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Journal of Language Horizons

According to the Ministry of Science, Research and Technology proclamation dated 1397/12/06 and numbered /3/18/311330, the *Journal of Language Horizons* was granted full Academic-Research status by the ministry's publication committee in their meeting of Jan. 30, 2019. This status has been applied from Volume 1, Issue 1, Spring/Summer 2017.

It is a monolingual (English) journal which operates on a blind peer review policy; it publishes twice- yearly (biannually) papers which report the findings of original research on the current trends and topics in different language related issues.

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Aims and Scope

Considering the National Master Plan for Science and Education in the country and the necessity of *localizing* the humanities, this journal welcomes English articles contributing to this aim.
Aims of this journal include but are not limited to:
- Promoting scientific and professional knowledge of researchers in the below mentioned areas.
- Sharing the findings of researchers in the mentioned fields.
- Promoting general and professional knowledge necessary for learning English as an international language among Iranians and international interaction in the future.
- Promoting Iranian culture along with the English.

The main focus of the Journal is on research conducted on language learning and teaching. We are in particular interested in research papers on L2 education (in particular EFL/ESL), in a variety of levels, including school level, university level, institute level, etc. The Journal welcomes papers on teaching and learning any component of language including skills and sub-skills, as well as sociolinguistics, psycholinguistics, discourse and pragmatics, TESL or TEFL, Teaching Persian to Speakers of Other Languages (AZFA), language evaluation/testing, language and culture, teaching language for specific purposes, teaching methodology, English and Persian literature, language studies, translation, and linguistics but written only in English.

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The manuscripts submitted to *Journal of Language Horizons* should follow the latest version of APA style. Contributing authors are advised to read this document carefully and adhere to the instructions given below before sending their papers to the Journal office. The article will be sent in two separate files including the title file and the manuscript file. The title file includes the title, author's

/authors' name(s), their institutional affiliation(s), phone number(s), and the email(s), preferably the academic one(s). In case of multiple authors, the corresponding author should be indicated.

The second file, the main manuscript, starts with the abstract. The abstract should be between 150 and 250 words, followed by five keywords, separated by commas. The abstract should include information on the purpose of the research and/or research question(s), the methods and materials used, information on the analysis procedures as well as the major findings. The Persian translation of the abstract should be provided too. The font type should be Times New Roman and the size is 12. The whole manuscript should be double-spaced throughout and the new paragraphs should be indented. The manuscript should be divided into clear sections such as: Introduction, Review of literature (which may include sub-sections), Method (including participants, materials, and procedure), Results, Discussion, Acknowledgements (if necessary) and References (and Appendices, if needed). The reference list should be on a new page, double spaced, and the hanging indent method should be used (all lines after the first one are indented). The length of the paper should be between 7000 and 10000 words. The following pages provide key information and give examples of APA style. More information on APA can also be found in the website: http://www.apastyle.org/

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All in-text citations must be listed in full in the reference list at the end of each article following the specifications of the *APA* manual (7th edition) and all references listed must be cited somewhere in the text. Begin the reference list on a separate page entitled "References" and double-space it throughout. Each entry must include the author's name, co-authors (if any), publication date, and title of work. For a journal article, also provide the name of the journal, volume and issue numbers, and page numbers for the article. For an article in an edited volume, list the editor's name, title of the collection, and page numbers of the article. For a book or monograph, list the edition, volume number, series, and name of publisher. For all online works, the DOI should be provided as well. If not available, the URL can be provided instead. Punctuate and capitalize as in the following examples:

Book
Brown, G., & Yule, G. (1989). *Discourse analysis*. Cambridge University Press.

Journal article
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Journal article with volume number
Lee, M-B. (2002). A closer look at language learning strategies and EFL performance. *Foreign Languages Education*, *10*(1), 115-132.

Article in a book
Dechert, H. (1983). How a story is done in a second language. In C. Faerch & G. Kasper (Eds.), *Strategies in inter-language communication* (pp. 175-195). Longman.

Journal Article with DOI
Paivio, A. (1975). Perceptual comparisons through the mind's eye. *Memory & Cognition*, *3*, 635-647. http://doi.org//10.1037/0278-6133.24.2.225

Journal Article without DOI (when DOI is not available)
Hamfi, A. G. (1981). The funny nature of dogs. *E-journal of Applied Psychology, 2*(2), 38-48. http://www.ojs.lib.swin.edu.au/index.php/fdo

Encyclopedia Articles
Brislin, R. W. (1984). Cross-cultural psychology. In R. J. Corsini (Ed.), *Encyclopedia of psychology* (Vol. 1, pp. 319-327). Wiley.
Developmental genetics. (2005). *In Cambridge encyclopedia of child development*. http://www.credoreference.com.library.muhlenberg.edu:80/entry/cupchilddev/developmental_genetics

Reference citation in text

Direct citation 1
She states, "the 'placebo effect' ... disappeared when behaviors were studied in this manner" (Miele, 1993, p. 276), but she did not clarify which behaviors were studied.

Direct citation 2: Fewer than forty words
Lee (1999) found that "The EAP writing curriculum incorporate reading and analysis of major academic journal articles in the specific field to identify macro-level organization an obligatory 'moves' in conjunction with writing practice." (p. 21)

Direct citation 3: More than forty words
Miele (1993) found the following:
The "placebo effect," which had been verified in previous studies, disappeared when behaviors were studied in this manner. Furthermore, the behaviors were never exhibited again, even when reed rings were administered. Earlier studies were clearly premature in attributing the results to a placebo effect. (p. 276)

One work by two authors
- Smith and Takamoto (1997) argued that. ...
- In recent study of SLA (Smith & Takamoto, 1997) ...

One work by multiple authors: Use et al.
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Contents

Creating Learning Space through Corrective Feedback in Synchronous Online EFL Classrooms

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Abstract

This paper presents a study on how teachers can use online affordances to create learning spaces and maximize language learning opportunities. While previous research has highlighted the importance of learning space in improving language learning outcomes, scant research has examined how teachers can utilize online affordances and interactional strategies to create learning spaces in corrective feedback sequences. To fill this gap, the study investigated the use of corrective feedback in synchronous online English as a Foreign Language (EFL) classrooms by ten teachers. Using conversation analysis (CA), the study analyzed seventy-five hours of video-recorded observations to explore the online tools and verbal interactional strategies used by teachers to create learning spaces. The findings revealed that teachers used chatboxes, online notepads, and breakout rooms as online affordances to facilitate language learning opportunities. The study's results can provide EFL teachers with valuable insights into the best practices for using synchronous online educational tools and interactional resources to create better language learning opportunities for learners.

Keywords: corrective feedback, EFL learners, learning space, online affordance, synchronous online EFL classroom

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Introduction

Research shows that corrective feedback (CF) in L2 classrooms can assist language learning (Li & Vuono, 2019). The most convincing evidence confirming that CF significantly affects L2 learning comes from the meta-analyses of CF research (e.g. Li, 2010; Lyster & Saito, 2010), all of which show that CF has medium to large impacts on learning. Despite many studies investigating how various types of corrective feedback lead to learning (see Li, 2021), scant research has concentrated on teacher talk and interactions during corrective feedback sequences, which contribute to creating learning space and maximizing learning opportunities. The construction of learning spaces derived from corrective feedback is a significant aspect that needs investigation. According to Walsh and Li (2013), creating a learning space in the classroom is a characteristic of teaching that leads to learning. By constructing a learning space, teachers create opportunities for participation, increase learners' engagement, and promote dialogic interaction in their classrooms.

Knowing how to use affordance strategies to construct learning spaces effectively is a skill deriving from teachers' interactional competence (Walsh, 2011). Teachers who manage learning spaces can promote learning more likely than other teachers. Furthermore, when viewing learning as a social process entailing participation, the creation and management of learning space become the central concern. The teachers' knowledge of strategies for increasing learning space can lead to maximizing learning in the classroom. As Walsh and Li (2013) put it, "by studying the ways in which people use language for interaction and by making small adjustments to existing practices, teachers and learners can not only effect considerable increases in opportunities for learning but also in the quality of learning." (p. 263)

Since the COVID-19 pandemic, more education has been conducted online. However, studies on exploring oral corrective feedback in the online context of language education are still in their infancy (Cheung, 2021). Furthermore, studies have shown that EFL teachers require a different repertoire of interactional competence in synchronous classrooms run through videoconferencing software than in face-to-face classes (Moorhouse et al., 2023). It has been found that despite the opportunities for learning and interaction that are provided through the

incorporation of technology into learning experiences, teachers may not be fully prepared to teach online as they need new digital competencies (Starkey, 2020). The present study, therefore, aims to provide insights into how learning spaces are created in synchronous online EFL classrooms by investigating corrective feedback interactional sequences and the teachers' use of online affordances while providing corrective feedback to EFL language learners.

Literature Review

Learning Space

The concept of learning space was characterized by Walsh (2002) in his conversation analysis of teacher talk in English as a foreign language (EFL) classrooms. He suggested that careful language use by teachers can either hinder or facilitate learners' contribution and enhance the quantity and quality of their output. In a later study, Walsh and Li (2013, p. 250) refined the concept of learning space and proposed it as the "affordances" that teachers use not only to create opportunities for participation but also to increase engagement at both the individual and whole class levels and promote dialogic interaction. Walsh and Li further suggested that investigating interactional features of the classroom can help understand how learning space is constructed and how learning opportunities are provided.

Several research studies in Iran have also focused on exploring the relationship between teacher talk and learner involvement in EFL contexts (e.g., Kamdideh & Barjesteh, 2019; Shamsipour & Allami, 2012). One such study was conducted by Poorebrahim et al. (2015), who utilized conversation analysis to investigate the impact of teacher talk on advanced EFL classes in Iran. Their findings revealed that certain types of teacher talk could either facilitate or obstruct learner involvement. Specifically, confirmation check, scaffolding, direct error correction, and content feedback were found to be constructive, while teacher interruptions and turn completions were identified as obstructive.

The concept of affordance was originally introduced by Gibson (1979) in the field of psychology. Gibson defined affordance as "the match between an organism's abilities and the environmental resources and opportunities (both positive and negative) that enable a particular activity" (Gibson & Pick, 2000, p. 15).

Hutchby (2001) employed the concept of affordances to analyze online interaction using CA, contending that technological features can both enable and restrict the interactional potential. The idea of affordances has been central to many CA investigations of online interaction (e.g., Arminen et al., 2016; Stommel & Molder, 2015). Practically, using the concept of affordances entails analyzing the interaction itself first and examining how it aligns with the relevant technological features of the medium (Meredith, 2017).

Investigation of how learning space is created in classroom interactions requires a social view of learning which considers learning as "doing" and not "possessing knowledge" (Larsen-Freeman, 2012). Learning from this perspective is believed to be a process in which learners participate rather than something they gain. With this standpoint on language learning, this research takes corrective feedback sequences as the point of departure to reveal how the teachers' specific use of online tools while providing corrective feedback can construct or obstruct learning opportunities.

Corrective Feedback in Computer-Mediated Environments

In classroom settings, corrective feedback, or repair, is a common type of teacher-student interaction that has been extensively studied (e.g., Sacks et al., 1974). As Walsh (2011) noted, this type of feedback can take up a substantial amount of time in language classrooms, making it a crucial area for research and investigation. Due to technological advancements, more education is conducted in computer-mediated environments, either synchronously or asynchronously, and language education is not an exception. However, as Ziegler and Mackey (2017) pointed out, only a handful have investigated the learners' interactions during corrective feedback sequences in such environments. Referring to some early research in this field, Pellettieri (2000) found that learners gave corrective feedback to each other during meaning-focused exchanges and text-based synchronous CMC environments facilitate meaning negotiation and interaction and give learners more time for processing and monitoring their language.

In a more recent investigation, Pineda Hoyos (2018) explored the influence of technology on pedagogical practices and the associated impact on learning outcomes. Specifically, Pineda Hoyos examined the use of corrective feedback and

repair moves in synchronous learning activities within an online English course. The outcomes of the research indicated that explicit corrections provided during synchronous learning activities led to the production of repair moves and facilitated learning. The findings also suggested that synchronous learning activities promoted explicit corrections. Shirazizadeh and Amirfazilian (2019) conducted a study aimed at examining the effectiveness of various forms of electronically delivered corrective feedback and determining whether one form was more effective than others. Their findings revealed that direct written corrective feedback demonstrated a statistically significant improvement in the grammatical accuracy of students.

Conversation Analysis

Scholars have primarily employed Conversation Analysis (CA) to examine how teachers, through their interactions with students, create learning spaces during various moments in their lessons. CA offers a detailed examination of what teachers orient to in discourse, how they construct management turns through verbal and nonverbal communicative cues, and how learners respond to these cues. Such analyses enable a granular understanding of teachers' actual practices in naturally occurring classroom interactions, including the moment-by-moment decisions made, the reasons behind those decisions, and the potential for promoting language learning opportunities in specific instructional contexts.

