



# An Analysis of the Iranian Simultaneous Interpreter's Strategies Based on Translation Spotting: A Study of Inferential and Temporal Discourse Markers



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## ABSTRACT

Simultaneous interpretation involves the parallel and temporal decoding and encoding of information within natural language processing framework. And language processing includes change and adaptation. The present researcher tried to analyze simultaneous interpreter's interpreting strategies in the interpretation of the two groups of the most frequent, effective, complex, and apparently simple discourse monitoring elements, that is, discourse markers (DMs). To carry out the study, the researcher applied parallel data focusing on the comparative analysis of inferential and temporal discourse markers from Persian into English. To meet the aims of the research, three Persian lectures along with their simultaneous interpretation were selected randomly. Coherence theory in discourse analysis and translation spotting in translation studies shaped the theoretical perspectives the study, and an inventory of discourse markers. The basis of this analysis was a comparative analysis of discourse markers in source and target texts. The results revealed that this simultaneous interpreter applied four groups of elaborative, contrastive, inferential, and temporal discourse markers in simultaneous interpretation of inferential and temporal discourse markers. This is a creative, flexible, and innovative approach in construction of discourse substantiated from an awareness of discursal differences between two languages and application of this awareness in planning and creation of proper discourse for the audience. Moreover, this analysis revealed that this Iranian simultaneous interpreter applied a theory in pragmatics, that is, underspecification and another theory in linguistics, that is, cooperative principles. Different implications in various research and educational perspectives about curriculum planning, material preparation, and educational discourse were suggested.

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and research implications? Researchers (Steele, 2015; Crible et al, 2017) believe that the differences between cultures, languages, and discourses in the use and distribution of DMs make their translation a challenging task for translators. Then the analysis of interpreters' and translators' creative approaches and strategies for problem solving in finding equivalents for DMs will bring about new research and educational horizons for researchers and authorities. Moreover, the analysis of translation strategies of DMs in parallel corpora will result in innovative perspectives in the investigation of translation universals effective in comprehensive and creative monitoring of educational discourse and display new approaches in the investigation of coherence relations between cultures and languages. Also, these studies will be in the service of development of different aspects of pragmatic researches. Moreover, research models may also be changed, revised and improved (Zufferey, 2017).

Researchers such as Simom-vanderbegen and Aijmer (2004) believe that the analysis of equivalence for DMs from different perspectives and in different languages will be more effective than their monolingual analyses. As a result, the integration of translation studies and discourse analysis will bring about new theoretical perspectives in both areas. Furthermore, investigation and analysis of translation equivalents for DMs will result in a more reliable, scientific, and research procedures for the introduction of the functional spectrum of DMs and can function as an exploratory system for the purpose of presenting semantic and pragmatic features of these elements. Also these studies can be in the service of analysis and introduction of pragmatic strategies in the process of translation (Hoek and Zuffery, 2015). Another implication of these studies might be related to lexicography. According to Hauge (2014) as pragmatic investigation and analysis of the

## 1. Introduction

Strategy, as the conscious undertaking by simultaneous interpreters to solve problems derived from linguistic, social, cultural, and discursal differences, is applied for the purpose of establishing effective communication with the target audience. And generally, it consists of intelligent and rational procedures for the immediate management of a lot of data that the simultaneous interpreter is involved in (Gumul, 2006). Simultaneous interpretation consists of bilateral interaction comprising concurrent decoding and encoding of information in source and target languages on the basis of frameworks, conventions, and principles of target language, culture, and discourse (Chesterman, 2016; Gill, 2018). From a pragmatic and discursive perspective, language components such as coordinators, conjunctions, short sentences, and adverbs in the process of interaction are referred to as discourse markers (Faghih Malek Marzban, 2009; Mohammadi, 2015). In spite of their apparent simplicity, discourse markers (DMs hereafter) are the most complicated, effective, and frequent elements in spoken and written discourse and are seen as inseparable elements in the use of language in different situations (Castro, 2009). DMs are meta-communicative, meta-textual and meta-comment elements which monitor discursive system of human communication in production, distribution, and use of discourse in society (Aijmer, 2002; Frank-job, 2006; Mohammadi, 2021). Now, the question is: how DMs should be translated? Due to the complex, ambiguous, and context-dependent nature, lack of propositional meaning, having no influence on semantic meaning of the sentence, translation of DMs is a complex and challenging process (Furko, 2014).

What is the motivation behind these parallel corpora studies? What are their pedagogical

are to be substantiated in decoding and encoding of information in complex simultaneous interpretation processes (Crible et al, 2018).

## 2. Review of literature

In this part of the study, first inferential and temporal relations in discourse are analyzed. Then various aspects and components of simultaneous interpretation are investigated. And finally, the methodology, nature, conditions of translating DMs, and some instances of their translation will be examined.

### Inferential relations in discourse

Inference deals with cause and effect, different aspects, and procedures of implication. Scholman and Demberg (2017) believe that in the first utterance the writer/speaker initiates a topic and in the second utterance by applying DMs he tries to provide reasoning, encouraging, and justification. That is, the writer/speaker tries to influence ideas, attitudes, and stances of the audience. Schiffrin (2006) believes that the foundations of inference are based on a set of interpretive principles and the audience will apply them in different contexts in order to discover communicative purposes of the writer/speaker and as a result to provide a proper reaction in the process of communication.

In the analysis of different aspects of inference Urgelles-Coll (2010) comes to the idea that in this process you provide a summary of ideas, show the consequences of former utterance, and finally express the outcome. Applying the following example, this researcher tries to clarify the issue: "He talked to his mother and the hatred increased." In this context, the DM "*and*" possesses an inferential function. Discussing stages of inference, Maschler and Schiffrine

translation of DMs has started recently, the findings are not put into practice in lexicography and the meaning of DMs represented in dictionaries may have not taken into account pragmatic functions of these elements. Therefore, they are not scientifically reliable, since lexicographers' procedures are limited to the representation of semantic meaning of DMs. However, this approach is not effective in the analysis of their pragmatic functions.

