure. Lambrecht (1994) also considers that Information Structure is a surface between the meaning and the form of the sentence. Therefore, it plays a significant role in the representation of the pragmatic intention underlying the condition of the sentence. He explains that languages' syntactic and phonological systems often generate multiple possible formulations of an utterance, and communicative principles can be invoked to explain the correspondences between certain kinds of discourse contexts and certain patterns of linguistic form.

Instruments

Since the study is descriptive, the needed data were gathered manually from the multi-media archive of IRNA website for scientific and political genres. The applied instruments to collect data for the everyday conversation genre were two different voice recorders--a Samsung MP4 player and an iPhone XS cell phone. To answer the posed research question, Mann-Whitney U test, along with the descriptive statistics, were used, i.e. the mean and the frequency of results were calculated to assessing whether one of three types of genres tends to have larger values than the other two concerning the four syntactic structures under study. Furthermore, in the final step, Chi-square was run to investigate whether there was a statistically significant difference between the distributions of frequency of each syntactic structure in all three genres under investigation.

Procedures

Data Collection Procedures

In the data collection process for the study, 3000 utterances were extracted from the two sources mentioned above, in the form of three spoken genres. For the political genre, a total of 1,000 utterances were randomly selected from the speeches of 4 Iranian political figures who were a native speaker of Persian, with the average age of 50-70. For the scientific genre, 1000 pieces of utterances were randomly selected from the scientific lectures of 4 native Iranian researchers, with the average age of 40-60, from both male and female genders. It is to be noted that to eliminate the effect of changes which might have occurred due to the development of language use during the time, all the selected lectures were chosen from among those published within the period of 2015 to 2020. Regarding everyday conversation, the everyday conversations of the researcher's family members and friends were recorded with their permission and thus, 1000 pieces of utterance were randomly selected and transcribed. To make sure that the results of the study would definitely be representative of the selected population, such variables as age, gender, language, culture, and background knowledge were controlled.

Data Analysis Procedures

Since this research aimed to investigate the frequency of occurrence of the syntactic

structures of Information Structure (i.e. clefting, pseudo-clefting, passive and preposing) in three different genres, the 1000 different utterances related to each genre as well as the number of each syntactic device were first counted by the researchers. Then, the most frequently-used syntactic structures of Information Structure in each genre were identified. For considerations of reliability and to minimize the risk of subjectivity, the data analysis procedure was done twice in a three weeks interval. Furthermore, during the data analysis procedure, experts in linguistics, specifically in syntactic argumentation, were consulted whenever necessary.

RESULTS
The three genres/corpora of political, scientific, and everyday conversations included a range of targeted structures investigated in the current study (i.e., preposed sentences, passives, cleft sentences, and pseudo-clefts). What follows is a description of the syntactic structures in each corpus.

Frequencies of Syntactic Devices in the Three Corpora
The frequencies of use of 'preposed structures', 'passives', 'cleft sentences', and 'pseudo-clefts' in the three corpora of political texts, scientific texts, and everyday conversations are tabulated and presented below separately for each genre.

Table 1
Representation of Different Syntactic Structures in Political Texts

	Preposed Structures	Passives	Cleft Sentences	Pseudo-clefts
Frequency/Percentage	68	103	73	126