Walsh's (2002) pioneering study highlighted the concept of learning space in the investigation of how teacher talk can either obstruct or construct learning opportunities which was conducted through CA due to several reasons. Firstly, they believed that CA forces researchers to focus on emerging interaction patterns from the data rather than relying on preconceived notions. Secondly, the patterns of language in a second language classroom are socially constructed by the participants, making CA an appropriate methodology to account for the interdependency of turns and social practices. Thirdly, CA can explain the rules that ensure talk is maintained and sustained across multiple speakers, which is essential in any institutional discourse. Fourthly, the classroom context is regarded as dynamic under CA methodology, and language is the principal force in bringing about changes in context. Finally, CA can cope with the goal-oriented nature of institutional discourse, which is dependent on the intended outcomes and related

expectations of the participants. Later, Walsh and Li (2013) used CA again to investigate how teachers can create such a space and promote learning opportunities through their language use.

Sert (2017) utilized Walsh's concept of Classroom Interactional Competence (CIC) to investigate how L2 teachers manage learners' initiatives in pre-listening prediction activities and create learning opportunities. Their findings suggest that teachers can create opportunities for language learning by successfully managing learners' initiatives and utilizing resources such as embedded correction, embodied repair, and embodied explanations. Furthermore, Paulus et al. (2016) found in their literature review that CA is increasingly being used to analyze online interactions, as evidenced by the growing number of articles that have employed CA in online data analysis.

The review of literature shows that there is still a need to investigate the potential of various online affordances that teachers can use simultaneously with verbal strategies to provide language learning opportunities. The present study is aimed at understanding this potential with a concentration on corrective feedback sequences in synchronous online classrooms. Specifically, this study sought to answer the following research question:

- What online affordances do EFL teachers use while providing corrective feedback to create learning space in synchronous online EFL classrooms?

Method

Participants and Setting

Ten EFL teachers, four males and six females, teaching in one of the well-known private language institutes in Iran participated in this study (see Table 1). To establish more homogeneity in the research sample, teachers were selected based on their shared teaching context, which encompassed the same instructional materials, learner level, and class size. As a prerequisite for starting their teaching in the institute, all teachers had attended the same teacher training course run by the institute, so they followed the same prescribed method of instruction. Maintaining a homogenous context helped the researchers concentrate only on teachers' creating interactional space. Pseudonyms are used for the participants in this study to keep their identities confidential.

Table 1

Background Information of the Participant Teachers

#no.	Gender	Age	Experience	Academic background
1	Male	48	22	MA in TEFL
2	Male	40	15	BA in English Translation
3	Male	31	6	MA in TEFL
4	Male	30	8	BA in Civil Engineering
5	Female	35	14	BA in Russian Translation
6	Female	35	14	BA in English Literature
7	Female	31	4	MA in Art Research
8	Female	31	7	MA in TEFL
9	Female	27	7	BA in Management
10	Female	30	6	MA in English Literature

The *Touchstone* (McCarthy et al., 2014) series was the main coursebook, and *Oxford Word Skills* (Gairns & Redman, 2008) was the supplementary material. *Touchstone* is a four-level American English coursebook for adult and young adult learners of English. *Oxford Word Skills* is a three-level topic-based vocabulary course book for ESL learners. The learners in all classes were adults at the intermediate level of proficiency. The classes were held online through the Adobe Connect platform, with the opportunity for audio and video communication among learners and teachers. The teachers also used notepads, online whiteboards, and chatboxes to communicate and give feedback to the learners. The duration of each class, including a maximum number of 11 learners, was one and a half hours.

The Virtual Learning Platform

As noted in the preceding section, synchronous instruction was delivered using the Adobe Connect platform. Adobe Connect is a web-based platform that enables instructors to deliver live and recorded instructional sessions to learners from remote locations. The platform offers a range of interactive tools that can be used to support effective online learning. One such tool is the notepad, which allows instructors to share notes, feedback, and instructions with learners in real time. The notepad is useful for capturing important information that can be referenced throughout the session. Another tool offered by Adobe Connect is the breakout room

feature. This tool allows instructors to divide learners into small groups for collaborative activities and discussions. Breakout rooms can be used to promote peer-to-peer learning and facilitate group work. Instructors can monitor each breakout room and offer support as needed. The chatbox feature is also available on Adobe Connect. It enables learners to communicate with the instructor and other learners during the session. The chatbox can be used to ask questions, seek clarification, and provide feedback. The instructor can also use the chatbox to facilitate discussions, prompt learners to share their thoughts, and offer guidance. In addition to the above tools, Adobe Connect offers a range of other features to support effective online learning. For instance, the platform supports screen sharing, polling, and virtual whiteboards. These tools can be used to enhance the interactive nature of online learning and support active engagement among learners. Overall, Adobe Connect is a versatile platform that can be used to deliver effective and engaging online instruction. Utilizing the interactive tools available on this platform, instructors can create a supportive and collaborative online learning environment that promotes active learning and learner engagement.

Data Collection

Five consecutive sessions of each teacher's classroom (sessions 2 to 6) were video recorded for further with the teachers' consent. The aim was to explore the depth of feedback episodes leading to discursive learning spaces. The first and last sessions were not used for analysis as, generally, the first session revolved around introduction and ice-breaking, and few corrective feedback sequences occurred in this session. In the last sessions, the teachers explained the final exam, reviewed the lessons, and answered the learners' questions about previous lessons or the final exam; therefore, corrective feedback sequences did not occur noticeably in these sessions.

To minimize the influence of the researcher's presence, the researcher responsible for the data collection observed the recorded sessions with the consent of teachers and the institute's administrator and did not participate in the classes as a participant observer. Each recorded session lasted one hour and a half, resulting in 75 hours of video-recorded data for further analysis. The corrective feedback episodes were carefully transcribed as the unit of analysis.

Data Analysis

Conversation Analysis is a practical methodology that offers a microanalytic perspective to better understand the context-sensitive nature of classroom interactions (Sert & Seedhouse, 2011). This approach allows for a comprehensive investigation of how learners interpret and respond to the verbal and nonverbal cues that teachers utilize to signal the purpose of their feedback. Overall, CA provides a valuable tool for understanding the intricacies of classroom interaction and the factors that influence teacher feedback decisions in real time.

In the current study, CA was employed to explore the potential of various affordances offered by online classrooms, such as the notepad, chatbox, and breakout rooms, in facilitating the teacher's turn-taking and expansion of feedback turns during corrective feedback sequences, as well as students' initiation of uptake. Recorded videos were carefully analyzed to identify episodes where corrective feedback was provided to the learners, and the timing and classroom moves in which these episodes occurred were meticulously noted. To ensure a comprehensive analysis, all linguistic and paralinguistic features of the data were annotated using transcript conventions proposed by Jenks (2011) (see Appendix) and then analyzed using CA techniques.

Results

The opportunity to use various online affordances in this study helped the teachers in the observed classrooms correct learners' errors without many interruptions in the learners' turns and contributed to creating learning space. The following sections describe how the teachers frequently used three online affordances, namely chatboxes, online notepads, and breakout rooms, to create learning spaces in the classroom.

Using Online Notepads to Create a Learning Space

Frequently, it was observed that the teachers used their online notepads to write down the errors that the learners made without verbal correction of the error. This affordance happened mostly in free practice and discussion activities when the lesson aimed to produce language. By writing errors on the notepad, the teacher attempted to direct the learners' attention to their errors without interrupting the conversation flow. In Adobe Connect, online notepads are boxes that can be

displayed on the screen next to other shared materials. The notepad can be shared on the screen during class so the learners can refer back to it when necessary. Figure 1 illustrates how a teacher used an online notepad in the Adobe Connect platform to write learners' errors while participating in a discussion activity.

Figure 1

Writing Learners' Errors on Online Notepads in Adobe Connect

Writing errors and correcting them on the notepad was used as an affordance by the teachers to have a minimum interruption during learners' turns. This way, they could also maximize learning opportunities by saving time, increasing learners' talk time, and encouraging them to have longer turns.

Extract 1 displays the moment in a discussion activity when a learner made an error in matching subject-verb agreement. However, the teacher did not use verbal correction to avoid interrupting the learner's turn. Instead, he wrote the sentence on the notepad, later referred back to it in the feedback time, and explained why those statements were wrong. As such, he could create a learning space and maximize language learning opportunities by not interrupting the learner, letting her hold the flow, and making a longer turn to produce language.

Extract 1

1	T:	what comes to your mind↑
2		when you see this picture
3		Can you talk about this picture↑ (3)
4		Bahar please
5	S:	eh when I see this picture
6		I think
7		when we want to say different view on
8		an issue
9		we say this
10		For example
11		one of his persons say this number is
12		nine
13		but one of them say it is six
14		So each of them say different views
15		for example about one problem
16		I think about one solution
		but my friend thinks differently
		Yes just this
17	T:	thank you very much

The selected portion of text begins with the first pair-part of a question-answer sequence used by the teacher in an elicitation process (lines 1-2). The teacher employed the method of "individual nomination" (Mehan, 1979) to involve Bahar in the interaction. The teacher's use of an individual nomination, accompanied by a rising tone, allowed him to elicit a response from the student, Bahar, resulting in her offering a response (line 5) in the second pair-part of the teacher's request made in line 1. The learner made an extended turn (lines 5 to 16) discussing that different people might evaluate the photo differently. Her contribution was delivered with a number of false starts, hesitations, and errors. The teacher acknowledged this contribution (line 17) and did not interrupt the student to correct errors and waited until the learner transferred a termination signal in the last line, 'yes, just this' (line 16). During the instructional session, the teacher displayed active listening by transcribing the sentence "one of them say it is six" onto a notepad while refraining from interrupting the learner (as depicted in Figure 1). This approach fostered a

learning space that encouraged the learner to engage in an extended turn. During the feedback phase, the teacher made reference to the erroneous sentence and directed a follow-up question to the same learner, Bahar, asking for an explanation of the mistake. The activity was done in the pre-teaching move when the learners brainstormed about the lesson's topic by looking at a picture and expressing their ideas. As the pedagogical aim of preparation activities is meaning-focused interaction (Sert, 2017), the teacher's use of a notepad when the learner made an erroneous form helped him make no interruption for correcting errors. Hence, he could maximize learning opportunities.

In extract 2 in the same class, the lesson's main objective was using various expressions to agree or disagree with a person. One of the expressions taught was 'I know what you mean, but'. After teaching this, the learners were assigned a free practice in which they had to work in pairs and discuss with their friends if they agreed or disagreed with three questions. Then they had to report back. In the following extract, a learner made an error while using the sentence that was taught before. However, the teacher did not use explicit or implicit forms of correction; instead, he opened a notepad to record the error and then gave delayed feedback at the end of the session in feedback time.

Extract 2

1	T:	Yes Nasim please
2	S:	I disagree with this sentence
3		I know what Nima mean (.) but…
4	T writes on the notepad:	what Nima mean

In the instructional session, the teacher initiated the dialog by soliciting a sentence that began with the phrase "I know … but" through individual nomination. A learner's response contained an error in the third line, which the teacher documented on a notepad without providing an immediate explicit correction. He then continued the lesson by asking other students to make their sentences. In the feedback phase, the teacher employed a metalinguistic approach, referring to the notation on the notepad to indicate that the appropriate usage would be the third-person verb "means" instead of "mean," as depicted in Figure 1. During this

particular episode of the instructional session, the teacher demonstrated the ability to create an optimal learning space by allowing learners to participate actively without interruption. The teacher leveraged the online notepad as a supportive tool to highlight and draw students' attention to errors made during their discourse, without disrupting the natural flow of their conversation.

Using Chatboxes to Create a Learning Space

Chatboxes were online affordances that teachers and learners extensively used to co-construct learning spaces in the classroom. Chatboxes were places for peer feedback and compensating for internet buzzes as the learners could write their responses to the teachers' corrective feedback when the oral response was not possible. Figure 2 displays the way the chatbox was used in Adobe Connect for classroom interactions.

Figure 2

Using Chatboxes for Interactions with Teachers and Among Learners
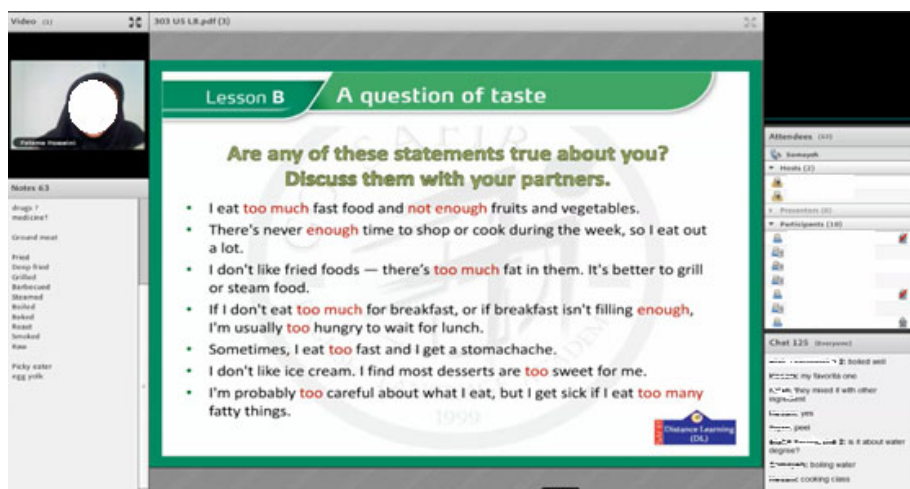
The teachers and learners used chatboxes for multiple purposes. The learners mostly used the boxes to answer the teachers' questions. In some corrective feedback sequences, the learners used chatboxes to give peer feedback. For example, it was observed that, when the teacher used prompts and the learner who had made an error could not respond to that prompt, another learner responded in the chatbox. Using the chatbox, other learners engaged in the learning space that the teacher

created, as shown in extract 3. The episode in question took place during the feedback phase after the instructional session. During this episode, the teacher initiated a discussion centered on several erroneous uses of language made by the students. The teacher actively elicited contributions from the learners to correct these sentences.