The present study tried to analyze and provide a report of methods and strategies of translating DMs and discover translation equivalence of DMs from a comparative perspective in parallel corpora. Due to the fact that simultaneous interpreter is mentally and linguistically involved in a creative and dynamic procedure in decoding and encoding of information in source and target languages, functionally and naturally he applies natural processing of language for the purpose of producing a fluent and comprehensible text for target audience. Therefore, the current study tried to analyze the consequences of creative application of natural processing of language in the interpretation of inferential and temporal DMs. So the following questions were investigated in the present study: 1. Which groups of English DMs are applied in the interpretation of Persian inferential DMs? 2. Which groups of English DMs are applied in the interpretation of Persian temporal DMs? 3. Based on the application and employment of the strategies in natural processing of language in decoding and encoding of information in simultaneous interpretation, is it possible to provide another definition for translation in this area? The researcher's assumption is that the application of natural language processing in social interactions such as simultaneous interpretation implies some sort of modification and innovation which are based on contextual, social, and cultural dynamism in human communication. Therefore, diverse structural, semantic, and pragmatic innovations, adjustments, and enrichments

temporal system. Analyzing the following example, this researcher proves that the DM "and" shows that the action of visiting took place before getting on the bus: "We visited and got on the bus." So a temporal relation is substantiated by this DM.

In addition, according to Groute (2002) in the process of temporal relations the writer/speaker combines two speech acts or ideas in which the first utterance establishes a hierarchical framework to facilitate the interpretation of the following utterances. Generally, establishing relations between speech acts, DMs show that the speech act in the main clause is simultaneous with the speech act in the subordinate clause, or it is before the speech act in the subordinate clause, and it also may be after the speech act in the subordinate clause. Besides, this researcher believes that pragmatic behaviors of temporal DMs occur in a way that the selection of a temporal DM between two events or ideas for the expression of a hierarchical relationship is under the influence of writer's/speaker's mental context.

**Interpretation system**

Due to the simultaneous involvement of the interpreter in decoding and encoding of information, simultaneous interpretation is very complex and the interpreter's success in this process depends on creative use of natural processing of language in this dual and complex process. Researchers such as Chesterman (2016) and Gile (2018) believe that the steps followed by simultaneous interpreters include quick comprehension and analysis of speech, storing of information, and simultaneous production of the spoken text based on cultural, linguistic, and discursal requirements of audience through cooperation with lecturer and his success in this process depends on proper

(2015) come to the conclusion that in the framework of inference the person starts his justification, relates his claim to the general reality, and finally discovers the difference between the form of speech and its context of use. And he comes up with more understanding of context and situation. Moreover, Cribble and Dagand (2019) believe that pragmatic behavior of inference consists of causal, conditional, and concluding functions.

**Temporal relations in discourse**

In the analysis of temporal relations issues such as hierarchical and sequential structure of text, temporal sequence of events in the text, and hierarchical nature of human communication are investigated. Aijmer (2002) believes that an important part of discourse structure is established on the basis of temporal relations including sequence and hierarchy of time and place. In the description of temporal process, Schilder (1998) states that on the basis of rhetorical structure theory, a text is made up of a set of discourse units which are organized on the basis of hierarchical stages.

Moreover, Urgelles-Coll (2010) believes that according to assumptions of coherence theory, DMs establish coherence relations between units of discourse on a temporal basis within a text. This researcher classifies temporal procedure and process as follows: 1. the writer/speaker indicates change on the basis of time, 2. the writer/speaker reminds sequential limitations, and 3. the writer/speaker recognizes reference to time. That is, temporal relations express active cognitive mechanisms by the writer, speaker, and audience. Sanders (1992) cited in Urgelles-Coll (2010) believes that the first condition in coherence relations is that the organization of discourse units be hierarchical and it implies that any relationship in discourse should have a

is not be a proper strategy due to the fact that researchers have shown that finding one-to-one correspondence between DMs in two languages is impossible. Also, Aijmer and Simon-Vanderbergen (2006) believe that finding the same equivalence for these discourse elements is not possible because the application of a special a DMs depends on some social, stylistic, and interpersonal functions in the context. As a result, a number of adjustments are substantiated in the selection of equivalence. These researchers conclude that translation of the functions and pragmatic impressions of DMs requires more flexibility in the selection of equivalence including the employment of target language DMs, conjunctions, coordinators, short sentences, modal verbs and other structural components and modifications.

In his analysis, Chaume (2004) infers that the application of DMs in a text reveals a lot of information about the writer and speaker. Every language possesses its rules, distinctive features and special principles for the application of DMs. Consequently, word by word translation of DMs is rejected and finding proper equivalents expressing various layers of their meanings in source language is a sensitive, subtle, and elusive procedure. In the process of translating and finding equivalence for DMs, information regarding their pragmatic functions is the most important variable. Therefore, naturally the interpreter needs to use proper DMs which are conventional in the target language, he might modify the structural system of target language, and finally another option might be deletion of DMs. Moreover, researchers' findings revealed that translation of DMs is connected with cultural and social variables and intercultural pragmatic knowledge is very important in their translation (Alo, 2010).

And the final part of the review of literature is devoted to the analysis of the translation of some DMs in the former investigations. Gonzalez (2004) has analyzed the functions of DMs in narratology and came to the idea

use of Grice's co-operative principles. In the analysis of parallel corpora in Chinese and Russian languages researchers discovered the following four universals in the translation of discourse markers: simplification, implicitation, explicitation, and naturalization (Jiang & Tao, 2017). As a rule, these researchers come to the conclusion that translation of DMs undergoes some sort of pragmatic enrichments. Conditions and characteristics of context are taken as an important and influential variable in the translation of DMs. And they believe that adaptation in translation and different structure of academic texts are assumed as two important factors. Context, structure and dynamics of text set up the foundations of adaptation in translation. Differences between two languages also are important elements resulting in lack of equivalence for DMs. Therefore, these researchers conclude that omission of DMs within the framework of implicitation functions as a translation strategy.

The second issue in the study of translation of DMs is related to researchers' views about the translation of DMs. According to Furko (2014), due to the various features of DMs including multi-functionality, lack of propositional meaning, profound dependence on context, and lack of referential function, translation of DMs becomes a complex process. In spite of possessing these important characteristics, DMs do not modify the core meaning of the sentence. But they are essential, influential, and effective in the organization and monitoring of discourse. Moreover, these metalinguistic elements indicate the attitude and reaction of a speaker/writer towards the content of the text. Also they shape the pragmatic and inferential processes in the mind of audience, helping him discover and explore implicit aspects of a text.