It can be seen in Table 1 that in the political genre of spoken Persian, the highest number of syntactic devices belonged to pseudo-clefts ($f =$ 126), with passives occupying the second rank ($f =$ 103, followed by cleft sentences ($f =$ 73) and preposed structures ($f =$ 68). This distribution is also graphically shown through the pie chart in Figure 1 below.
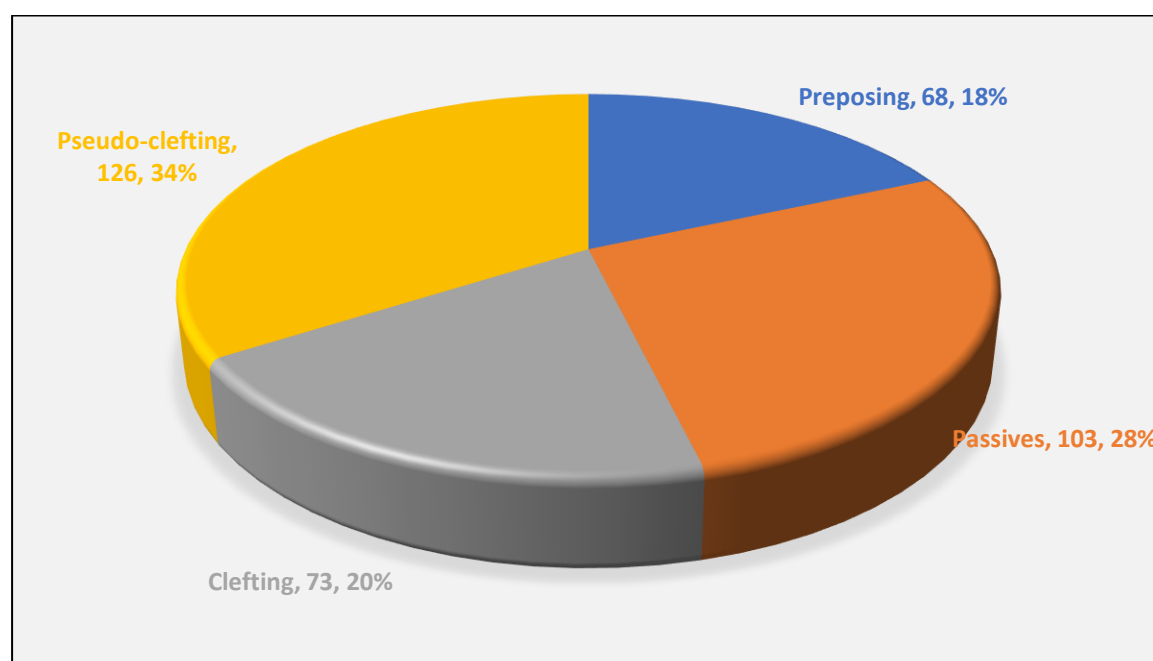

Figure1
Representation of the Syntactic Structures in the Political Corpus

It is also apparent in Figure 1 that the largest segment of the pie chart is that of the pseudo-clefts ($p = 34\%$), with the second one being passives ($p = 28\%$), followed by cleft sentences ($p = 20\%$) and preposed structures ($p = 18\%$). The following table shows the frequencies of different syntactic structures in the scientific genre of spoken Persian.

Table 2

Representation of Different Syntactic Structures in Scientific Texts

	Preposed Structures	Passives	Cleft Sentences	Pseudo-clefts
Frequency/Percentage	76	116	29	85

In the corpus of scientific texts, passive structures received the highest frequency ($f = 116$), and the second-highest frequency was that of pseudo-clefts ($f = 85$). Preposed structures stood in the third position ($f = 76$), and cleft sentences had the lowest frequency ($f = 29$). This is also graphically represented in the pie chart in Figure 2 below.
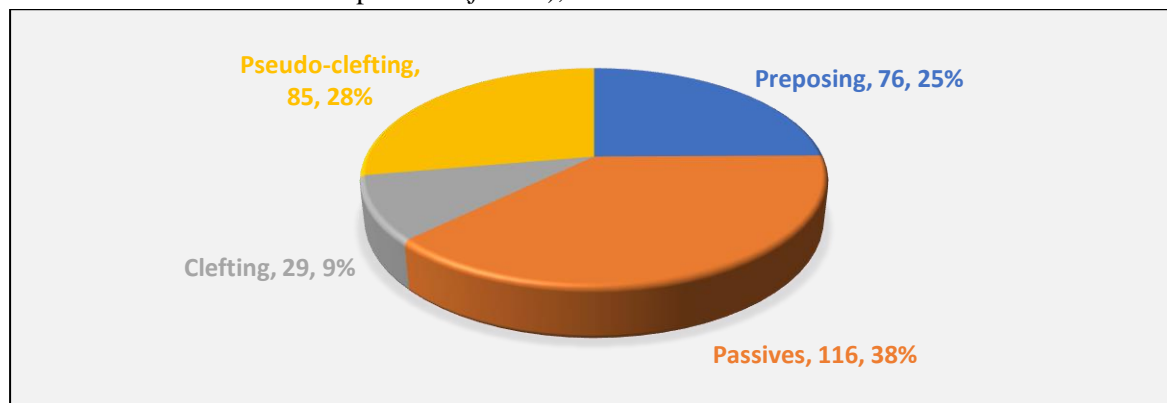