Extract 3

1	T:	I don't have friends very much
2		How can we correct this sentence?
3	S1:	any friends?
4	T:	any means <u>zero</u>
6		if you say
7		I don't have <u>any</u> friends
8		it means zero
9	S2:	Many
10	T:	Yes
11		thank you
12		many or a lot of

The conversation started with the teacher writing an inaccurate sentence on the board and using the first pair-part of a question-answer adjacency pair in an elicitation sequence. She did not select any individual student and her attention was to the whole class. One of the students initiated a second pair-part response in the chatbox (line 3). The teacher did not agree with that student's response. Switching back to the whole class, the teacher clarified why the response was incorrect (lines 4-8). This clarification resulted in another student's contribution in the chatbox (line 9). The teacher acknowledged the student's contribution by responding with an affirmative "yes" and echoing it to the entire class. This exchange highlights the valuable role that chatboxes can play as a useful affordance for learners to actively contribute to the instructional session without interrupting their peers or the teacher.

It was observed that learners mostly preferred chatboxes for interaction in

the classrooms rather than audio chats. Frequently, they used chatboxes to ask and answer questions, give examples, and make sentences with the vocabulary or grammar taught in the lesson. Interactions in the chatboxes mattered to the teachers as they reacted to them and sometimes corrected errors in the sentences written in the chatbox. The teachers' interaction with the chatbox responses, including their recognition and validation of the answers provided, exemplifies how this tool can be leveraged to create an effective learning space while correcting errors and to promote active participation. The teachers did so by reacting to their sentences, accepting their responses, sharing ideas about them, doing confirmation checks, and correcting errors they saw in their sentences (see Figures 3 & 4).

Figure 3

The Error Made in the Chatbox and Learner Uptake

Figure 4

The Error Made in the Chatbox and Learner Uptake
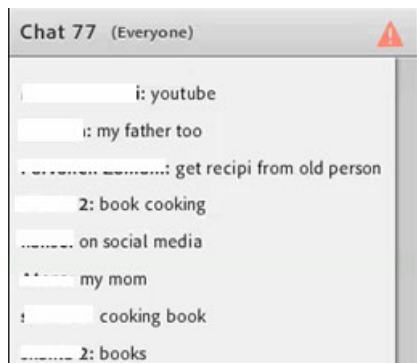
In the following excerpt, learners provided an answer to the question the teacher asked about where they could find recipes for the food they did not know how to cook.

Extract 4

1	T:	Where do you find recipes for the food you don't know how to cook↑
2	S1:	just googling
3	T:	Aha by googling (.)
4		Aha searching them on the net
5	S2:	in Instagram
6	T:	on Instagram
7	S2:	Yes on
8	T:	O:n thank you
9		how do you usually learn to cook↑
		Multiple learners typing
10	S3:	my mom
11	S4:	my mother,
12	T:	Nasim your mother↑
13		But my father is a really good cook
14		sometimes when he cooks his food is even better than my mother
15		He is really talented
16	S5:	my father too
17		Multiple chatting
18	S6:	cooking book
19	T:	cooking books (.) cooking books Farshad

Extract #4 opened with the teacher's first pair-part of a question-answer adjacency pair in an elicitation sequence. Several learners opted to contribute by providing typed responses in the chatbox. A student initiated a second pair-part response by typing that she does 'googling' to find recipes (line 2). The teacher accepted the response using a confirmation token 'Aha' and clarified the student's contribution to the entire class by echoing her response (line 3) and restating it in a reformulated form (line 4). Another student contributed to the conversation but used an incorrect preposition. The teacher reformulated the response (line 6), which resulted in an uptake (line 7). The student acknowledged the correction starting the turn with "yes" and repeating the teacher's correction "'on." The teacher closed his interaction with S1 by confirming the uptake while repeating the preposition with an emphatic tone (line 8) and acknowledging the student's turn saying "thank you.". In

line 9, the teacher launched the first pair-part of the second question-answer adjacency pair (how do you usually learn to cook?). Multiple students contributed to offer responses in the chatbox. In line 12, the teacher acknowledged one student's response by nominating that individual and repeating her response and commenting on it saying that his father cooks better than his mother. The conversation went smoothly as the teacher commented on each answer and corrected the errors with minimum interruption. The teacher participated in the discussion, answering the question and talking about his father's cooking (lines 12-13-14). With this comment, he managed to engage more learners in the interaction as one learner participated in the exchange, reacting to the teacher's statement about his father's cooking (line 15).

This extract highlights the remarkable extent of interactional work facilitated by the chatbox between the teacher and multiple students. The chatbox provides a unique opportunity for learners to contribute to the interaction by responding to the teacher's queries. Additionally, the teacher can establish an extended learning space by involving multiple learners and commenting on their contributions in the chatbox. Through the teacher's use of questions and elicitation of responses, multiple learners can be involved in the learning process simultaneously. This fosters a dynamic and interactive learning milieu that promotes peer learning and builds upon each other's ideas.

Using Breakout Rooms to Create Learning Spaces

In the observations, the free practice moves were primarily conducted in breakout rooms. When the learners conversed in breakout rooms, the teachers observed learners' practice and provided them with corrective feedback where necessary. The teachers frequently used breakout rooms as an affordance to create learning space through feedback.

In extract 5, two learners discuss different English proverbs in the breakout rooms. The teacher enters the breakout room and listens to the learners' conversation. When the talk finishes, he asks them to report back to him about what they discussed. Then he corrects the error through multiple strategies (line 6, prompt; line 9, elicitation, line 17, direct correction).

Extract 5

1	S:	for number 1
2		we say you can't have your cake
3		and eat it too
4		number 2 we don't have it
5		I'm not sure (.) I didn't hear
6	T:	Do you mean you haven't heard it?
7	S:	yes yes
8		I hadn't heard about it
9	T:	I↑….
10		hadn't heard?
11	S:	no::: so:::rry
12	T:	no eh it's ok
13	S:	Uses the first language
14	T:	so how do you say it?
15		I haven't =
16	S:	=I [never ..
17	T:	[I've never heard] about it
18		heard or I haven't heard about it
19		ok continue
20	S:	Yes (.) I never heard it

The conversation began with the student responding to a prompt from the teacher, stating "you can't have your cake and eat it too" (line 1). The student then proceeded to say "we don't have it" (line 2), but immediately after, the student paused and said "I'm not sure" and "I didn't hear." The student made a tense error in line 5 (using past tense instead of present perfect), and the teacher prompted the error correction by reformulating the student's statement (line 6). The student

confirmed this, saying "yes yes, I hadn't heard about it." When in line 8 the student made another tense error while repeating her previous sentence ("I hadn't heard"), the teacher changed the correction strategy to elicitation by using a rising intonation (line 9). The student confirmed that she was making an incorrect statement but indicated that she did not know how to correct it, using the first language (line 13). Initiating the first pair-part of another adjacency pair, the teacher attempted to elicit the correct verb tense, continuing the pair by stating an incomplete turn (line 15). The student completed the teacher-initiated turn without hesitation (shown by a latched turn (line 16), saying "I [never.." but is interrupted by the teacher who completed her turn by saying "heard" (indicated by a simultaneous utterance at line 17).

This extract highlights the notable potential of breakout rooms in enabling the teacher to correct errors, clarify responses, and elicit turns without interrupting or causing disturbances for other students in the class. The use of breakout rooms offered a dedicated learning space for individual students, allowing for targeted instruction and the correction of errors. By utilizing breakout rooms, the teacher was able to create a learning space that catered to the specific needs of individual students (that is present perfect tense grammar). This provided opportunities for focused instruction and targeted feedback, which are essential for effective learning. Moreover, the use of breakout rooms offered a way to avoid disrupting the learning experience for other students. This allowed the teacher to provide personalized attention and feedback to a student without affecting the flow of the larger classroom setting.

Discussion

The purpose of this study was to explore how teachers utilized videoconferencing tools in their online classrooms to create learning spaces and expand learning opportunities through corrective feedback. The results of the study revealed that teachers successfully used chatboxes, online notepads, and breakout rooms as instructional tools to facilitate learners' participation in interactions, avoid interrupting learners' talk time, and create a learning space. The results showed that the chatbox in the Adobe Connect platform was an affordance tool used by teachers and learners in the co-construction of the learning space while providing corrective

feedback. Learners initiated uptake in response to their teachers' elicitation of correct forms, and teachers used the chatbox to correct errors and avoid interruptions which occur mostly with verbal corrections, thus increasing learners' opportunities to produce language. The use of chatboxes has been found to allow for the co-construction of understanding when all learners can participate by writing their responses in the box and discussing them with their teachers and the teacher could orient to single and multiple students (Cheung, 2021). It has been found in previous literature that any strategy that teachers use to avoid interruptions and enhance learners' participation in classroom talk is considered an affordance that helps create language learning opportunities (Sert, 2019). In this study, it was discovered that the utilization of chatboxes can be instrumental in augmenting the level of learners' contribution to the classroom. Previous research has indicated that the use of chatboxes is a valuable means of enhancing students' engagement (Lai, 2017; Walker & Koralesky, 2021) and increasing their accuracy (Smith, 2004). Recent research has also found chatboxes as a favored mode of communication by students from certain cultures, particularly those adhering to religious practices. The Saudi Arabian culture, for instance, encourages women to cover their faces and bodies in the presence of non-relative men. Consequently, such students prefer the anonymity and privacy provided by chatboxes to communicate with non-related individuals (Aladsani, 2021). Such findings reveal the significant role of chatboxes as pedagogical tools that can enhance learning opportunities within language classrooms.

The findings corroborate previous research that underscores the significance of notepads as useful online affordances that foster and facilitate learners' participation in synchronous online classrooms (Khan et al., 2021). Additionally, other studies have demonstrated the positive impact of online tools, such as boards and notepads, on increasing learners' engagement in diverse subject classrooms, including mathematics (Rogers et al., 2022). This study revealed that online notepads can offer teachers the opportunity to overlook certain errors in communication by recording them on the notepad and addressing them during feedback time. This time allowance is an interactional practice that has been recognized as beneficial for learners as it encourages their active participation and facilitates the creation of a conducive learning environment (Walsh & Li, 2013).

In addition, the use of breakout rooms was identified as an affordance that contributed to the creation of learning spaces. The limitations of online educational platforms were mitigated by breakout rooms, which allowed for group interactions (González-Lloret, 2020). According to Peachey (2017), one significant advantage of breakout rooms is that they provide a quieter environment that is free from distractions, allowing learners to engage in meaningful discussions. Moreover, breakout rooms were found to facilitate communicative language learning by providing an interactive online environment for authentic language instruction (Kohnke & Moorhouse, 2020).

The present study adds to previous research by demonstrating that breakout rooms not only enable learners to talk freely without interruption from other learners but also provide a room for extended interaction between teachers and specific learners to whom the teachers can offer individualized feedback and even teach specific language items that were not part of the original lesson. For example, in this study, teachers corrected errors in breakout rooms, allowing learners more space to produce language without frequent interruptions for error correction compared to the main room. This finding underscores the value of breakout rooms in enhancing opportunities for further learner contribution and the creation of learning space.

The present study builds upon previous findings to establish that online videoconferencing platforms can enable educators to bolster student engagement and facilitate a seamless transition amidst the COVID-19 pandemic (e.g., Martin et al., 2022). The findings confirm that the online tools available through the videoconferencing platform of Adobe Connect could assist teachers in constructing learning spaces in the classroom by facilitating higher participation and avoiding unnecessary interruptions in learners' production of language (Walsh, 2002), which, according to the sociocultural view of learning, leads to better learning opportunities. The use of online boards, chatboxes, and breakout rooms for the correction of errors allowed the teachers to provide feedback with minimum interruption in the learners' flow of talk and, therefore, increased the space for learners to produce language and enhance their language learning opportunities.

Conclusion

The present study sheds light on how teachers can use the affordances in a

videoconferencing platform to create learning spaces through corrective feedback and maximize learning opportunities. It can be concluded from the findings that teachers' good practices in online classrooms can help them use the instructional tools in synchronous online EFL classrooms more efficiently to promote learning. Quick technological advancements and crises, such as the COVID-19 pandemic, made teachers rush into new teaching environments without enough competencies. The findings reveal the advantages that online videoconferencing tools can bring learners and teachers. Knowledge of best practices in the online classroom setting can assist teachers in adopting technology and prepare them to successfully deliver online lessons on new platforms.

These findings have significant implications for understanding how corrective feedback can be used to create learning spaces and enhance learning opportunities. The ability to construct learning spaces in the language classroom is believed to be the hallmark of good language teaching (Walsh & Li, 2013). The focus of this research was on how different online affordances can complement the conventional ways of error correction so that learning opportunities are enhanced in the classroom. It is recommended that teachers get trained on those affordances they can use in their online classrooms other than verbal error correction to create learning spaces and enhance learners' opportunities for language production. Language teacher educators can also employ the findings of this study to train teachers on how to use corrective feedback more efficiently. This knowledge is of utmost importance for the teachers given the promising role of corrective feedback in promoting language learning in classrooms.