Another group of researchers studied the strategies and methods of translating DMs. According to Zuferry (2017) definitely literal and word by word translation of DMs

**Theoretical bases of the study:** for the purpose establishing and substantiating theoretical foundation for the study, theoretical perspectives in discourse analysis and translation studies were integrated. As a result, the researcher resorted to coherence theory in discourse and translation spotting theory in translation studies. According to Coherence Theory the truthfulness and accuracy of a concept depends on its connection to other concepts in the mind of the person. And the expression of concepts in discourse and in the context of sentence should be fluent, understandable, relevant, and logical (Glanzberg, 2018). The following principles shape the foundations of coherence theory: all the texts enjoy coherence, there are various coherence relations in texts, and analysis and exploration of the relations for the comprehension of the text is essential (Redeker, 2006; Schiffrin, 2006). Moreover, the analysis of translators' strategies, practices, and procedures in the process of problem-solving in translation substantiated the foundations and presuppositions of Translation Spotting Theory. On the basis of this theory in translation studies, researchers analyze pragmatic behaviors of translators to study discourse and explore commonalities and universals among languages, cultures, and discourses (Cartoni and Zuferry, 2013).

**The research model:** coding, recognition, and classification of DMs were carried out by the inventory discovered and designed by Mohammadi and Dehghan (2020). This model is designed on the basis of coherence theory in discourse and a corpus-based investigation. This model shows four logical relations of inference, elaboration, contrast, and temporal progression and development in texts. In this inventory and model four different ways of developing texts for agreement and addition, contradiction and contrast, inference and conclusion, and temporal and chronological sequence of

that these elements have got various pragmatic functions. Gile (2005) investigated pragmatic functions of DMs and discovered that the DM "*I mean*" possesses the following 11 functions: indicating topics switch, elaboration, description, clarification, false starts, contradiction, contrast, conclusion, emphasis, clarification of intention, and correction. In the analysis of his corpus, Hajimia (2018) investigated the functions of the DM "*in fact*". His findings showed that this DM indicated general relations such as avoiding deviation from the main topic, returning to the former topic, introducing new topic and rejecting an idea. The investigations of these researchers revealed that translators' equivalence expressed a limited number of these functions. This review of literature revealed that such a research is not carried out in the area of simultaneous interpretation in Persian language. Therefore, the present research tries to fill this scientific, research, and educational gap.

### 3. Methodology

**Research method:** this exploratory research investigated the English equivalents of the simultaneous interpreter for inferential and temporal DMs for the purpose of production of fluent and coherent text for the audience in English language. The corpus of the investigation included three lectures in Persian language along with their simultaneous interpretation into English language. Moreover, in order to prevent researcher's biases and possible mistakes in discovering and recognizing interpreter's equivalents as well as indicating reliability of the findings of the study, two raters were invited to contribute in discovering and identification of simultaneous interpreter's equivalents for DMs.

findings are reported and the next section (4.2) is devoted to the analysis and the interpretation of the findings. The purpose of this exploratory, descriptive, and qualitative research was the study of pragmatic behaviors, procedures, and strategies of this Iranian simultaneous interpreter in the translation of inferential and temporal DMs and exploration of his translation equivalents on the basis of coherence and translation spotting theories. And also the researcher applied a discourse marker inventory for the comparison of the parallel corpora. In order to accomplish the research objective, the equivalents selected by the interpreter for inferential and temporal DMs were analyzed. According to Table 1, Persian corpus consists of more than 16000 words and there are 745 instances of DMs in the corpus including 13 percent of the total number of words in the corpus. The analysis of English corpus revealed that in the process of finding equivalents by this Iranian simultaneous interpreter, 250 instances of DMs were modified (more than 33 percent) which includes one third of DMs in the corpus (questions 1 and 2). That is, in the process of finding equivalence for DMs in simultaneous interpretation process other DMs were employed.

Table 1

*Frequency of words,  
DMs and percentage of modified DMs in the  
corpus*

Lectures	Words in the Persian text	Number of DMs	Percentages of DMs	Number of modified DMs	Percentages of modified DMs
First	4409	188	4.2%	73	38%
Second	7095	324	4.5%	96	29%
Third	5155	233	4.5%	81	33%
Total	16659	745	13.2%	250	100%

version 26 and Kappa formula. This formula is applied for the analysis and evaluation of correspondence between raters for analyzing data with similar values. In the qualitative analysis of interpreter's pragmatic strategies

events through the application of DMs are introduced.

**Raters, procedures, and corpus of the research:** to confirm the scientific reliability of the research, two raters who were specialists in linguistics and TEFL participated in the analysis procedures. Their responsibility was the evaluation of the qualitative phase to check and eliminate the possible researcher's biasedness and mistakes in recognition of equivalents for DMs in English language. They were familiar with the literature in the area and they had carried out researchers in discourse analysis. First the English and Persian corpora were compared and analyzed. Then DMs were recognized in both corpora through the above model. After that 25 percent of interpreter's equivalents for DMs were given to the raters. Next the raters analyzed and evaluated researcher's recognition of interpreter's equivalents for DMs. Afterwards, SPSS version 26 and Kappa formula were applied in the analysis of data. Corpus of the study consisted of 35000 words. The corpus was selected randomly from the three lectures given by Ayatollah Seyyed Ali Khamenei, the leader of Islamic revolution, in 2020 and their simultaneous interpretation on press TV.

#### 4. Results and discussion

In this part, first the

**Interrater reliability:** the analysis of inter-rater reliability approves reliability of the qualitative phase of the study. Inter-rater reliability was calculated through SPSS



Tables 2 and 3 show the degree of interrater reliability and according to Pete (2001) 0.78 shows a good level of reliability.

Table 2

*rater1 \* rater2 Crosstabulation*

		rater2		Total	
		.00	1.00		
rater1	.00	Count	4	0	4
	% within rater2	66.7%	.0%	6.7%	
	1.00	Count	2	54	56
	% within rater2	33.3%	100.0%	93.3%	
Total		Count	6	54	60
		% within rater2	100.0%	100.0%	100.0%

*Symmetric Measures*

in the process of finding equivalents, two raters were invited to express their agreement or disagreement about the researcher's view on the interpreter's strategies in the interpretation of DMs. The value for every agreement on items was 1 and the value for disagreement was 0.

Table 3

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of	Kappa	.783	.148	6.211	.000
N of Valid Cases		60			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					

English corpora. And the second section provides the report of interpreter's equivalents for temporal DMs.