Figure 2

Representation of the Syntactic Structures in the Scientific Corpus

Passive structures were by far the most frequently used structure in the scientific genre ($p = 38\%$), while cleft sentences were by far, the least frequently used structure ($p = 9\%$). Pseudo-clefts ($p = 28\%$) and preposed structures ($p = 25\%$) were roughly equal in terms of the frequency of use in the scientific genre of spoken Persian. Table 3 below shows the frequencies of different syntactic devices in the genre of everyday conversations:

Table 3

Representation of Different Syntactic Structures in Everyday Conversations

	Preposed Structures	Passives	Cleft Sentences	Pseudo-clefts
Frequency/Percentage	109	34	21	69

Examining the genre of everyday conversations in spoken Persian, the researcher found many preposed structures ($f = 109$). In contrast, the frequencies for passives ($f = 34$) and cleft sentences ($f = 21$) were distinctively lower. Pseudo-cleft sentences in this corpus were found to receive a frequency of 69. This distribution is visually represented in the pie chart in Figure 3 below.
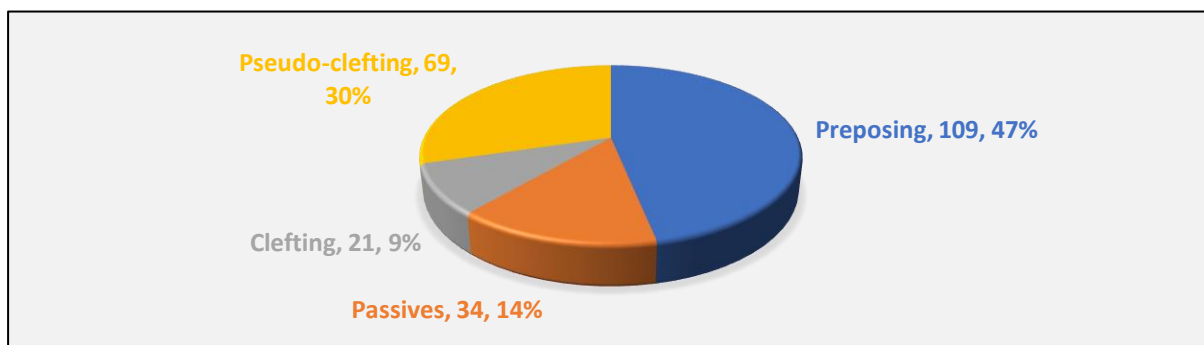
Figure 3
Representation of the Syntactic Structures in the Daily-Conversations Corpus

The pie chart reveals that the most significant portion of the syntactic devices used in the genre of everyday conversations belonged to preposed structures ($p = 47\%$); in fact, it constituted just under half of the targeted structures under investigation. Pseudo-clefts then included just under one-thirds ($p = 30\%$) of those structures, leaving 14% of the structures for passive and only 9% of them for cleft sentences.

Comparisons among the three spoken Persian genres and the different types of syntactic devices are provided below.

Differences in the Representation of Syntactic Structures in the Corpora

The frequencies for the four different types of syntactic devices of preposed structures, passives, cleft sentences, and pseudo-clefts for each of the three genres of political texts, scientific texts, and everyday conversations were separately presented above. What follows is an attempt to compare the three genres and the four structures in each genre. Table 4 then displays the frequencies of preposing, passives, clefting, and pseudo-clefting for the three genres of political, scientific, and daily-conversation spoken Persian, and then Table 5 presents the results of chi-square for independence, examining whether the differences among the three genres were considerable enough to reach statistical significance.

Table 4
Representation of Different Syntactic Structures in Political, Scientific, and Everyday Conversation Texts

	Preposed Structures	Passives	Cleft Sentences	Pseudo-clefts
Political Genre	68	103	73	126
Scientific Genre	76	116	29	85
Everyday conversations	109	34	21	69

What can be understood from Table 4 is that, (a) in the political corpus, 'pseudo-clefts' enjoyed the highest frequency, while 'preposing' had the lowest frequency of occurrence, (b) in the scientific corpus, the structure with the highest frequency was the 'passive' structure, while the least frequently used structure turned out to be 'cleft 'sentences, and (c) in the corpus of everyday conversations, 'preposing' was found to occur most frequently, while 'clefting' was used with the lowest frequency.