The issue of creating learning space through corrective feedback in the online language learning context is an intriguing one that could be usefully explored in further research. It is suggested that future experimental research investigate if using the methods proposed in the study can help EFL teachers create learning space through corrective feedback more efficiently. Furthermore, it is suggested that future studies in other educational platforms, such as Skype and Zoom, find new affordances the teachers use to construct learning space through corrective feedback. It is also proposed that further studies address learners' online affordances to co-construct learning spaces as they respond to the teachers' corrective feedback.

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Appendix: Transcription conventions

Adapted from Jenks (2011)

[ ]	Brackets around utterances show simultaneous utterances
=	Contiguous utterances: the latching of two lines of talk spoken by two different speakers and the latching of two lines of talk spoken by the same speaker
(0.3)	Numbers inside parentheses show timed pauses. The number indicates the number of seconds of the pause duration to one decimal place.
(.)	A pause of fewer than 0.2 seconds
↑↓	Up or down arrows indicate rising and/or falling intonation. The arrow is located just before the syllable in which the change in intonation occurs
Under	Underlined words show emphasis
:	elongated speech is represented as a colon ':', with more colons denoting longer stretches of sound
> <, < >	The signs indicating 'Greater than' and 'less than' show the pace of talk they surround which was faster or slower than the surrounding talk.

Differential Impact of Synchronous and Asynchronous Computer-Assisted Dynamic Assessment on Higher-Order and Lower-Order Writing Skills

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Abstract

This study endeavored to scrutinize the differential impacts of asynchronous and synchronous computer-assisted dynamic assessment (CADA) on English-as-a-foreign-language (EFL) learners' higher-order and lower-order writing skills. In a quasi-experimental pretest-posttest research design, 60 Iranian EFL university students of both genders were selected through convenience sampling and were randomly assigned to two experimental groups. They experienced dynamic assessment (DA) procedures and received mediation on their writing either asynchronously or synchronously for 12 weeks where the higher-order and lower-order writing skills were rated by the researchers based on the West Virginia Department of Education (WVDE) (2011) writing rubric. The results of MANOVA revealed that both groups performed significantly better on the writing posttest in all the higher-order and lower-order writing skills. Nevertheless, no significant inter-group differences were found in the practiced writing skills on the posttest results. Further, 10 participants were randomly selected from each experimental group to explore their perceptions of and attitudes toward the CADA procedures. Analyzing their responses, it was observed that members of the asynchronous CADA group had more positive perceptions of writing, less level of stress, and more sense of rapport with the instructor. The findings highlight the potential of CADA to enhance EFL learners' higher-order and lower-order writing skills both in synchronous and asynchronous contexts.

Keywords: asynchronous, computer-assisted dynamic assessment (CADA), higher-order writing skills, lower-order writing skills, synchronous

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Introduction

In the ever-changing world we are living in, technology is an instrument empowering human beings all around the globe to have a better life. According to Chih-Ming and Ying-You (2020), the expeditious development of information and communication technologies (ICT) has given rise to the emergence of computer-mediated communication (CMC). CMC deals with "synchronous or asynchronous electronic mail and computer conferencing by which senders encode text messages that are relayed from senders' computers to receivers" (Walther, 1992, p. 52).

Similarly, the developments observed in technological devices have influenced the second/foreign language (L2) experiences (Chakowa, 2018) and enhanced the quality of teaching, learning, and assessment (Mukminin & Habibi, 2020; Prasojo et al., 2019). Since instruction and assessment go hand in hand, any variation in one would inevitably result in a change and variation in the other. Accordingly, computer-assisted dynamic assessment (CADA) has emerged as the integration of teaching and assessment into one single activity (Ebadi & Bashiri, 2021; Poehner, 2008; Shrestha, 2020).

Dynamic assessment (DA), principally inspired by Vygotsky's sociocultural theory (SCT), is a comprehensive assessment procedure that endeavors not only to determine the learners' actual cognitive ability but also to enable them to improve their maturing ability (Shrestha, 2020). In the DA context, learners constantly receive mediating feedback through the deployment of effective interventions and social interactions, usually provided by the teacher and more capable peers, respectively (Andujar, 2020; Zandi et al., 2020).

DA has been the focus of L2 scholars' attention in the Iranian EFL context too, and several studies have scrutinized the potential of both in-class or technology-assisted versions of DA on L2 learning. In the classroom setting, Tavassoli and Nikmard (2019) identified the effectiveness of DA on L2 learners' performance on reading comprehension tasks. Also, Daneshvar et al. (2021) found the outweigh of DA over conventional static assessment in improving the learners' performance on IELTS writing task 2. Further, the technology-assisted DA has also been studied by investigating the students' writing skills through mobile-based DA (Ebadi & Bashiri, 2021; Torabi & Safdari, 2020), developing EFL learners' descriptive writing through mobile-mediated hybrid DA (Shafaiee Rad, 2021), and exploring

the developmental errors in academic writing through computer-mediated and face-to-face DA (Vakili & Ebadi, 2019).

Deploying DA approach not only necessitates an alternative to the conventional teaching and assessing procedures but also requires an integration of new technologies in teaching writing (Vakili & Ebadi, 2019). In other words, it seems beneficial to focus on computer-mediated communication in writing classes. CMC can be categorized into asynchronous and synchronous modes. The former entails some time restraints on communication while the latter requires individuals to get involved in simultaneous interactions (Kazemi et al., 2022).

Exploring how DA works as an asynchronous online medium (e.g., emails) or a synchronous online communication tool might introduce promising results in teaching L2 writing. DA can help the assessment of both macro-level or higher-order writing skills (e.g., organizational) and micro-level or lower-order writing skills (e.g., structural) (Cumming, 2001). To the best of the researchers' knowledge, in the EFL context of Iran, no study has been conducted on EFL learners' higher-order and lower-order writing skills while they are engaged in asynchronous CADA (hereafter, ACADA) or synchronous CADA (hereafter, SCADA). Moreover, no information is available about Iranian EFL learners' perceptions of and attitudes toward online DA procedures. Taking into consideration the studies mentioned above reveals that they are mostly confined to traditional classroom boundaries. However, as Shrestha (2020) asserted, "more DA studies need to be conducted in academic writing and distance education" (p. 241). Besides, in cases technology is integrated to manage mediation, no study inclined its focus on whether ACADA and/or SCADA can be effective for improving EFL learners' higher-order and lower-order writing skills, and whether such procedures are favorable and encouraging for EFL learners. Taking the paucity of research in this regard on the one hand, and the necessity of shedding light on EFL learners' inclination toward integrating DA and technology in the class, on the other hand, the researchers were inspired to conduct this study. To address this lacuna in the literature, the current study investigated the following research questions:

1. Does ACADA significantly affect EFL learners' higher-order (i.e., organization and content development) and lower-order writing skills (i.e., sentence structure, mechanics, and word choice/grammar usage)?

2. Does SCADA significantly affect EFL learners' higher-order (i.e., organization and content development) and lower-order writing skills (i.e., sentence structure, mechanics, and word choice/grammar usage)?

3. Is there any significant differential impact on EFL learners' higher-order (i.e., organization and content development) and lower-order writing skills (i.e., sentence structure, mechanics, and word choice/grammar usage) using ACADA and SCADA?

4. What are EFL learners' perceptions of and attitudes toward ACADA and SCADA of writing?

Review of the Related Literature

Dynamic Assessment (DA)

DA is deeply rooted in Vygotsky's sociocultural theory of learning (SCT) (Lantolf et al., 2018). Originated in the 1920s by Vygotsky in Russia, SCT concentrates on the human mind, its higher mental functions, and the role social contexts play in shaping individuals' thinking (Lantolf & Thorne, 2006). Mediation and zone of proximal development (ZPD) are the main components of SCT and DA (Lantolf et al., 2015). Mediation refers to the process that individuals use to control and adjust the material world and their mental and social activities by making use of cultural artifacts (Lantolf & Thorne, 2006). On the other hand, ZPD refers to the current distance between an individual's independent problem-solving and his/her potential problem-solving under the guidance of an expert or a more capable person (Vygotsky, 1978). Learners can reach their ZPD as a consequence of the received mediation (Poehner, 2008).

DA "is a development-oriented process in which learners' learning difficulties are first diagnosed based on which mediations are provided to help the learners overcome the learning issues and reach their potential capabilities" (Ebadi & Rahimi, 2019, p. 2). The type and the amount of performance that learners require to successfully perform the task in DA reveals their learning potential. In DA, the instruction is not interrupted, but rather instruction and assessment are brought together to foster the learners' development (Kazemi & Tavassoli, 2020).

Computer-Assisted Dynamic Assessment (CADA)

In 1995, the publication of the first issue of the Journal of Computer-Mediated Communication gave rise to the scholars' interest in the concept of computer-mediated communication (CMC) and the significant role computers could play in communication. CMC may involve different types of message exchange such as many-to-many, one-to-many, and one-to-one with asynchronous or synchronous modalities (Carr, 2020; Lee, 2020). In this respect, Shrestha (2020) mentioned that in a computer-mediated context, technological tools can be employed to perform DA and do research on it. Plunging into the world of technology and computers, L2 scholars have recently endeavored to indicate the effect of CADA on learning target language components. Yang and Qian (2019) illustrated that with the help of CADA, learners could perform significantly more efficiently on reading. Estaji and Saeedian (2020) also concentrated on CADA by scrutinizing the influence of three different types of mediation provision, including mediation provided by a computer, an individual, and a combination of both. Their findings revealed that the first two types of mediation had the same amount of influence on the learners' reading comprehension, while the third type was influential as well.

Employing an interventionist DA, Davoudi and Ataie-Tabar (2015) explored the influence of a computerized dynamic test of writing (CDTW) on the learners' writing performance and reported that the participants' writing performance was enhanced in four major writing sub-skills. The attitude of the participants also confirmed the effectiveness of CDTW. In addition, in a recent qualitative study, Vakili and Ebadi (2019) scrutinized the effect of DA on EFL learners' writing and compared its differential effect in face-to-face and computer-mediated contexts by analyzing four learners' writing corpora. The findings of the study indicated that mediation in the face-to-face context encouraged the learners to participate in collaborative writing whereas in the computer-mediated context, learners were more concerned with their own written text and difficult items.

EFL Learners' Perceptions of Online Classes

Individuals' perceptions and attitudes are among the influential factors affecting their beliefs, interpretations of events, and the way they make decisions

throughout their lives. Richards and Schmidt (2002) defined perception as "the recognition and understanding of events, objects, and stimuli through the use of senses" (p. 391). Many of the studies conducted on students' perceptions have revealed that their perception is a star player in any process of language learning (Nazara, 2011). Rukmi et al. (2021) also asserted that students' perception is a puissant factor influencing the effectiveness of an activity and students with more positive perceptions accomplish classroom activities more effectively and achieve better results (Manalu, 2019).

Students' perception of distant education has been the locus of many studies within the outbreak of the Covid-19 pandemic as many educational systems had to use different online learning platforms and shift toward online teaching and learning to survive. In this regard, different researchers reported various results, including both positive and negative students' perceptions. Some scholars (e.g., Atmojo & Nugroho, 2020; Melani & Kuswardani, 2022) observed that teachers and students perceived online EFL learning insufficient, less motivating, and hard to understand. However, others (e.g., Rojabi, 2020) claimed the opposite to be true. Similarly, Deiniatur (2021) identified that students had positive perceptions of the use of Google classroom as employing such classes and giving feedback on students' writing prepared them for autonomous learning. Rosalinda et al. (2022) also revealed that students showed positive responses and a strong interest in using WhatsApp for learning writing during the Covid-19 pandemic. Using Zoom, Mu'awanah et al. (2021), however, found that students with suitable online learning facilities had positive perceptions while those with poor online learning facilities had negative perceptions of the application used.

EFL Learners' Attitudes toward Online Classes

Attitude refers to "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly & Chaiken, 1993, p. 1). It influences every decision people make and every action they take (Tran et al., 2019). Students' attitudes mold how they think, feel, behave, and understand the world around them (Tran, 2020).

The rapid development of technology has affected studies done on attitude and language. Tusino et al. (2021), for instance, observed that learners showed

positive attitudes toward online task-based language teaching as it enabled them to write drafts and revisions in a better way. Azizah and Nugraha (2021) also indicated that, in their qualitative study which was conducted during the Covid-19 pandemic, EFL students revealed positive attitudes toward learning writing online. Furthermore, using Facebook as a tool to provide feedback, Phuong and Nguyen (2019) mentioned that students showed positive attitudes toward the app and their writing performance significantly improved.

Method

This study adopted a quasi-experimental pretest-posttest design to investigate the differential impact of A/SCADA on higher-order and lower-order writing skills. Furthermore, the participants' perceptions of and attitudes toward the DA procedures was checked through an open-ended questionnaire.

Participants

All the participants were undergraduate university students majoring in English translation studies. Out of the initial pool of 77 students in two intact groups who were opted at the inception of the study based on convenience sampling, 60 individuals that were at the intermediate level based on their performance on an Oxford Placement Test (OPT, 2001) were selected. There were 30 students in each group. Of these, 15 participants were male (25%) and 45 were female (75%), and their ages ranged from 19 to 30.