**Inferential DMs**

According to tables 3, 5, and 7 the analysis of source text reveals

**4.1. Results**

The results are reported in two sections. First part is devoted to the analysis of the equivalents selected by the interpreter for inferential DMs along with instances from Persian and

Table 4

*Distribution  
of equivalents for inferential DMs  
expressing conclusion*

Number	Persian DMs	Frequency	English equivalents	Frequency
1	خب	16	And, So, Now, You know, Also, I mean	6
2	خب حالا	3	Now , So, Now well, Now but	4
3	خب بنابراین	1	So	1
4	خب پس بنابراین	1	So ....also	1
5	خب بله	1	Well yes but	1
6	خیلی خب	1	So	1
7	بنابراین	3	So/ Just because, just besides	3
8	پس بنابراین	1	So, therefore	2
9	بلکه	1	So	1

interpreter. Totally in the interpretation of 9 different Persian DMs, 14 different English DMs are applied (Table 3 and extracts 7 to 18, Table 5). Analysis of this interpreter's pragmatic strategies revealed variety, dynamism, and flexibility in the process of construction of discourse in interpretation of DMs.

Table 5

*Simultaneous  
interpreter's equivalents for inferential DMs  
indicating conclusion*

Number	Extracts	Equivalents
1	در آن روز و آن دورانها <b>خب</b> روحانیونی بودند که در زمینه های مسائل روشنفکری وارد بودند و بحث میکردند و حرف میزدند.	<b>خب</b>
	<b>You know</b> those days the clerics were discussing in different issues, clerics and scholars were expressing their views.	<b>You know</b>
2	<b>خب</b> ، نکته ی مهم این است امام بزرگوار که این همه تحولات را به وجود آورد.	<b>خب</b>
	<b>So</b> all these developments and changes were caused by Imam.	<b>So</b>
3	<b>خب</b> ، یک شرط مهم برای ایجاد تحول، نترسیدن از دشمن و دشمنی ها است.	<b>خب</b>
	There's <b>also</b> another important condition to call change and that is not being scared of the animosity of the enemy.	<b>Also</b>
4	<b>خب</b> این خیلی دستاورد عجیب و بزرگی بود که خرمشهر را رزمندگان ما، ارتش و سپاه و بسیج، توانستند از دشمن باز پس	<b>خب</b>

that lecturer applied three different groups of inferential discourse markers expressing conclusion, documentation, and logical reasoning.

The first group includes DMs expressing conclusion such as well, therefore, then and their combinations (9 instances). The analysis of selection of equivalents by the interpreter indicates that in the process of interpreting these discursal elements, different groups of DMs including elaborative, contrastive, inferential, and temporal DMs are applied. Table 5 shows instances of inferential DMs expressing conclusion in Persian along with different equivalences selected by this simultaneous

	بگیرند.	
	And that was a big achievement you know in liberating the city of Khorramshahr there was the IRGC, the mobilization Force, the army forces and so on they recaptured the City.	And
5	علاج هم دست خودمان است. <b>خب</b> می بینید که مسئولین دارند خودشان را واقعاً فدا میکنند؛ از پزشک و از پرستار و از مدیر	خب
	We can just find the cure <b>I mean</b> the officials are sacrificing themselves there are many good physicians managers.	I mean
6	<b>خب</b> رژیم آمریکارژیم استکباری است و رژیم استکباری، جامع بسیاری از ضررها و شیظنتها و بدیها است	خب
	<b>Now</b> the US establishment is an arrogant one, an imperialist one and the source of lots of treachery	Now
7	<b>خب</b> ، <b>پس</b> بنابراین امام، امام تحویل بود.	خب پس بنابراین
	<b>So</b> Imam was the Imam of change.	So
8	<b>پس</b> بنابراین تحویل یعنی میل به شتاب گرفتن و سرعت داشتن در حرکت و جهش در حرکت.	پس بنابراین
	<b>Therefore</b> , by change we mean you have this inclination and willingness to accelerate to move forward fast.	Therefore
9	سرعت با شتابزدگی فرق دارد. <b>خب حالا</b> اینها یک نکاتی بود در مورد تحوّل که باید ما دنبالش باشیم.	خب حالا
	It is different from acting hastily, <b>so</b> they were a number of points that I wanted to mention regarding change.	So
10	<b>خب حالا</b> تحویل در چه زمینههایی باید انجام بگیرد؟	خب حالا
	These are the points that we need to bear in our mind, <b>now but</b> change in what areas.	now but
11	<b>خب</b> ، بنابراین چستی و چرایی جنگ تحمیلی، در این چند جملهی کوتاه به نحو اجمال روشن میشود	خب، بنابراین
	<b>So</b> the why and how of the imposed War is summarized this way.	So
12	<b>بنابراین</b> ، از اول تا آخر، مسئلهی دفاع مقدّس یک پدیدهی عقلایی و یکی از عقلانیترین حرکات ملت ایران بود.	بنابراین
	<b>So so</b> the sacred defense was a rational move and wise action by the nation of Iran.	So so
13	<b>خب اصلاً</b> فضایل اخلاقی مثل صداقت، صدق و صفا. <b>خب اصلاً</b> منطقی جبهه، منطقی صدق و صفا بود، همه با هم باصفا بودند.	خب اصلاً
	I can refer to honesty as one such moral values <b>and</b> the Battlefield was a place filled with honesty and dedication.	And
14	<b>خب بله</b> ، ممکن است حوادثی اتفاق بیفتد، به ما ارتباطی نخواهد داشت.	خب بله
	<b>Well yes but</b> it has nothing to do with us.	Well yes but
15	<b>خب حالا</b> قطع نظر از اینکه کدام انتخاب بشوند -ممکن است این یکی، ممکن است آن یکی انتخاب بشود، حالا امروز معلوم خواهد شد.	خب حالا
	<b>Now</b> regardless of who is going to be elected this one or that one would be elected, will be clear today.	Now
16	<b>بنابراین</b> به اسلام و پیغمبر صدمه‌ای وارد نمی‌آید،	بنابراین
	<b>Just besides</b> the prophet of Islam is not his reputations are not harmed any way	Just besides

17	خب شما میگوی که این طرف آدم را کشته؛ <b>خیلی خب!</b> شما برای آن کسی که کشته شده ابراز محبت بکن، ابراز تأسف بکن.	<b>خیلی خب</b>
	Well you are saying that this man has killed the person; <b>so</b> , for the victim you can sympathize.	<b>so</b>
18	<b>بنابراین، هم</b> مرکز تولید فکر درست کردند، <b>هم</b> جریانهای تروریستی را به وجود آوردند، <b>هم</b> عناصری را که نمیدانستند و نمیخواستند وارد این بازی بشوند، به طور غافل و نادانسته وارد جریان کردند.	<b>بنابراین، هم</b>
	<b>So</b> they created think tanks they <b>also</b> create the terrorist groups and also those elements who didn't know actually they didn't want to actually enter this game	<b>So... also</b>

target language (extracts 1 to 9, Table 7).