Given the differences mentioned above among the three genres of spoken Persian, chi-square

for independence was conducted to see whether there were differences among the three genres regarding how the four types of syntactic structures were distributed in them. The results of the chi-square are in view in the table below (Table 5):

Table 5

Chi-square Results for Comparing the Representation of Syntactic Structures in Political, Scientific, and Everyday Conversation Texts

	Value	*Df*	Asymptotic Significance (2-sided)
Pearson Chi-Square	88.788	6	.000
Likelihood Ratio	86.862	6	.000
Linear-by-Linear Association	24.389	1	.000
N of Valid Cases	909		

The *p* value under the rightmost column in front of Pearson chi-square in Table 5 was found to be smaller than the .05 significance level (*p* < .05), indicating that the differences among the three genres of political, scientific, and everyday conversation spoken Persian was of statistical significance. This means that the distributions of preposed structures, passives, cleft sentences, and pseudo-clefts were significantly different in the three genres of spoken Persian under investigation. This could also be seen in the bar graph in Figure 4 below.
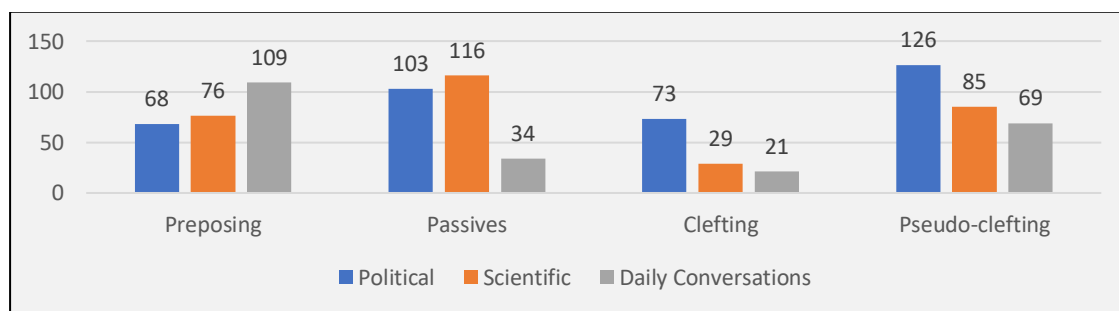

Figure 4

Representation of the Syntactic Structures in the Three Corpora

As it was pointed out above, the bar graph also shows that the four syntactic structures of preposing, passives, clefting, and pseudo-clefting were not evenly distributed in the three genres of political, scientific, and everyday conversations: preposing occurred most frequently in everyday conversations, passives in scientific texts, and clefting and pseudo-clefts in political texts. To compare the three genres in a pair-wise fashion in this regard, three more chi-squares were run, the results of which are merged and presented in Table 6.

Table 6

Chi-square Results for Comparing the Representation of Syntactic Structures in Each Pair of Texts

	Pearson Chi-Square Value	*df*	Asymptotic Significance (2-sided)
Political-Scientific	22.304	3	.000
Political-Everyday conversations	61.737	3	.000
Scientific-Everyday conversations	44.587	3	.000

As shown in the first row of Table 6, the political and scientific genres of spoken Persian differed significantly in terms of the distribution of the four syntactic structures under examination ($p < .05$). The same results were obtained for the comparison of political and daily-conversation genres ($p < .05$) and also for the pair of scientific and daily-conversations genres ($p < .05$).

In Table 7 below, each syntactic device is compared in a pair-wise fashion across different genres.