Moreover, 10 participants from each group provided explanatory and rich data regarding their perceptions of and attitudes toward the DA procedures deployed in the two groups. However, the researchers acknowledge that information from just 10 participants from each group might not lead to generalizable results.

Instruments and Materials

The participants performed on OPT (2001) as the placement test to ensure their homogeneity and those at the intermediate level on OPT were selected.

They were also asked to write two 150-word paragraphs as the pretest and the posttest so that their writing proficiency could be evaluated. Selected from the course-book *Longman Academic Writing Series 3: Paragraphs to Essays* (2014), the

topic for the pretest was "Write a 150-word paragraph about your plans. You may write about your plans for the near future or the distant future", and the topic for the posttest was "Write a 150-word paragraph about how you want to get the job of your dreams".

In evaluating the writings in pretest and posttest, the West Virginia Department of Education (WVDE) (2011) writing rubric was used, which was adopted from Pourdana and Tavassoli (2022). The rubric concentrates on "organization" and "content development" as higher-level skills of writing, and "sentence structure," "mechanics," and "word choice/grammar usage" as lower-level skills of writing. Each component has 6 band scores and to determine the learners' overall writing skills, it is necessary to add up all the scores obtained for each component.

The course-book which was used in both groups was *Longman Academic Writing Series 3: Paragraphs to Essays* (2014), which concentrates on writing as a process, contains a precisely structured approach to writing, and is suitable for students studying at university. This course-book provides students with realistic writing models, clear explanations, and systematic practice that enable them to have a step-by-step writing development through the acquisition of new vocabulary, grammar, sentence structure, and mechanics (Oshima & Hogue, 2014).

In the ACADA group, email was used to carry out the interaction between the teacher and the students while in the SCADA group, the Adobe Connect platform was deployed to enable the simultaneous evaluation of the students' writing.

Further, to build up a comprehensive picture of the students' perceptions of and attitudes toward ACADA and SCADA of writing skills, the researchers adopted a perceptions questionnaire from Darhower (2014) and asked 10 participants from each experimental group to complete it. The questionnaire consisted of 13 questions to unmask the students' perceptions of and attitudes regarding the merits and demerits of DA procedures. The students were required to indicate, based on the experience they had in the class, whether each question was true for them or not. They were also required to provide detailed explanations about their answers so that the researchers could obtain a better understanding of their perceptions and attitudes.

Procedure

The study was done in Iran in late 2020 and early 2021 during the Covid-19 pandemic. After signing the consent form, 77 EFL learners in two intact groups participated in an electronic version of OPT (2001). Of these, 60 learners, 30 in each group, whose scores were at the intermediate level (30-37) on OPT were selected. The two groups were randomly assigned into two experimental groups. All the 60 participants were informed about the classroom procedures and were told that during the semester, they would learn how to organize and develop paragraphs by reviewing different models, studying various explanations with examples, and having extensive practice on writing. They were also informed that they were required to write paragraphs individually and constantly receive feedback from their teacher. Then, the participants were asked to write a 150-word paragraph electronically for the pretest to evaluate their higher-order and lower-order writing skills. Employing the WVDE writing rubric (2011), adopted from Pourdana and Tavassoli (2022), the researchers rated the pretest of both groups.

Next, the treatment sessions started following the DA approach which lasted for 12 sessions. The instructor of the two groups was one of the researchers who was quite familiar with applying the DA procedures. The ACADA group received instruction once a week on the Adobe Connect platform. However, most of the communication between the instructor and the students was done through emails. In DA sessions, the students were required to send their writings to their instructor through emails. Their writings were assessed several times, and every time they received relevant guidance step-wise by moving from implicit to explicit corrective feedback through emails. The erroneous parts were initially highlighted to draw the students' attention to the problematic structural, lexical, or discursive constituents in their writing. In case they could not resolve their errors, they were provided with a hint or clue to locate their errors. Finally, if they were still unable to use the accurate language form, they were given several choices to select the most suitable one. In parallel, the students' writings in the SCADA group were checked in the Adobe Connect platform and they were simultaneously coached to correct their errors through orally leveled guidance inside the classroom. The corrective feedback similarly ranged from implicit to explicit in a step-wise manner. The main difference between SCADA and ACADA groups was that in the former, the feedback occurred

synchronously in the context of the classroom and in front of all the other students.

Near the end of the treatment, 10 randomly selected participants from each experimental group were asked to electronically answer a perceptions questionnaire adapted from Darhower (2014) regarding their perceptions of CADA procedures with explanatory responses. They were required to decide if each question was true for them or not. More importantly, they were asked to provide explanatory answers to the questions to identify their perceptions better. They were also provided with three open-ended questions to share their attitudes regarding the advantages and disadvantages of the CADA procedures used in their class. Even though the researchers were aware that information from only 10 participants from each group might not be enough, since the obtained data were explanatory and rich in nature, they considered this number acceptable. Later, the researchers analyzed the content of the students' responses to the questionnaire items collaboratively to extract the main themes.

Finally, in the last session, all of the students had to write a 150-word paragraph electronically for their posttest. The posttest of both groups was also rated by the researchers using the WVDE writing rubric (2011).

Results

The collected data were analyzed by the researchers to answer the research questions of the study.

Preliminary Investigations

The quantitative data from the pretest and posttest of the two groups were fed into the Statistical Package for Social Sciences (SPSS) for further analysis. First, to check whether to use parametric formulae in analyzing the data, the normality of the scores on the writing pretest and posttest were scrutinized through the one-sample Kolmogorov-Smirnov test (KS-test) (Pallant, 2011). The results showed that the two sets of scores were normally distributed because their levels of significance were larger than the critical level ($p_{pretest}$=.37; $p_{posttest}$=.53; α=.05; $p>\alpha$). Hence, these data sets were normally distributed and parametric formulae could be used to analyze them.

Next, to ensure the consistency of the pretest and posttest scores, the inter-

rater reliability was measured between the two raters' ratings of individual components of the WVDE writing rubric (2011) and the total writing scores using a series of Pearson correlations. The Pearson correlation values for the pretest scores (on individual components of writing and the total) ranged from .83 to .92 and for the posttest scores ranged from .89 to .97, all representing high values since they were all higher than .7 (Pallant, 2011).

In the next step, the homogeneity of the participants' writing was checked at the outset of the study through an independent-samples t-test on their pretest scores. The related descriptive statistics and the independent-samples t-test are reported in Tables 1 and 2.

Table 1

Descriptive Statistics of the Writing Pretest of the ACADA and SCADA Groups

	N	Mean	SD
ACADA	30	23.60	2.06
SCADA	30	23.09	2.26

Table 2

Independent-Samples T-Test on the Writing Pretest of the ACADA and SCADA Groups

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Writing Pretest	Equal variances assumed	.00	.99	.82	58	.41

As Table 1 indicates, the pretest mean scores were 23.60 and 23.09 for ACADA and SCADA groups, respectively, which appeared to be close to each other. The difference between the two groups was checked statistically (Table 2). The significant value for the t-test was .41 and higher than the critical level (t=.82; p=.41; α=.05; $p>\alpha$), representing insignificant inter-group differences.

Investigation of Research Questions 1-3

To investigate research questions 1-3, a multivariate analysis of variance

(MANOVA) was carried out to investigate the two groups' performance on higher-order and lower-order writing skills (based on WVDE writing rubric, 2011) in the pretest and posttest. First, the descriptive statistics of the pretest and posttest scores are reported in Table 3.

Table 3

Descriptive Statistics of Higher-Order and Lower-Order Writing Skills of the ACADA and SCADA Groups

				Pretest	Posttest
Higher-Order Skills	Organization	ACADA	Mean	4.08	5.35
			SD	.90	.91
		SCADA	Mean	3.84	5.40
			SD	.96	.86
	Content Development	ACADA	Mean	5.26	5.67
			SD	.44	.45
		SCADA	Mean	5.28	5.46
			SD	.45	.70
Lower-Order Skills	Sentence Structure	ACADA	Mean	4.54	4.92
			SD	.39	.72
		SCADA	Mean	4.50	5.02
			SD	.65	.63
	Mechanics	ACADA	Mean	4.80	5.15
			SD	.50	.71
		SCADA	Mean	4.70	5.16
			SD	.55	.50
	Word Choice/ Grammar Usage	ACADA	Mean	4.85	5.31
			SD	.54	.56
		SCADA	Mean	4.80	5.33
			SD	.63	.27
	Total	ACADA	Mean	23.60	26.42
			SD	2.06	2.06
		SCADA	Mean	23.09	26.39
			SD	2.26	1.96

Taking a look at Table 3, it can be seen that both the ACADA and SCADA

groups had noticeable improvement from their pretest to posttest as far as the five higher- and lower-order writing skills and the total writing scores were concerned. To statistically check the significance of the observed differences, a MANOVA was run and the result is reported in Table 4.

Table 4

MANOVA on Higher-Order and Lower-Order Writing Skills of the ACADA and SCADA Groups

Source		Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Higher-order skills	Organization	49.14	1	49.14	58.82	.00*	.38
		Content Development	2.08	1	2.08	7.49	.00*	.07
	Lower-order skills	Sentence Structure	5.66	1	5.66	14.95	.00*	.13
		Mechanics	3.50	1	3.50	10.53	.00*	.10
		Word Choice/ Grammar Usage	6.04	1	6.04	22.07	.00*	.19
Group	Higher-order skills	Organization	.22	1	.22	.26	.60	.00
		Content Development	.21	1	.21	.78	.37	.00
	Lower-order skills	Sentence Structure	.00	1	.00	.00	.97	.00
		Mechanics	.12	1	.12	.37	.54	.00
		Word Choice/ Grammar Usage	.00	1	.00	.01	.90	.00
Time * Group	Higher-order skills	Organization	.54	1	.54	.65	.42	.00
		Content Development	.33	1	.33	1.19	.27	.01
	Lower-order skills	Sentence Structure	.21	1	.21	.57	.45	.00
		Mechanics	.15	1	.15	.46	.49	.00
		Word Choice/ Grammar Usage	.03	1	.03	.11	.73	.00

Table 4 shows that the significance value for "time" in the case of all the higher-order and lower-order writing skills was .00 and smaller than the critical level (p_{time}=.00; α=.05; $p<\alpha$). In other words, there was a significant difference between the performance of the two groups in all the higher-order and lower-order writing skills from pretest to posttest and the effect sizes in all cases were either moderate or large. It should be noted that the partial eta squared is small if it is .01 or 1%, moderate if it is .06 or 6%, and large if it is .138 or 13.8% (Pallant, 2011). However, there was not a significant difference between the performance of the two groups on any of the higher-order or lower-order writing skills since the significance values for "group" were all higher than the critical value (α=.05; $p>\alpha$), where all the effect sizes were zero. Therefore, they indicated similar improvements in both groups who received DA no matter synchronously or asynchronously. Finally, the results of the interaction of "time*group" revealed that neither of the two groups had a more significant progress from pretest to posttest on any of the higher-order and lower-order writing skills since all the p-values were above .05 (α=.05; $p>\alpha$), with effect sizes of zero or close to zero.

Figure 1 shows the performance of the two groups on the higher-order and lower-order writing skills and their total writing scores from pretest to posttest. The figure shows that in all cases, both groups had similar pretest scores, improved significantly from pretest to posttest, and had a similar performance on the posttest.

Figure 1

Comparison of the ACADA and SCADA Groups

Organization

Content Development
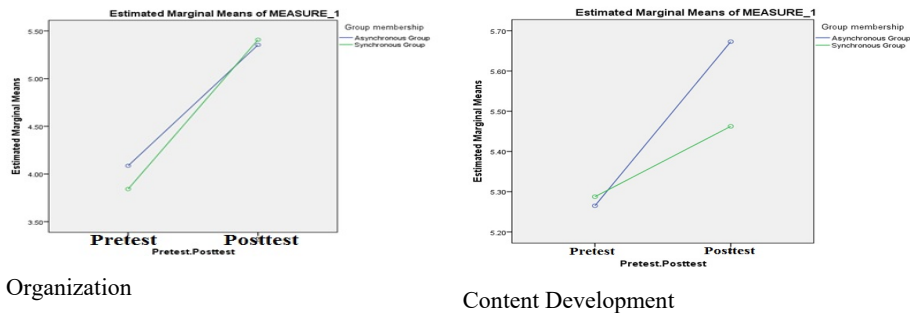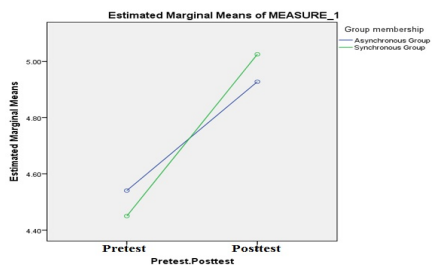
Sentence Structure
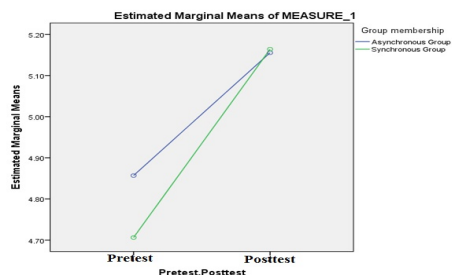
Mechanics
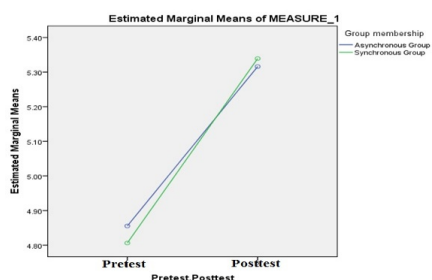
Word Choice/Grammar Usage
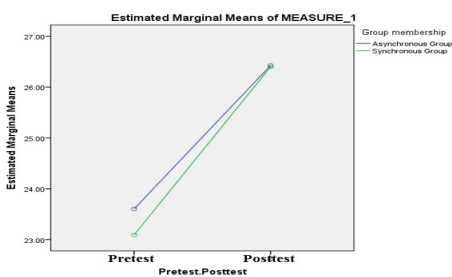
Total

To sum up, based on the results presented in Tables 3 and 4 as well as Figure 1, both the ACADA and SCADA significantly affected the Iranian EFL learners' higher-order and lower-order writing skills. Furthermore, it was found that no significant differences were observed between the effects of the ACADA and SCADA on Iranian EFL learners' higher-order and lower-order writing skills.