The analysis of the equivalents for this group of DMs reveals that they are doubled. These findings indicate creativity and an innovative approach in discourse structuration in the process of encoding information in simultaneous interpretation.

Table 6

*Distribution of equivalents for inferential DMs indicating documentation*

The second group consists of inferential DMs indicating documentation such as really, in fact, and their combination with 2 instances. In the interpretation of this group of DMs, this interpreter applies the following English DMs: in fact, so, and, then (4 instances). That is, in the interpretation of two Persian DMs, the interpreter has applied 4 instances of English elaborative and inferential DMs in

Number	Persian DMs	Frequency	English equivalents	Frequency
1	در حقیقت	1	And	1
2	در حقیقت در واقع	1	In fact	1
3	در واقع	3	Then, And, So	3
4	واقعا	1	And	1
5	واقعاً هم	1	And	1
6	البته...هم	1	And	1
7	البته	1	And	1

*Simultaneous interpreter's equivalents for inferential DMs indicating documentation*

Table 7

Number	Extracts	Equivalents
1	مردم را به جهنم می کشانند و دعوت به جهنم می کنند. در واقع آن حالت و شدتی که قرآن در قبال دشمنان اسلام و کفار ابراز می کند، در مقابل آن جریان ها است.	<b>در واقع</b>
	They are leading the people towards the hell and infernal <b>so</b> that intensity that the Quran in face of being an infidel and it is expressed about the masses of non- believers	<b>so</b>
2	<b>واقعاً</b> نابودی حرث و نسل است.	<b>واقعاً</b>
	<b>So</b> this is the reality they destroy the whole generation	<b>So</b>
3	دانشجویان که به سفارت حمله کردند <b>در حقیقت</b> حرکت دفاعی بود، به جا بود، به موقع بود، کاملاً عقلانی بود.	<b>در حقیقت</b>

	When our students attacked that US Embassy <b>and</b> that was in defense that was the timely one that one the right one it was based on wisdom.	<b>And</b>
4	من و شما حسنِ مادری را اصلاً نمیفهمیم، واقعاً هیچ کس نمیتواند حسنِ مادری را درک کند.	واقعاً
	We may not cannot feel the feeling of mother who <b>and</b> no one can feel feeling of motherhood except mothers.	<b>And</b>
5	امروز توانایی های دفاعی ما در <b>حقیقت و در واقع</b> نزدیک به حله بازدارندگی است؛ این چیز خیلی مهمی است.	دح دو
	Today we have our defense capabilities, <b>in fact</b> , close to deterrent and that really matters.	<b>in fact</b>
6	در <b>واقع</b> یک مرگ تمدنی برای آنها به حساب می آید، کما اینکه برای کشور ما هم متأسفانه همین جور هم بود.	در واقع
	<b>Then</b> a death of the civilization that is what unfortunately our country event through at that time.	<b>Then</b>
7	واقعاً هم همین بود؛ امام و کارگزاران امام و جوانهایی که با اشاره ی دست امام حرکت میکردند، به معنای واقعی کلمه تحقیر کردند ابرقدرت ها را.	واقعاً هم
	<b>And</b> that is what exactly the Imam did and also the agents that simply moved on the orders of Imam they really humiliated the world powers.	<b>And</b>
8	این نکته بیش از بقیه ی نکاتی که عرض شد، به برکت اسلام است. البته اعتلا و درخشندگی نقاط دیگر هم به برکت ایمان دینی بود،	البته...هم
	Compared to the other points this point is quite clear <b>and</b> it has been due to the blessing of Islam and also having firm faith in Islam.	<b>And</b>
9	البته چون ملت ایران قبلاً لطمه خورده بود از غربی ها -از انگلیس ها یک جور، از آمریکایی ها یک جور- آشنا بودند تا حدودی اما نه به قدری که در دفاع مقدس دیده شد.	البته
	<b>And</b> the Iranian nation had been harmed by the West in the past and we're somehow familiar with America and Britain. We became more familiar during the sacred defense.	<b>And</b>

because, and that is why. In other words, three different types along with four different combinations are applied (Table 8 and extracts 1 to 4, Table 9). Here also different types of a structural, semantic, and pragmatic innovations are observed in the data.

Table 8

*Distribution of equivalent for inferential DMs indicating logical reasoning*

Number	Persian DMs	Frequency	English equivalents	Frequency
1	هم به خاطر	1	Because of the fact that	1
2	به خاطر	1	And then because	1
3	چون	1	And that is why	1

4	به خاطر همین	1	Just because	1
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*Simultaneous*

*interpreter's equivalents for inferential DMs indicating logical reasoning*

Table 9

Number	Extracts	Equivalents
1	به خاطر بی‌اهتمامی‌هایشان مبتلا شدند به ارتجاع، به عقب‌گرد.	به خاطر
	And then because of negligence they had to go back and they faced retardation.	And then because
2	چون دشمن این را فهمید، شروع کرد به برنامه‌ریزی بر ضد این حرکت.	چون
	That is what the enemy realized and realized. And that is why they tried to act against it.	And that is why
3	توانستند مدیریت کنند و نمیتوانند مدیریت کنند؛ به خاطر همین خصوصیات فسادى که در دستگاه حاکمى آمریکا وجود دارد.	به خاطر همین
	They have not been able to manage them and they won't be able to manage them just because of the corruption in their administration.	Just because of
4	دشمنى شان هم به خاطر این است که سلطه‌ی ظالمانه‌ی آنها را به رسمیت نشناختیم.	هم به خاطر
	Well, their animosity against us is because of the fact that we did not accept and surrender their dominance.	because of the fact that

In the Persian text 9 different ordinal DMs are employed. In the process of interpretation of these elements, 10 different English DMs including inferential, elaborative, contrastive, and temporal DMs are applied. The most frequent equivalents selected by the interpreter are elaborative DMs including five different types (extracts 2 to 8, Table 9). The second rank with four instances belongs to temporal DMs (extracts 1, 4, 7, and 8, Table 9).

**Temporal discourse markers**

In the source text two groups of temporal DMs are observed: ordinal DMs and time sequencing DMs.

**Ordinal discourse markers**

In this section, first simultaneous interpreter's approach in interpretation of ordinal DMs are reported.