Table 7

Chi-square Results for Comparing the Frequencies of Different Syntactic Structures in Each Pair of Texts

Syntactic Devices	Compared Pairs	Chi-square	df	Sig. (2-tailed)
Preposed Structures	Political-Scientific	.444	1	.505
	Political-Everyday conversations	9.497	1	.002
	Scientific-Everyday conversations	5.886	1	.015
Passives	Political-Scientific	.772	1	.380
	Political-Everyday conversations	34.752	1	.000
	Scientific-Everyday conversations	44.827	1	.000
Cleft Structures	Political-Scientific	18.980	1	.000
	Political-Everyday conversations	28.776	1	.000
	Scientific-Everyday conversations	1.280	1	.258
Pseudo-clefts	Political-Scientific	7.967	1	.005
	Political-Everyday conversations	16.662	1	.000
	Scientific-Everyday conversations	1.662	1	.197

The results presented in Table 7 made it clear that for preposed structures, the difference between political and scientific texts was not statistically significant ($p = .505 > .05$), but the difference between political texts and everyday conversations reached statistical significance ($p = .002 < .05$), and so did the difference between scientific texts and everyday conversations ($p = .015 < .05$).

With regard to passives, there was no significant difference between political and scientific texts ($p > .05$), but the difference between political texts and everyday conversations was of statistical significance, and so was the difference between scientific texts and everyday conversations ($p < .05$). Concerning cleft sentences, however, political texts and scientific texts differed significantly, and the same result was also obtained for the political-everyday conversations comparison. Yet, the difference between scientific texts and everyday conversations failed to be statistically significant. Finally, concerning pseudo-clefts, political texts and scientific texts were significantly different. Political texts, in this regard, were also substantially different from everyday conversations. Nonetheless, the difference between scientific texts and everyday conversations was not of statistical significance.

DISCUSSION

As was observed above, the researchers of the current study attempted to find sound answers to the posed research question by analyzing the mentioned corpora based on Lambrecht's (1986, 1987, 1994, 2001) Information Structure model. The rationale behind employing this model was that it takes into consideration the fact that different devices represent Information Structure, including referential form, morphological marking, prosody and syntactic devices, and that the type and genre of language affect the use of these syntactic devices, either through optional rearrangement of constituents, or through obligatory movement of information-structurally marked components to certain positions in the clause. Moreover, each of the syntactic devices for representing Information Structure, such as passive

structure, cleft structure, and preposing, has a different role in representing various components of Information Structures (i.e. Focus, Presupposition, Topic).

The results obtained from the analysis of the data in the current study actually reconfirmed the above-stated presuppositions of the very model of research in the first place, meaning that the type and the frequency of syntactic devices (i.e. clefting, pseudo-clefting, passive and preposing, which are syntactic devices of Information Structure) depend on the type of language genre. This means that the model and its entities apply to the English language and other languages like Persian. This finding designates the novelty of the current study.

In the second place, the gained results indicated that pseudo-cleft was the highest frequently-used syntactic structure in the political corpus. On the other hand, in the scientific corpus, the passive was the most elevated frequently-used syntactic structure and in the corpus of everyday conversations, preposing was found to occur most frequently. Generally, these results are consistent with those of Modaresi (2007), who studied Persian Information Structure within Lambrecht's framework and showed that special syntactic structures could represent the Information Structure of a sentence. They also approve the overall finding of Jiménez-Fernández (2020), in her book, *Syntax-Information Structure Interactions in the Sentential, Verbal and Nominal Peripheries*, that there is a connection between Information Structure and syntax. Furthermore, regarding the higher frequency of the passive in scientific texts, the second finding supports that of Hadian, Tavangar-rizi, and Amouzade (2013). They investigated the frequency of occurrence of the passive structure in two registers of Persian, i.e. short story and scientific articles, regarding their Information Structure, and came up with the event of the passive as the most frequent syntactic structure of scientific articles in comparison with short stories.

As a final word to this section, it should be stated here that a good number of studies have been conducted on Information Structure events and categories in Persian. Still, most of them have examined only one or two syntactic features. Rasekhi (2018), for example, provided a unified syntactic analysis for elliptical structures in Persian, with an emphasis on the interaction between ellipsis licensing feature bundles and Information Structure. Rezai and Hooshmand (2012), studied Information Structure in interrogative sentences according to Role and Reference Grammar (RRG). Shafiei (2014) investigated postposed constituents in Persian to find out the Information Structure paradigm of such constructions. Most of these studies have reached conclusions based on a tiny sample. There is still a lack of detailed analysis of syntactic structures and their rhetorical functions in representing Information Structure on Persian spoken genres. Like Modaresi (2007), most of such studies have reported different syntactic forms for representing Information Structure. Still, they did not carry out an in-depth investigation on the existing differences in the frequency of using each syntactic device. Thus, the current study is, in comparison, more conclusive and its findings are more generalizable.