Investigation of Research Question 4

To explore the participants' perceptions of and attitudes toward ACADA and SCADA, 10 participants were randomly selected from each 30-member experimental group to answer a perceptions questionnaire which was adopted from Darhower (2014) and was modified based on the objectives of the current study.

To understand the learners' perceptions of CADA on their writing improvement, the participants answered the items with true/false which best suited their experience with DA procedures and wrote down a brief explanation about each item. Table 5 summarizes the frequency of the responses in each group followed by the chi-square test to examine the potential differences between the groups. The chi-square tests showed insignificant measures for all the items (α=.05; $p>\alpha$) which

were interpreted as the participants' positive perceptions of DA.

Table 5

Frequency of Responses to the Items in the Perception Questionnaire

		ACADA F	SCADA F	Chi-square	Sig.
1.	I can write better than I could before the class.	10	9	.05	.81
2.	The instructor's assistance helped me learn to write better.	10	10	.00	1
3.	I am more aware of the problems I have in my writing as a result of the instructor's explanations on my writing.	10	9	.05	.81
4.	The instructor's explanation sometimes confused me rather than helping me.	0	1	---	---
5.	The instructor's explanation on my writings was an effective way to practice writing.	10	10	.00	1
6.	I prefer to have a face-to-face conversation with the instructor.	9	9	.00	1
7.	Over time, the amount of help that I need in my writing becomes less and less.	10	6	1	.31
8.	Discussing my writing problems in English was more helpful than discussing them in Persian.	10	3	3.6	.06
9.	I think online classes are not effective at all.	9	3	3	.08
10.	I would have preferred that my errors were checked alone rather than talking about them with the instructor and other students in the class.	3	5	.5	.48

--- There were not enough valid cases for processing.

To delve into the participants' perceptions about CADA procedures more, example explanations about each item follow. Considering item 1, almost all

participants in both groups found CADA effective in improving their writing ability, which was in line with the results of the quantitative data analysis of the study.

> *I thought writing was one of the hardest skills, but learning the rules of writing and, of course, practicing and repeating can help improve your writing skills.* (Student J in ACADA group)

For item 2, all the participants claimed that the instructor's assistance was influential. This highlights the role of the teachers' mediation in supporting the students to put more effort into practice the next time they want to write.

> *It's crystal clear that the instructor's assistance helped me write better. Rules make everything better.* (Student F in SCADA group)

Regarding item 3, almost all participants agreed that the explanations they received enabled them to be aware of their writing problems more and this could be attributed to the positive effect of the feedback they received in the writing process.

> *The fact that you read all my writings many times and say my mistakes was really useful for me and I'm grateful.* (Student H in ACADA group)

Considering item 4, almost all participants rejected that the instructor's explanations confused them.

> *In most cases, the instructor gave us some general feedback and fortunately I could get her mind map.* (Student D in SCADA group)

Regarding item 5, all the participants in both groups agreed with the effectiveness of the instructor's explanations on their writings. In other words, they all considered DA as a beneficial way to practice writing.

My teacher's explanations are so sufficient and good that once she says it, I fully understand it and understand what she wants from me. (Student G in ACADA group)

For item 6, almost all the participants, except one in each group, preferred to have a face-to-face conversation with the instructor.

100%, face-to-face classes are more effective. (Student C in SCADA group)

With respect to item 7, although all the members of the ACADA group agreed that the amount of assistance they needed in their writing became less over time, in the SCADA group, 4 individuals disagreed and stated that they still wanted their teachers or peers to read their writing and make a comment on it.

Over the term, my mistakes became less and I learned how not to repeat past mistakes which I had in my writing. In other words, I became my own instructor. (Student E in ACADA group)

For item 8, in contrast to the members of the ACADA group who unanimously preferred their writing problems to be discussed in English, most members of the SCADA group preferred their writing problems to be discussed in Persian (their mother tongue). This can be explained in terms of the academic environment they experienced. The participants of the SCADA group stated that as their errors were checked in the class, they suffered from too much anxiety and were under a lot of stress. Using a foreign/second language doubled their stress level.

In some cases, we can't understand the explanation of our mistakes in a paragraph. Telling it in Persian is better and it reduces our stress. (Student I in SCADA group)

Regarding item 9, almost all of the participants in the ACADA group agreed that online classes are not effective. Some of them stated that online classes

were their second choice and they mentioned some problems such as lack of concentration and not being energetic in online classes. However, the majority of the students in the SCADA group rejected this idea.

> *It's not fair to say on-line classes are not effective. It's better to say face-to-face classes are more effective.* (Student B in SCADA group)

The last item was about the students' preference for their errors to be checked alone rather than being talked about with the instructor and other students. Three students in the ACADA group and five students in the SCADA group responded positively to this item while most claimed the reverse or that there was no difference for them.

> *I prefer the teacher to correct my mistakes, and if he tells me in front of the other students, it's better because I think it has a greater impact on me because when problems are raised in front of someone else, my motivation to do it right increases.* (Student A in ACADA group)

Overall, it was concluded that the participants in both groups had positive perceptions of DA procedures. Next, to explore the participants' attitudes toward CADA, three-open ended questions were added to the end of the questionnaire. The first two questions directly asked the students to mention the advantages and disadvantages of the A/SCADA procedures used in their classes.

Regarding the advantages, both groups mentioned that the CADA procedures enabled them to notice their mistakes and avoid repeating them. The ACADA group stated that they had more time to think, less stress, and a good rapport with the instructor. In addition, they stated that the classroom procedures gave them enough time to correct their errors on their own and helped them remember their mistakes, try to minimize them, and avoid their recurrence. On the other hand, the SCADA group believed that the main advantage of having synchronous DA was the instructor's immediate error feedback and elaboration on

students' errors. An example follows:

> *When I write a paragraph, and send it to my instructor, I need her to give feedback to my writing. As a result, I understand my errors, and learn the correct forms. When she just highlights my errors, and let me correct them, I try more, and also learn more.* (Student B in ACADA group)

Regarding the disadvantages, four members in the ACADA group did not mention any disadvantages, but the others stated that the procedures were lengthy and difficult especially for the older participants to cope with. On the other hand, most of the participants in the SCADA group objected to the shortage of class time as a result of which they could not submit high-quality works. Moreover, they maintained that they were stressed and could not make a good rapport with the instructor. Some of the participants in the SCADA group found the DA procedures useless and the cause of students' embarrassment, stress, and low concentration. Some students mentioned the poor internet connection as one of the major disadvantages.

> *When I have to write my assignments in a limited time, I get lots of stress, and I can't write as good as I can, so my work has many mistakes. When I make mistakes, I will lose marks. I can't focus on my topic easily in a short time and can't write about it.* (Student G in SCADA group)

Regarding the advantages and disadvantages of CADA procures, an interesting pattern was observed between the two groups as if the two groups' responses were the two extreme ends of a continuum. In contrast to the ACADA group who mentioned more advantages, the SCADA group mentioned more disadvantages. The themes extracted from the participants' responses in each group regarding the advantages and disadvantages of CADA are presented in Table 6.

Table 6

Extracted Themes from the Participants' Responses

	ACADA Group	SCADA Group
Advantages of CADA Procedures	• Becoming aware of errors and minimizing them • Being encouraged to write more • Having less stress • Having more time to think • Having the chance to correct mistakes and get better scores • Improving accuracy, structures, and punctuations • Having more self-confidence • Correcting the errors with the instructor's assistance • Making a good rapport with the instructor • No stressful atmosphere • Not being afraid of making mistakes because mistakes would lead to students' progress • Remembering mistakes and avoiding their repetition	• Checking a student's error helps others obtain information about their possible problems • Increased speed of typing • Increased speed of writing • Not being mocked by others • Remembering mistakes and avoiding their repetition • Checking students' errors instantly
Disadvantages of CADA Procedures	• Being hard for students who do not know how to work with computers • Needing more time to do the tasks • Being stressed • Time consuming	• Shortage of class time • Lowering self-confidence • Decrease of students' writing quality due to time limitation • Lack of concentration • Being stressed • Feeling embarrassed • No good rapport with the instructor • Poor internet connection and computer problems

The last open-ended question asked the participants of the ACADA group to state if they could write better in class and receive constructive feedback in class. Only two of the participants were positive and mentioned that as class writing would simulate the exam atmosphere, it could help reduce their stress level. The other eight participants preferred to write at home where they could have plenty of time to reflect on what to write and how to express their ideas. On the other hand, in the SCADA group, the students were asked if they preferred to write after class time and receive feedback in private. They unanimously stated that writing at home would give them more time to focus on their writing and therefore would be able to perform much better.

Discussion

The researchers in the current study aimed to delineate the differential impact of ACADA and SCADA on Iranian EFL learners' higher-order and lower-order writing skills. The results of the present study showed that both ACADA and SCADA positively influenced Iranian EFL learners' higher-order (including organization and content development) and lower-order writing skills (including sentence structure, mechanics, and word choice/grammar usage). However, there was no significant difference between ACADA and SCADA in improving either the higher-order or lower-order writing skills, and both were useful mediation tools for improving EFL learners' writing ability. Furthermore, the results of the study indicated that the learners had a more positive inclination toward ACADA than SCADA. Overall, it seems that for elementary and intermediate level L2 learners who are not much proficient, writing requires much time to form structures and to choose appropriate vocabulary. Accordingly, using SCADA may put a lot of pressure on such learners and make them much stressed. In contrast, ACADA seems to be a more appropriate tool for EFL students at lower levels as it might create a more supportive environment where students constantly receive scaffolding from their teacher who is a more competent and knowledgeable person.

The findings of this study are in line with Helm (2015) who found similar results by stating that asynchronous communication settings might enable students to make use of more quality time to consult various resources and browse the websites for relevant posts to provide suitable replies. In another study, Zafarani and

Maftoon (2016) found that the procedures of DA used by Web 2.0 tools were effective for enhancing the learners' syntactic complexity, vocabulary, and quantity of the information they present. Moreover, employing google docs to observe the effect of synchronous DA procedures on academic writing, Ebadi and Rahimi (2019) indicated that DA positively influenced the coherence, cohesion, lexicon, structure, and accuracy of the participants' academic wiring. Finally, Ebadi and Bashiri (2021) using collaborations between the students and the teacher with text-based and voice-based mediation found that mobile-assisted DA enhanced the EFL learners' writing proficiency.

Conclusion

Technology integration has influenced every aspect of individuals' lives and enabled them to have broader thinking, deeper learning, and wider knowledge. Showing the effectiveness of both ACADA and SCADA, the current study intended to lead EFL teachers to use different CADA procedures in their classes to improve students' target language knowledge, especially their higher-order and lower-order writing skills. Such procedures may especially benefit L2 students who are not much proficient to improve different aspects of their writing. Both ACADA and SCADA enable teachers to have a more precise understanding of the students' performance. Thus, teachers may use CADA procedures as an opportunity to reflect in-, on-, and for-action to make better decisions regarding their students' needs and expectations and modify their teaching procedures accordingly. Teachers can also consider CADA as the foundation for action research in their classes to resolve potential teaching and learning problems.

Similar to other studies, this study has faced some limitations that might have influenced the results in one way or another. The 30 participants in each experimental group with various age ranges and different genders made a small research sample which could have affected the generalizability of the findings. Also, only 10 participants from each group provided data regarding their perceptions of and attitudes toward CADA procedures. Accordingly, future research can be done with a larger number of participants to collect both quantitative and qualitative data. Moreover, the researchers used the Adobe Connect platform and email as tools for communicating with students for sending writings and receiving feedback.

Interested researchers may look for other applications and find their potential effects on different language components following CADA procedures. They may also employ other effective procedures such as blended learning, computer-mediated collaborative writing, or blogging to observe their possible effect on higher-order and lower-order writing skills. Researchers may conduct other similar studies using CADA procedures and examining their impact on writing complexity, accuracy, and fluency. Finally, more qualitative studies can be done through interviews and observations to explore the teachers' and students' attitudes toward CADA procedures.