Table 10

*Distribution of equivalents for ordinal DMs*

Number	Persian DMs	English equivalents
1	اولا	So in the first place, or for example
2	دومی	Also.....also
3	بالاخره	I mean, And
4	اخری هم	And the last
5	بعد هم	And/and also

6	و بعد	And
7	بعد خوب	Of course later on
8	و بعد هم	And then
9	بعد که	And when
10	ثانیا	Then secondly
11	بعد	And, And later on, But after, And also

language in simultaneous interpretation. The second rank goes to ordinal DMs with 7 instances (extracts 2, 4, 5, 12, 16, 18 and 20, Table 11). The third rank belongs to temporal DMs with 6 instances (7, 12, 14, 17 and 20, Table 11). And finally the fourth rank belongs to inferential and contrastive DMs each with one instance (extracts 3 and 4, Table 11). Therefore, this interpreter applied all four groups of DMs in the process of finding equivalents for ordinal DMs.

Table 11

*Simultaneous interpreter's equivalents for ordinal DMs*

According to the Tables 10 and 11, a great number of varieties, innovations, and flexibilities in the selection of equivalents for DMs are observed. In 10 instances, the interpreter has applied elaborative DMs or their combinations in the process of interpretation (extracts 1, 3, 6 to 21, Table 11). Namely, 19 various samples, some of them combined and others used individually, are applied in interpretation process. This outstanding variety in the selection of equivalents is an indication of the interpreter's competence and performance in natural processing of

Number	Extracts	Equivalents
۱	وقتی که شما تغییرات مثبت در خودتان ایجاد کردید، خدای متعال هم برای شما حوادث مثبت و واقعیت‌های مثبت را به وجود می‌آورد. <b>دومی</b> در سوره‌ی انفال است.	<b>دومی</b>
	Unless you make positive changes in yourself he will also put forth some positive issue was before you. <b>Also</b> in Anfall chapter God Almighty <b>also</b> says the same concept.	<b>Also...also</b>
۲	<b>بعد</b> از رحلت امام این حرکت تحولی وجود داشته است.	<b>بعد</b>
	<b>But after</b> the departure of late Imam we did not stop and the change continued.	<b>But after</b>
۳	خدا به پیغمبرش میفرماید که از مردم نباید بترسی. <b>بالاخره</b> هر اقدام مثبتی، هر کار مهمی ممکن است یک عده‌ای مخالف داشته باشد.	<b>بالاخره</b>
	God tells his profit that he shouldn't be afraid of the people. <b>I mean</b> whatever positive action could be opposed by people.	<b>I mean</b>
۴	<b>اولاً</b> هدف جنگ افروزان، آن کسانی که جنگ تحمیلی را بر ملت ایران تحمیل کردند، در هم کوبیدن نظام اسلامی بود، در هم کوبیدن انقلاب بود.	<b>اولاً</b>
	<b>So in the first place</b> what was the goal of by the war mongers? Those who imposed the war on the Iranian nation. They wanted to repress and crash the Islamic Revolution ,the Islamic establishment .	<b>So in the first place</b>

5	ثانیاً یک تشخیص اساسی و حیاتی امام داد و آن این بود که این مسئله‌ی مهم را فقط ملت ایران میتواند حل کند. این مسئله، صرفاً مسئله‌ی نیروهای مسلح نیست.	ثانیاً
	Then secondly there was also something else that Imam realized and that was the very fact that this important issue could be solved and tackled by the Iranian nation. This is not the solely job of the Armed Forces.	Then secondly
6	می فهمیدند که حقیقت را دارد بیان میکند؛ بعد نگاه تیزبین او که یک اعماقی را مشاهده میکرد که به معنای واقعی کلمه مصداق «آنچه در آینه جوان بیند، پیر در خشت خام آن بیند.	بعد
	They knew that he was speaking the truth and that the way that he looked at you, he was sharp-sighted, he will see some minute details and subtleties.	And
7	فلان جوان از روستایی در فلان نقطه‌ی کشور -مثلاً روستایی در کرمان- بیاید داخل شهر و ببیند به اینجا، بعد بشود مثلاً حاج قاسم سلیمانی.	بعد
	Imagine a young man coming from a village going to the city and joining the combatants and later on he turned into a person like general Qassem Soleimani.	and later on
8	آنچه امام فرمودند، نشان‌دهنده‌ی عقلانیت ورود در این عرصه بود. بعد فعالیتها و همکاری سپاه و ارتش؛ ببینید، این خیلی مسئله‌ی مهمی است.	بعد
	Everything Imam said all include the rationality related to sacred defense and also the cooperation between the army and the IRGC is a very important issue.	and also
9	بعد، در این حرکت دسته‌جمعی چه استعدادهایی ناگهان پیدا بشود.	بعد
	And in this way you could come across new talents.	And
10	بعضی‌ها پشت جبهه میتوانند نقش بیافرینند و آفرینند. اولاً کمکهای مالی، آذوقه رسانی‌ها که مهم بود.	اولاً
	Someone can play the role behind the Battlefield or for example the financial support and providing the combatants with the provisions are also important.	or for example
11	خدا به پیغمبرش میفرماید که از مردم نباید بترسی. بالاخره هر اقدام مثبتی، هر کار مهمی ممکن است یک عده‌ای مخالف داشته باشد.	بالاخره
	God tells his profit that he shouldn't be afraid of the people. I mean whatever positive action could be opposed by people.	I mean
12	بعدی «حریص علیکم»؛ دلسوز شما است، مشتاق شما است، علاقه‌مند به سرنوشت شما است.	بعدی
	And then he is compassionate, he is kind to you, he's keen on your destiny, a good destiny for you .	And then
13	دست‌های تحریف‌گر در کمینند. خب شماها که مردان جنگید الان حضور دارید، بالاخره شماها یک چیزی میگویید، یک دفاعی می‌کنید.	بالاخره
	Some things are said and you defend the secret defense.	And
14	بعد پایین می‌آید، میرود در سفارت انگلیس پناهنده میشود.	بعد
	.....and then he goes into British embassy and Take Shelter there.	and then
15	امام در یک چنین شرایطی توانست آغاز جنگ را و بعد تداوم این حرکت را در زیر چشم خود و اراده‌ی خود به پیش ببرد و اداره کند.	و بعد
	The late Imam in such a situation managed beginning of the war and in the continuation of the war he had everything under his control and manage things.	And
16	نیروهای مسلح بعد خب وضع بهتری پیدا کردند.	بعد خب
	Of course the Armed Forces later on were better and they improved their capabilities.	Of course.... later on