CONCLUSION

In the present study, some of the differences in syntactic structure that emerge from a comparison between a series of oral presentations were investigated. The idea was to provide a statistical account of these differences and propose some explanations for the differences observed. In our view, a study of the syntactic differences between the three genres under investigation can be usefully linked to the linguistic notion of Information Structure. Furthermore, by studying information packaging arrangements, we can gain added insight into why certain syntactic forms are preferred in a specific context. Therefore, the ultimate goal of the study was to explain and interpret the observed differences between these three genres in terms of the persistent syntactic structures used in them. With this goal in mind, the frequency of occurrence of the four syntactic structures, that is, clefting, pseudo-clefting, passive and preposing, as syntactic devices of Information

Structure, within three Persian spoken genres of political, scientific, and everyday conversation discourse, was calculated.

The obtained results showed that there is a significant difference between these genres in terms of syntactic devices frequency of use, meaning that the four syntactic structures of preposing, passives, clefting, and pseudo-clefting were not evenly distributed in the three genres of political, scientific, and everyday conversations: preposing occurred most frequently in everyday conversations, passives in scientific texts, and clefting and pseudo-clefts in political texts. This shows that each of these syntactic devices is more akin to and used in one of the three genres of Persian discourse. This phenomenon occurs in an involuntary process because the results of the study were established on natural corpora.

The findings of the study have implications for different groups of people: 1) linguists who are interested in the study of Persian language and linguistics and the comparative analysis of Persian Information Structure, 2) education experts who are concerned with the analysis of Persian spoken discourse for language learning and teaching, and 3) language theoreticians who deal with models of natural language and crave for the universals of Information Structure.

REFERENCES

Banon, J. A., & Martin, C. (2019). Anticipating information structure: An event-related potentials study of focus assignment via the it-cleft. *Neuropsychologia, 134*, 107203.

Biber, D., & Conrad, S. (2009). Register, genre, and style, Cambridge, CUP. In.

Brown, G., Brown, G. D., Brown, G. R., Gillian, B., & Yule, G. (1983). *Discourse analysis*: Cambridge university press.

Büring, D. (2006). Focus projection and default prominence. In *The architecture of focus* (pp. 321-346): de Gruyter Mouton.

Büring, D. (2007). Semantics, intonation and information structure. *The Oxford handbook of linguistic interfaces, 445474*.

Chafe, W. (1976). Givenness, contrastiveness, definiteness, subjects, topics, and point of view. *Subject and topic*.

Dik, S. C. (1997). *The theory of functional grammar: the structure of the clause*: Walter de Gruyter.

Erteschik-Shir, N. (2007). *Information structure: The syntax-discourse interface* (Vol. 3): Oxford University Press.

Féry, C., & Ishihara, S. (2014). *The Oxford handbook of information structure*: Oxford University Press.

Gundel, J. K., & Fretheim, T. (2004). Topic and focus. InHorn, Laurence R. & Ward, Gergory (eds.), The handbook of pragmatics, 175–196. In: Oxford: Blackwell.

Hadian, B., Tavangar-rizi, M., & Amouzade, M. (2013). A Functional Analysis of the Passive Structure in Persian. *International Journal of Linguistics, 5*(4), 22-37.

Halliday, M. (1985). AK An Introduction tO Functional Grammar [MJ. *Lond: Edwa~ Amold, 1*, 994.

Halliday, M. A. (1967). Notes on transitivity and theme in English: Part 2. *Journal of linguistics, 3*(2), 199-244.

Herdiana, H., Hidayat, D. N., Alek, A., & Husna, N. (2020). GIVEN AND NEW INFORMATION IN BARACK OBAMA'S REMARKS: A SYNTACTIC FORM ANALYSIS. *Journal of Languages and Language Teaching, 8*(4), 458-464.

Jackendoff, R. (1983). *Semantics and cognition* (Vol. 8): MIT press.