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Donald Trump and His Opponents as Represented in His 2016 US Presidential Campaign Retweets: A Discourse Analytic Study

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Abstract

Donald Trump's 106 handpicked tweets of his supporters in terms of his retweets, during his 2016 presidential campaign starting from the day before his candidacy announcement, June 15th, 2015, until the day he took office on January 20th, 2017, were explored in accordance with the Fairclough's approach to CDA: (1) to identify the specific linguistic, discursive, and social features employed in Donald Trump's retweets; (2) to explore how Donald Trump is represented via his retweets; (3) and to examine how Donald Trump's opponents are represented via his retweets. The findings revealed a severe authenticity issue regarding Trump's retweets since numerous Twitter accounts from which he retweeted did not exist on Twitter. Additionally, his representation was mainly *us* vs. *them*. He was attributed with Godlike characteristics while his opponents were poorly portrayed. Moreover, his representation was concentrated on his personal character, his popularity, and his financial success. From the discourse perspective, his discourse was simplistic, populistic, informal, and repetitious filled with powerful words describing nationalistic and economic–oriented ideologies. Generally, the discourse struggled to legitimize Trump as the prime candidate and

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delegitimize his opponents due to the people's discontent with the career politicians. This study indicated that Trump's presence as a celebrity politician was due to the need in society for a novel character to relieve traditional politics while his language simultaneously transformed the existing social order in the realm of American politics

Introduction

Social media usage has surged within the past decade which has resulted in instant connection among people across the world. It has emerged as a platform for the people to be vocal (Gerbaudo, 2018) since they are offered miscellaneous outlets to discuss opinions, ideologies, and emotions. It facilitates creative production and interpretation of content developed by the people's participation (Seargeant & Tagg, 2014) and it decentralizes and democratizes access to discursive power (KhosraviNik, 2017). Accordingly, it is defined as "a space that is reputed to be more authentic than the one dominated by mainstream media" (Gerbaudo, 2018, p. 748). It equips people, media, and politicians to socialize with their audience in their own styles for self-promotion, supporter mobilization, information distribution, and impression management (Graham et al., 2013).

Such capabilities have led to the recognition of the social media as the new communication medium for politicians (Larsson & Kalsnes, 2014). They have been ever-increasingly conscious about their social media and its discourse utilization as *toolkit of political communication* to exploit for their propagandas and political purposes (Graham et al., 2013, p. 692) in terms of "a (potential for) many-to-many dynamic of discursive practice" in which there is no *clear-cut* division between manufacturers and interpreters of discourse unlike "the traditional unidirectional, one-to-many interface of mass media" (KhosraviNik, 2017, p. 582).

Yet, as Chilton (2004) maintains strikingly least attention was paid in conventional political studies to (social media) discourse and its impacts on society and politics. Such ignorance is further shocking when politics is defined to be "reconciling differences through discussion and persuasion [in which] communication is, therefore, central to politics" (Hague et al. 1998, pp. 3-4). In other words, persuasion and bargaining are the two main bases of politics (Miller,

1991). Thus, as Chilton (2004) acknowledges, there is a conspicuous need "to explain how use of language can produce the effects of authority, legitimacy, consensus, and so forth that are recognised as being intrinsic to politics" (p. 4) which is in line with the objectives of the current study.

Donald Trump, as a candidate for the 2016 US presidential election, with minimal staff, advertising, and discipline, could have managed to win the presidential election with resort to such a powerful customizable media, mainly Twitter (Karpf, 2017). He struggled to emancipate himself from the established and mainstream media and termed the opposing media *fake news* as an attempt to discredit them in order to popularize his discourse through his Twitter account. In the interim, his utilization of the social media and his discourse raised many interests as he unceremoniously employed discourses and practices inappropriate to his high official position and exercised the social media like a common man dissimilar to an officially responsible authority (Rachman & Yuniant, 2017; Sánchez-Giménez & Tchubykalo, 2018). As every research comes to existence from a curiosity and as Chilton (2004) asserts that human language with its cultural background "observably serve (though of course not exclusively) the needs of the political" (p. 6), Trump's handpicked tweets of his supporters are the subjects for this study to identify his supporters' perceptions about him alongside his preferred representation of himself and how his retweets serve his political needs.

Literature Review
Discourse Concept

The notion of *discourse* has been a challenging concept to define owing to the profusion of the definitions provided for it due to its significance in social sciences (Jorgensen & Phillips, 2002). That is, some scholars incline to narrowly define discourse as "continuous stretch of language - spoken or written - larger than a sentence" (Crystal, 1992, p. 25) while others, such as Cook (1992), define discourse as communicative language use in line with Gee (2005) who refers to it as "language (oral or written) in use with more socio-politically oriented meaning." (p. 1). In a similar vein, Van Dijk (1977) considers discourse as "information that is obligated for empiric examination" (p. 3). Therefore, discourse definition is more encompassing than just some 'content' and discourse rather, as Fairclough (1989)

asserts, refers to the whole communication process. In this regard, he claims that "I should utilize the term discourse to allude to the entire procedure of social communication of which a content is only a section" (Fairclough, 1989, p. 24)

Political Discourse

Discourse is capable of construction, manipulation, transformation, or even (re)production of reality (Fairclough, 1989, 2013). Such a mentioned capability of discourse is even further noteworthy when it comes to politics as politics in contemporary societies is becoming more and more democratic and the only possible way for politicians to come to power or to remain in power is their profound prolific communication with their people to convince them that they are the most qualified political figures to occupy some political positions (Chilton, 2004).

Political discourse is believed to be employed to shape and control people's thoughts as well as homogenize beliefs and attitudes of people with politicians. Fairclough (2006) declares that the political discourse has the requisite capability to "misrepresent as well as represent realities [and] ...it can also rhetorically obfuscate realities and construe them ideologically to serve unjust power relations" (p. 1). This is performed and functioned through the manufacture of consent whose vehicle is discourse, by which ideologies, beliefs, socio-cultural values, religions, and identities are represented (Fairclough, 1989, 2013). In this respect, Meyerhoff (2006) acknowledges that the styles of politicians' converse can be a resource for the people to understand their intentions and ideologies.

Critical Discourse Analysis in Fairclough's Approach

Critical discourse analysis considers and illuminates the hidden messages that discourse (re)produces (Fairclough, 2001). Fairclough's dialectical-relational approach to CDA (1995) peruses discourse as a social practice in "a social-theoretically informed way" (p. 131) denoting that a dialectical relationship between language and society is perceived. In this sense, they are to reciprocally influence each other, in that, "language is a part of society; linguistic phenomena are social phenomena of a special sort, and social phenomena are (in part) linguistic phenomena" (Fairclough, 1989, p. 23).

Since sheer textual analysis is considered insufficient in analyzing discourse, three levels of meanings are to be taken into consideration (Fairclough, 1992). Fairclough (1989, 2013) proposes a three-dimensional model to analyze every discursive event in terms of, firstly a spoken or written text; secondly a discursive practice embracing both interpretation and production; and thirdly a social practice. These three layers of meaning are investigated to uncover how Trump is represented through discourse, what are his ideologies, to what Donald Trump as a phenomenon responds, and what he may cause to happen in the society.

Previous Related Research

Rahimi et al. (2010) investigated demonstrations of ideologies through discursive practices used in the campaign speeches of the 2008 democratic presidential candidates Hillary Clinton and Barack Obama in relation to race and gender. In this respect, they used Hodge and Kress's (1996) framework and the results indicated that their discursive features were sensitive to their race and gender and these two factors were influential in determining their discursive features.

Amirian et al. (2012) conducted research to identify how Iranians are represented in western movies. They investigated the images of Iranians in Western movies, produced to be allegedly honest, which were considered to be anti-Iranian being referred as the case of Iranium. In their study, Van Dijk's approach (2004) to Critical Discourse Analysis (CDA) was employed as the theoretical framework to unearth the ideology that the movie held and the misrepresentations of Iranians. The findings indicated that a total distortion of the "image of the Iranians' history, culture and ideologies" was done through "the dichotomy of in-group favoritism vs. out-group derogation" (p. 1).

Dastpak and Taghinezhad (2015) tried to uncover the president Obama's overall intended ideology hidden in his public speeches. This study is done through the employment of Fairclough's CDA perspective. It is found that Obama's key ideologies are, namely *pragmatism*, *liberalism*, *inclusiveness*, and "acceptance of religious and ethnic diversity and unity" (p. 26). On the other hand, investigation of the keywords demonstrated that the following words were the most prominently utilized words, *country*, *new*, and *America* (p. 26) while an overwhelming usage of the pronoun we as a manifestation of solidarity was also perceived.

Mohammadi and Javadi (2017) researched on the discursive practices and their interrelation with ideological structures in the presidential acceptance speech of Donald Trump in 2016 through experimentation of Fairclough's CDA framework to uncover language strategies as well as the ideologies and the power that his language conveys. The findings of the study revealed that there are interrelations between discursive practices and ideological structures and Donald Trump used his exclusiveness from politics as an apparatus to blame others and clean himself from any disastrous mistakes done by his predecessors.

Hussein (2016) studied the Egyptian President Abdel Fattah El-Sisi's speech at the opening ceremony of the New Suez Canal on 6th August 2015 to uncover his linguistic features and ideologies by applying Fairclough's three-dimensional model of CDA. The findings claimed that distinctive and linguistic features were utilized in the forms of *figures of speech*, *repetition*, *synonymy*, and *collocation* (p. 85) to project his desired ideologies. Those ideologies were: a) the Egyptian's gratitude towards those who have helped them in reaching to their present status; b) strength and confrontation announcement; as well as c) expressing their self-confidence.

García and de Navarra (2018) were also persuaded to conduct a study on Donald J. Trump, who was in their opinion an "off the spectrum" (p. 47) president with contentious behavior which makes controversial news across international media. Their study was theoretically based on the Fairclough's dialectical relational approach to CDA in the form of his three dimensional model to reach three aims, namely to gain an insight about a) discourse styles of Donald Trump through the Fairclough's three-model of analysis; b) how his representation as a father is through "the family model developed by George Lakoff in terms of metaphors" (p. 47); finally c) how Donald Trump depicts otherness while his attitude towards racism, immigration, and the establishment is also regarded. The findings contributed to the simplicity and informality of Trump's discourse which attracts attention as few politicians act like him. Also, his strictness as a father is approved as he depicts the world full of danger and a place in which family needs to be protected by the father. In conjunction with that, it is also comprehended through its direct accusations of others in many terms, such as immigration and other concepts like that. Such otherness is depicted by his self-approval and other-disapproval statements. The

mentioned sets of research were some of the academic studies conducted in the area of discourse, CDA, and politics. However, in this study Donald Trump not only as a person but as a phenomenon is considered to discursively unearth why he came to power and what changes his raise to power would discursively impose on society.

Research Questions

1. What are the specific linguistic, discursive, and social features employed in Donald Trump's retweets?
2. How is Donald Trump represented via his retweets?
3. How are Donald Trump's opponents represented via his retweets?

Method

Research Design

The research is a qualitative one whose data and materials, 106 (re)tweets in the form of linguistic texts posted from his candidacy announcement on June 16, 2015, until he took the office on January 20, 2017, were collected from the official Twitter account of Donald Trump. Simple random sampling was devised. This type of sampling is a type of probability sampling by which each member of target population has the same chance of inclusion and exclusion, and it is appropriate when the target population is large, which is the case in this study.

For meticulous scrutiny regarding linguistic texts, Fairclough's three-dimensional model is perfectly relevant since it links between discourse and society through which profounder perception of Donald Trump as the president of US and his opponents is revealed alongside the reasons of his gaining power as well as the results that he may have on society. The three dimensions are namely texts, interaction, and social context. Firstly, text properties, which are explained in the theoretical underpinning section, are analyzed in terms of description stage. Secondly, the relationship between producer and interpreter of the message on the one hand, and the relationship between text and interaction on the other hand are analyzed in terms of interaction stage. The explanation stage, coping with social context conditions and structures, explains that interaction with respect to social conditions. Each stage has its own particular criteria to follow to fulfill its aims.

Theoretical Underpinning

Description Stage. In the description phase, textual features are considered in realms of vocabulary and grammar as well as textual structures. Conducting the three-dimensional model of CDA is straightforward since via answering the following overarching questions, the textual features are going to be described:

Vocabulary. What experiential values do words have?

What relational values do words have?

What expressive values do words have?

What metaphors are used?

Grammar. What experiential values do grammatical features have?

What relational values do grammatical features have?

What expressive values do grammatical features have?

Are there important features of expressive modality?

How are (simple) sentences linked together?

Textual structures. What interactional conventions are used?

Are there ways in which one participant controls the turns of others?

What larger-scale structures does the text have?

Interpretation Stage. The second stage known as interpretation focuses on the processes by which producer and interpreter communicate with each other (Fairclough, 1989, 2013). To fully understand a discourse, MR as *background knowledge* relates to formal text features as *cues* to comprehend meanings. Fairclough (1989) raised the following questions to address the aims of this stage through both *interpretation of text* and *interpretation context.*

Interpretation of text. Surface of utterance

Meaning of utterance

Local coherence

Text structure and point

Interpretation of context. What's going on?

Who is involved?

In what relations?

What's the role of language in what is going on?

Explanation. It deals with portraying "a discourse as part of a social

process, as a social practice …determined by social structures" while it has reproductive effects "on those structures, sustaining them or changing them" (Fairclough, 1989, p. 163). Within this stage, social determinants, social effects, and ideologies are considered at three levels, namely the societal level, the institutional level, and the situational level. Such three levels are studied through answering to the following questions (Fairclough, 1989, p. 166):

- What power relations at situational, institutional, and societal levels help shape discourse?