17	و بعد هم قاطعیت بی نظیر، آن قاطعیت فوق العاده؛ کارهای نشدنی را که به معنای واقعی کلمه نشدنی به نظر میرسید، امام به طور قاطع رد می کرد.	و بعد هم
	And then we had his resolve his determination of his decisiveness. You know the things that looked impossible, but he would decisively say no.	And then
18	یک صندلی گذاشتند آنجا نشست، فقط استالین بلند شد؛ بعد هم کمونیست ها در خاطرات بعدی نوشتند که استالین گفت دید که اینها بی اعتنائی میکنند، برای اینکه او را به طرف خودش جذب کند [از جا] بلند شد.	بعد هم
	They just let him sit next to themselves and only Stalin made a little move and later on in his memory the Communists had written that Stalin said that that as they gave him a cold welcome, so he got up because he wanted to attract his attention.	and later on
19	خیلی از انقلابهای دنیا مبتلا به ارتجاع شدند؛ یعنی بعد از آنکه پنج سال، ده سال، پانزده سال از شروع انقلاب گذشت.	یعنی بعد
	Lots of revolutions in the world face retardation after 5, 10 or 15 years when the Revolution starts.	After
20	احتمالاً انسان قدم را نابجا برمیدارد، بعد هم درست پافشاری نمیکند.	بعد هم
	You may take missteps and later on you would not emphasize.	and later on
21	و بعد، شدتش در دوران حکومت پهلوی، چیزی به نام تجلّد وارد کشور شد.	و بعد
	And also in that regime we had something like that was called modernization asking for change.	And also

applied three groups of elaborative, contrastive, and temporal DMs (extracts 4, 6 to 14, Table 13). And the equivalents selected in the interpretation of this group into English include all four groups of inferential, elaborative, contrastive, and temporal DMs (Table 12). Also analysis of this part of findings reveals that this interpreter has approached the production of discourse in English language innovatively, creatively, and flexibly.

Table 12

*Distribution of equivalents for time sequencing DMs*

Number	Persian DMs	Frequency	English equivalents	Frequency
1	الان	1	And that is	1
2	اینجا	1	So	1
3	آن وقت	2	And/then	2
4	امروز هم	1	So	1
5	حالا	7	So/ well/And	3

**Time sequencing discourse markers**

This group of DMs express time sequence between units of discourse. According to Table 12, the second group of temporal DMs, these DMs consist of two groups of combined and non-combined DMs such as now, here, now for example, today also, now today, then, and now also, and every time. The most frequent DM in this group “now” is replaced with three different elaborative and inferential English DMs (extracts 2, 3, and 5, Table 13). The rest includes 8 other DMs and in the interpretation into English, the interpreter

6	حالا امروز	1	Today	1
7	حالا مثلا	1	For example	1
8	و الان هم	1	And ...still	1
9	هر دفعه	1	When	1
10	الان	1	And that is	1

*Simultaneous interpreter's equivalents for time sequencing temporal DMs*

Table 13

Number	Extracts	Equivalents
1		آن وقت
	آن وقت بر اساس آن پرویم سراغ تحول.	
	So on that basis we should have the change substantiated.	So
2		حالا
	این حالا وضع دشمن و جبهه بود.	
	So that is how the situation was regarding the enemy and the battle front.	So
3		حالا
	بنابراین، ستیزه‌گری با این استکبار، با این پدیده، عین عقلانیت است. حالا بعضی‌ها میگویند «آقا! این خلاف عقلانیت است، خلاف تدبیر است»؛ نه، خلاف تدبیر نبود؛ این درست عین عقلانیت بود؛	
	So, battling such a thing such a phenomenon is exactly done by being wise. Well, some people say it is unwise, this is not true. this is exactly the wise thing to do.	Well
4		اینجا
	اینجا انسان نقش بسیار حساس و شگفت‌انگیز رهبری و فرماندهی امام بزرگوار را تشخیص می‌دهد.	
	Now that is very you see the very capable and right role of the leadership of the late Imam Khomeini.	Now
5		حالا
	بر اساس این حضور، بروز استعدادها است که حالا من مختصری درباره‌ی هر کدام از اینها عرض می‌کنم.	
	And based on such participation one can witness images of talons, new talents and I will briefly explain each of them.	And
6		اینجا
	اینجا دولت فرانسه می‌آید ربط می‌دهد این قضیه را به حقوق بشر و آزادی و این حرفها؛	
	So the French government here relates this to human right and different kinds of freedom and so on and so forth	So
7		آن وقت
	مشاهده کردید که چه کار کردند با مردم خودشان! آن وقت اینها ادعا میکنند که اهل آزادی و حقوق بشر و مانند اینها هستند.	
	You noticed the way they dealt with protesters on the street and these claim human rights and freedom.	And
8		الان
	الان این جنگ فاجعه‌بار یمن که پنج سال است این ملت مظلوم دارند بمباران می‌شوند .	
	.....and that is the catastrophe that Yemen war that you see it has been five years they have been attacked	and that is
9		حالا امروز
	حالا امروز انتخابات آمریکا است، بعضی‌ها همین طور حرف می‌زنند راجع به اینکه چه کسی بیاید، چه کسی نیاید، اگر این بیاید چه میشود، اگر آن بیاید چه میشود.	
	Today we have the elections in the US and some people talking about what is going to happen.	Today
10		امروز هم
	امروز هم کار این حضرات شبیه همان‌هاست؛ اینها هم نخواهند توانست .	

	So this is the same thing that is being repeated history is being repeated these people cannot do anything .	So
11	یک رزمنده‌ی سیزده چهارده ساله که حالا مثلاً با دست کاری در شناسنامه موفق شده بود خودش را به جبهه برساند.	حالا مثلاً
	For example imagine a 13 or 14 year old combatant who had some sort of changes in his identity card, he managed to reach the Battlefield.	For example
12	در عرصه‌ی دیپلماسی و بین‌المللی و مانند اینها، در منطقه یک فعالیت شگفت‌آوری داشت؛ یعنی واقعاً حالا هنوز دوستان و برادران مؤمن و ملت عزیز ایران از سعه و گستره‌ی کار شهید سلیمانی مطلع نیستند.	یعنی واقعاً حالا هنوز
	He had an astonishing activity in the regional level and our great nation and faithful brothers and sisters may not be ever of the activities he did.	And
13	و الان هم این رسوایی ادامه دارد.	و الان هم
	And the scandal is still going on.	And.. still
14	پس اینکه می‌گوییم امام به جوانها اعتماد میکردند - امروز هم ما همین عقیده را داریم که باید به جوانها اعتماد کرد، باید از نیروی جوان در پیشبرد کشور استفاده کرد.	و امروز هم
	So when we say that Imam has a stressed the youth and then we are in the same belief that we need to trust the youth and we need to take the advantage of the youth in the development of the country.	and then

time sequencing temporal DMs are employed (question 2).