Jackendoff, R. S. (1972). Semantic interpretation in generative grammar. MIT press

Jiménez-Fernández, Á. L. (2020). *Syntax-information structure interactions in the sentential, verbal and nominal peripheries*: Cambridge Scholars Publishing.

Krifka, M. (2008). Basic notions of information structure. *Acta Linguistica Hungarica, 55*(3-4), 243-276.

Lambrecht, K. (1986). Topic, focus, and the grammar of spoken French, Benjamins Amsterdam

Lambrecht, K. (1987). Presentational cleft constructions in spoken French. *Clause combining in grammar and discourse, 135*, 179.

Lambrecht, K. (1994). *Information structure and sentence form: Topic, focus, and the mental representations of discourse referents* (Vol. 71): Cambridge university press.

Lambrecht, K. (1996). *Information structure and sentence form: Topic, focus, and the mental representations of discourse referents* (Vol. 71): Cambridge university press.

Lambrecht, K. (2001). A framework for the analysis of cleft constructions. *Linguistics, 39*(3), 463-516.

Mathesius, V. (1882). *O potenciálnosti jevů jazykových*. nákl. Královské České Společnosti Náuk.

Mathesius, V. (1945). Řeč a sloh [Speech and style]. *Čtení o jazyce a poesii. Praha: Družstevní práce v Praze*, 13-102.

Modaresi, B. (2007). Information Structure and its Representation in Persian. *Unpublished Ph. D. dissertation. University of Tarbiyat Modares.*

Rasekhi, V. (2018). *Ellipsis and information structure: Evidence from Persian.* State University of New York at Stony Brook.

Rezai, V., & Hooshmand, M. (2012). Focus Structure in Persian Interrogative Sentences: An RRG Analysis. *English Language Teaching, 5*(8), 130-145.

Rizzi, L. (1997). The fine structure of the left periphery. In *Elements of grammar* (pp. 281-337): Springer.

Roberts, C. (2012). Information structure: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics, 5*, 6-1-69.

Samko, B. (2016). *Syntax & information structure: The grammar of English inversions.* UC Santa Cruz.

Shafiei, S. (2014). Postposing and Information Structure in English and Farsi/Persian. *Romanian Journal of English Studies, 1*(11), 48-55.

Sousa, V. D., Driessnack, M., & Mendes, I. A. C. (2007). An overview of research designs relevant to nursing: Part 1: quantitative research designs. *Revista latino-americana de enfermagem, 15*(3), 502-507.

Vallduví Botet, E., & Engdahl, E. (1996). The linguistic realization of information packaging. *Linguistics. 1996; 34 (3): 459-519. DOI: 10.1515/ling. 1996.34. 3.459*.

Vallduví, E. (1992). *The information component. University of Pennsylvania.* PhD Dissertation dissertation,

Van Valin Jr, R. D. (2005). *Exploring the syntax-semantics interface*: Cambridge University Press.

Von der Gabelentz, H. C., & Loebe, J. (1843). *Ulfilas: Veteris et Novi Testamenti versionis gothicae fragmenta quae supersunt ad fidem codd. castigata, latinitate donata, adnotatione critica instructa, cum glossario et grammatica linguae gothicae coniunctis curis* (Vol. 2): apud FA Brockhaus.

Biodata

Fatemeh Aghaei is a Ph.D. Candidate of Linguistics at the English Department of Islamic Azad University, Isfahan Branch, Isfahan, Iran, and a lecturer in the same university. Her Ph.D. dissertation about 'Syntactic Devices of Information Structure in Persian Spoken Genres' is in progress at the time being. She is interested in research on semantics and pragmatics.

Dr. Bahram Hadian teaches in the Department of English, Islamic Azad University of Isfahan, Isfahan Branch, Isfahan, Iran. He is an Assistant Professor of Linguistics and has taught different courses in linguistics and translation. He has published many articles on

discourse, pragmatics, and translation in local and international journals. His research interests are discourse analysis, translation, and critical discourse analysis.

Dr. Vali Rezaei is an Associate Professor in the Department of Linguistics, Faculty of Foreign Languages, University of Isfahan, Isfahan, Iran. He holds lectures in Syntax, Linguistic Typology, Issues in Persian Syntax, and Pragmatics. He has published a good number of articles on discourse, pragmatics, and syntax in local and international journals.