Analysis and interpretation of these findings in above five areas reveals that in the interpretation of a DM such as “now” or “well”, several different DMs are employed. This finding indicates variety, dynamism, flexibility, and innovation in areas of structure, semantics, and pragmatics in construction and creation of discourse in simultaneous interpretation. Therefore, the interpretation of these discursal elements is not based on literal or word by word interpretation. What is the logic and justification behind this innovation and variety in the interpretation of these elements? How can they be interpreted and justified?

The researcher’s assumption in the introduction was that natural processing of language in social contexts substantiates modification, adaptation, and recreation originated from the context, discourse structure, social and cultural dynamics of language use in human communication. And the interpreter is expected to approach the

## 4.2 Discussion

The analysis of English corpus revealed that in the interpretation of inferential DMs indicating conclusion the interpreter has resorted to four groups of elaborative, contrastive, inferential, and temporal DMs. For example, in the interpretation of Persian DMs “well” this interpreter has applied six different DMs in English text. Moreover, in the interpretation of two different inferential DMs indicating documentation, this interpreter has applied four inferential and elaborative DMs. Also in the interpretation of logical inferential DMs, he used three different inferential, elaborative, and temporal English DMs (question.1). Moreover, in the interpretation of Persian ordinal DMs, this interpreter has applied 10 different elaborative, inferential, contrastive, and temporal English DMs. In addition, in the interpretation of time sequencing temporal DMs into English, all four groups of inferential, elaborative, contrastive, and

contexts of language use in society (Aijmer, 2002). Therefore, one of theories supporting the justification of the modifications in the interpretation of DMs is Underspecification Theory applied in processing and creation of discourse in human interactions.

Moreover, the interpretation performances of this Iranian simultaneous interpreter can be analyzed and justified from another perspective, i.e. applying Grice's (1975) co-operative principles. For example, the analysis of results revealed that in the process of simultaneous interpretation, the Persian DM "finally" was translated into English as "and" and "I mean" (extracts 11 and 13, Table 10). Or Persian DM "really" was rendered as "so" in English target text (extract 2, Table 6). Moreover, Persian DM "here" was changed into "now" in English target text (extract 2, Table 6). The researcher's interpretation and justification in this part is that on the basis of the analysis of linguistic, cultural, and discursal context in the process of decoding and encoding information, first, the interpreter tried to provide a clear, coherent, and explicit target text that was not ambiguous. Secondly, the interpreter tried to discover pragmatic functions of these discursal elements in his interpretation. And finally, on the basis of the pragmatic functions, he tried to find equivalents for DMs in English language. That is, he didn't interpret DMs literally or word by word. This process of disambiguation is in line with the fourth principle in Grice's co-operative principles, i.e. manner. According to this principle encoding of information in the process of discourse construction should be fluent, clear, explicit, and free from any ambiguity.

On the other hand, the interpreter interpreted Persian combined DMs such as "that is really now yet" into a single DM in English, i.e. "and" (extract 12, Table 9). And the Persian combined DMs "well so therefore" are interpreted into a single English DM "so" (extract 7, Table 4). It can be justified that this interpreter might have come to the conclusion that finding different equivalents

process of simultaneous interpretation on the basis of the requirements necessitating different structural, semantic, and pragmatic adjustments and modifications in order to provide the audience with coherent, fluent, and rhetorically acceptable text. The analysis of strategies and procedures by this Iranian simultaneous interpreter reveals that this assumption and hypothesis about his approaches is substantiated. This inference and assessment can be justified due to the fact that simultaneous interpreter's task consists of two simultaneous processes of decoding in source language and encoding in target language carried out within the framework of natural processing of language creatively and actively in social context of language use. That is, his mind, language, and thought are permanently, actively, and dynamically engaged in an innovative framework resulting in different types of the structural, semantic, and pragmatic enrichment with the purpose of facilitating the perception, comprehension, and production of conventional discourse (Frisson, 2009).

In this pragmatic enrichment process, simultaneous interpreter is engaged in a creative interaction in decoding information in source language and also he possesses an open and active mind in encoding information in target text. The outcome of this bilaterally creative and pragmatic interaction and adaptation is the development and appearance of a kind of incompatibility and divergence in the process of encoding information in creation of discursal relations. This process of mismatch results in a discursal manipulation of text. This manipulation is referred to as underspecification, a theoretical perspective in pragmatics (Egg and Redeker, 2007; Frisson and Pickering, 2001; Mohammadi, 2021; Spooren, 1997). Applying the principles of Underspecification Theory, the researchers investigate the differences between semantic meaning, implicit meaning, and pragmatic functions of linguistic elements in different

English languages, so that, we can have parallel corpora from both directions and the result of such investigations would be a kind of discourse analysis between languages, cultures, and discourses (Cartony and Zuferry, 2013). Such investigations will provide answers to various questions in educational, research, and scientific areas such as curriculum planning, material development, and monitoring discourse in various educational contexts. In addition, due to the fact that investigations in the area of parallel corpora and the analysis of translation of DMs have been started in current decade and the findings have not been applied in areas such as a lexicography (Hauge 2014). So lexicography is another area in which the findings of these studies can be in the service of solving problems and developing the quality of dictionaries.

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for several combined Persian DMs is somehow redundant. Therefore, in the process of interpretation instead of making use of four different English DMs, he employed a single English DM. This finding also can be explained and justified on the basis of the first Co-operative principle, i.e. quantity. On the basis of this principle, the writer/speaker is expected to provide enough information for the audience and avoid providing redundant pieces of information. Moreover, these findings are in line with the findings of researchers such as Zuferry (2017), Aijmer and Simon-vanderbergen (2003) and Furko (2014). These researchers have also reported modification, correction, addition, and omission in the analysis of translation strategies and equivalents selected in the process of translation.

## 5. Conclusion, research, and pedagogical implications

Interpreters' challenge and problem in their pragmatic approach towards interpretation is the adjustment of their methods, approaches, strategies, and equivalents to various linguistic elements in other languages, cultures, and discourses (Aijmer, 2002). The analysis of results of the present research indicated creativity, novelty, variety, and flexibility in the selection of equivalents for the most ambiguous, effective, frequent, and complex elements, that is, DMs in simultaneous interpretation. Therefore, the process of the translation generally and simultaneous interpretation specifically is a kind of discourse structuration and construction within the framework of natural processing of language in social context of language use through the application of pragmatic theories (the third question). The current research is a primary step initiated with such a perspective in this context. Therefore, the researchers are recommended to carry out different researchers from different directions between Persian and

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