- What elements of MR, which are drawn upon, have an ideological character?

- Does the discourse contribute to sustaining existing power relations or transforming them?

Results and Discussion

Description Stage

Within this stage, the focus is on "what is 'there' in the text" (Fairclough, 1989, p. 110) through answering to the questions already mentioned along with their sub-questions (Fairclough, 1989). As mentioned afore, the questions are to address within three sections of vocabulary, grammar, and textual structures. However, regarding the former two, three values are considered in terms of experiential, relational, and expressive values.

Vocabulary Features. The feature with experiential value appears as "a trace of and a cue to the way in which the text producer's experience of the natural or world is represented" (Fairclough, 1989, p. 112). It refers to content, knowledge, and belief (Fairclough, 2013). Under this value, classifications of schemes are important which, in this study, are categorized into three main schemes, namely *Trump's personal character*, including trustworthiness and reliance, sincerity and honesty, strength, intelligence, vision, Christianity, devotion, confidence, bravery and courage, zeal, practicality, righteousness, toughness, and influence; *Trump's popularity*, comprising courtesy and humanism, awareness and consideration of the people's problems, and speaking the people's words; and lastly *Trump's business affairs*, including business skills, prosperity, leadership, wealth and financial independence, and accomplishments. Obviously, these tweets are

concerned with triumph and its essentials against others, which can be interpreted as any entity that is perceived as enemy by the producers, owing to this perception that the USA is threatened by other countries in various respects among which economy is more palpable because of China's economic advancement. These three main schemes are displayed as the people's main concerning themes about their future president as if these were the lost characteristics of an ideal president that people have been desperately searching among politicians. Nevertheless, they have yet to encounter these qualities embodied in any individual other than Donald Trump. As a non-career politician, he stands apart from the established political class, offering a departure from the disillusionment many have experienced with traditional political figures.

Considering the ideologically contested words, albeit *politicians* and *politics* may not be considered ideological regardless of context, in this context they appear ideological with special meanings of *impracticality*, *talkativeness*, *dishonesty*, *insincerity*, *weakness*, *self-promotion*, and *personal gains* while Trump is represented positively converse. Moreover, 60s and 70s liberals made an ideological analogy which resembles the Democrat's ruling era to the liberals in past with nothing novel and acceptable to offer. *Carter* is also declared to further associate the ideology of the Democrat Party with the crises occurred during his presidency.

Conversely, Trump is compared to *Reagan* whose reign is remembered with the flourish of the economy and the overcome of some of the problems he inherited from Carter although many problems remained, and some others occurred. Therefore, Reagan and Trump, both as the Republican presidents, appeared as the saviours of the US and its people who are closely represented due to their similar backgrounds but different from others, *Hollywood*. Also, there is another name whose numerous usages with certain identity, ideology, and services have led to its ideological connotation. *Teddy Roosevelt* is such a name representing an ideology of toughness, determination, and anti-corruption. In the statement *tough as hell*, Trump is compared to him.

The word *founders* imparts the ideology of sacrifice for the sake of the country owing to their unselfish services. Trump's lack of academic degree in law is linked to the founders' lack of academic degrees to transform this weak point to a

strong one. *Congress*, used in terms of metaphor referring to politicians, is an ideologically contested appellation which ordinarily represents the country's Constitution and supports its people. However, in the text, it is revealed to be incapable of righteously serving the country. Furthermore, God, faith, and Christianity are also used reflecting the ideology of faithfulness and religiousness in divine power. To some scale, such divine power is attributed to Trump by this statement *in God we trust, In Trump we trust*. In other words, they believe that Trump is the only humanly God or Godlike human who has the divine power and capability to lead the nation towards salvation and prosperity the same as God has it.

In the interim, the names of the Twitter accounts also possess significant ideological meanings. *Tory Ireland* is one of the accounts' names who supported Trump which is also ideological. It refers to the view of conservative party of the UK for which "Patriotism is the first, and most deeply rooted, element of the party's character" (Padmanabhan, 2015). Apparently, it is synonymous with what Trump is broaching about *America first*. Knight is another account name which seems to have ideology behind it as it alludes to a person who is awarded with the title of knighthood for the merit and services (Merriam-Webster, n.d.). Therefore, it shows the merits of the account holder in his support and loyalty to Trump the same as real knights are to their sovereign. The last ideologically meaningful account name is *patriot4567*. It projects the ideology of nationalism and thus the support of nationalists for Trump.

As mentioned, firstly the politicians and the political institutions are ideologically challenged to tarnish their devotion and value so that they cannot appear as an obstacle for displaying Trump's trustworthiness. It is a counterattack of credibility from Trump's supporters towards politicians who may disqualify him due to his integrity deficiency. Afterwards, they struggle to grant him validity through comparing him to the prestigious icons that are symbolically recognized for their honest and great services to the USA, such as Reagan, Roosevelt, and founding fathers, namely George Washington and Thomas Jefferson. They even do not stop there and endeavour to picture him above all to assure that no one can challenge him and place him in the safe zone by comparing him to God who is the source of trust and divine power. This indicates Trump and his supporters' perfectionism; in other words, extremism perspective which is also manifested in the high frequency of

exclamation marks which are repeatedly used for 70 times screening that the statements are produced with emphasis, certainty, excitement, and strong emotion (Gunner, n.d.). He and his supporters strive to redefine credibility in American politics in their own ways since in American politics with the current standards and institutions he may not have enough credibility to fill the president office.

Quantitatively considering, there are 124 twitter accounts involved in the text, without consideration of the famously recognized accounts of political or social institutions such as CNN and so on. Out of which 73 really exist on Twitter while 24 are suspended and the other 27 do not exist on Twitter. Also, there are 7 accounts which exist but joined Twitter even after the time Trump retweeted the tweets under their names and there are 4 available accounts which have not tweeted at all.

The next sub-question is about the occurrence of rewording and overwording. Rewording is when an *oppositional* wording happens. That is, "an existing, dominant, and naturalized, wording is being systematically replaced by another one in conscious opposition to it" (Fairclough, 1989, p. 113). Overwording, on the other hand, is "an unusually high degree of wording, often involving many words which are near synonyms" which indicates "a focus of ideological struggle" (Fairclough, 1989, p. 115).

Rewording happens in the case of media since it is commented on with the word hate indicating their insincerity in respect to Trump. The media is expected to stay honest in broadcasting news regardless of its own interests. Yet, they are portrayed as the producers of fake propagandas and false assertions against Trump, who is pictured in the tweets to mention nothing but the truth. Particularly, NBC New York, Politico, and mostly CNN, with the Democrat affiliation are considered as biased, unfair, and fake, in the statements, such as *stop interrupting Trump*, *will CNN be tough as they were with Trump?*, and *story is bogus.*

Likewise, politicians, who are expected to be the saviours of the United States of America, are projected as the ill-mannered and incompetent people with no positive effects for the country and its people. Similarly, albeit Congress and the White House are supposed to be the symbols of the US Constitution and lawfulness, they are represented as unlawfulness and selfish. *True*, *right*, *truthfulness*, and the synonymous words referring to the meaning of truth are reworded as those only assertions which are affirmed by Trump. In other words, Trump is the source of

truth who can distinguish true from false for the people.

Moreover, the US is referred to, with the words, namely *America*, *nation*, *country*, *the United States*, and *American* with tremendous repetitions, as a bankrupt, corrupt, divided, and unjust country while the US still has one of the strongest economy and military forces in the world. Such rewordings occur due to the Trump's supporters' perceptions of his opponents and the circumstances. They are clearly protesting the situation going on during the 2016 US election.

Overwording also occurs in this text. In this regard, *great* and *greatness* as of the country along with their synonymous words are predominantly recurred indicating that the greatness of the country is the most significant concern in their views. The word *fix* also appears frequently illustrating the urgency to fix the current situation which is believed to be only possible with Trump. *Hope* is another word occurring with its synonyms several times as the need of the people. The words of *speech*, *speaking*, *call* and their synonyms are also repeated, which mostly appear with the word *truth*, denoting Trump's truthfulness, or his representativeness to the people. *Lead*, *dominate*, and their synonyms also recurrently appear in the text revealing Trump's lead and domination over his rivals.

The word *want* is also repetitively mentioned, whether explicitly or implicitly, exhibiting their inclination towards Trump over other politicians. Another repeated word is *love* screening the people's love for Trump. The synonymous words including *win*, *victory*, *beat*, and *nail* are utilized as praises for Trump to express Trump's power in winning and defeating rivals. Likewise, the word *go* is drawn on for several times for encouraging and applauding Trump.

Intelligence and *wisdom* along with their synonyms, *brilliant*, *savvy*, *IQ*, *great ideas*, *lots of great sense*, *not brain dead*, *smart*, *most talented*, and *creative*, are employed to highlight and promote Trump's intelligence over his opponents. Moreover, Trump's *business successes* are also shown by overwording about his business skills and prosperity with the synonymous words, namely *prosperous, successful, business tycoon, icon, bigger than life, rich, net worth,* and *master negotiator, negotiating skills*, and *entrepreneur spirit*. *Truth* and *trueness* are also ideologically highlighted by overwording through the words*, right, correct, truth, true, truthfulness*, and *truly* which are repeatedly mentioned.

Furthermore, *the only* is overwhelmingly reoccurred showing the

uniqueness of Trump and his singularity in merits over his opponents. *Courageous, not afraid, bold, tough*, and *man enough* are utilized to expose his bravery in telling the truth and standing on his principles. *Real, actual, really, last*, and *finally* are repeatedly exercised to prove the real possibility of his presidency. The latter two are used to manifest his presidency as the last and final desperate opportunity for the Americans to find prosperity. *The most* as a superlative adjective is used to enhance the supremacy of his attributions over his opponents.

The last sub-question of experiential value concerning with vocabulary is about the ideologically significant meaning relations among words. Such meaning relations are mainly synonymy, hyponymy, and antonymy (Fairclough, 1989). Synonymy obviously refers to words with same or similar meanings. Albeit it is, surely, difficult to find words with absolutely the same meanings, Fairclough (1989) asserts that it is enough if the words are nearly synonymous. Hyponymy refers to the situation where "the meaning of one word is, so to speak, included within the meaning of another word" (Fairclough, 1989, p. 116). On the other hand, antonymy is where the meaning of a word is incompatible with another one.

Concerning with synonymy, within overwording, they were already addressed with the focus on Trump. Yet, the synonymous words regarding Trump's rivals have yet to be considered. *Mess* and *debt* are synonymously utilized referring to the bad situation of the country under Trump's rivals' supervision. They are addressed with the synonymously used words of *scared*, *too afraid*, and *weak*. *Politically correct, total liar* and *dishonest* are also synonymously employed as his rivals' attributions. *Dummies, incompetent*, and *brain-dead* are the other words used to describe his rivals.

Hyponymy is next to address. The first hyponymy scheme to address is about personal and characteristic merits of Donald Trump over his opponents which are mentioned through the following words, including *sincerity, honesty, appeal, motivation, depth, commitment, passion, confidence, sacrifice, stamina, proud, competent, experienced, gentle, awesome*, and *calm*. The word *impact* has hyponymy relations with the words, namely *influence, change,* and *shock*, which are used to demonstrate the immense influence of Trump on America and the world along with the hyponym words *huge*, *staggering*, and *serious*.

Trump is also considered as a *heroin* and *saviour* with the following words,

which are hyponyms of each other, *hero, best, greatest*, and *amazing*. Intensifiers are also used in terms of hyponyms to further signalize Trump's superiority over other politicians. They are namely *so, much, very, too,* and *many*. Likewise, there is a hyponymy about the extreme words with absolute meanings, comprising *ever, never, every, any, full, total, bigger than life, all, closest, excellent* and many others exhibiting Trump's supporters' perfectionism and extremism ideology. In the meantime, there are some words which may not be categorized under one classification, yet they all manifest loud and extremism attitude of the Trump's supporters about his supremacy over his opponents in filling the position of the US presidency. For instance, *yell, scream, very best, really, actually, most, tough as hell, rarely, only, 110%, extra,* and *more* are some of such meaningful words.

Finally, it is time to deal with antonymy which mainly occurs between the words used for describing Donald Trump and the words used for describing his rivals. *Mess, debt, lawlessness*, and *status quo* are exerted for depicting his rivals and the situations under their reigns while Trump is portrayed as a person who brings *success, order*, and *change*. They are *scared, too afraid*, and *weak* whereas Trump is *courageous, tough*, and *bold*. *Politically correct*, *total liar*, and *dishonest* are used to describe Trump's rivals whereas he is *true, correct, right, honest*, and *sincere*. *Dummies, incompetent, brain-dead,* and *clowns* are to refer to his rivals while Trump is addressed as *competent, smart, savvy,* and *Godlike*. *Loser* and *whiner* are the last words to refer to the rivals. Yet, Trump is addressed as *winner*.

Relational value, on the other hand, "is a trace of and a cue to the relationships which are enacted via the text in the discourse" (Fairclough, 1989, p. 112). It alludes to relations and social relationships. Under this value, euphemistic expression is examined. It is defined as "a word which is substituted for a more conventional or familiar one as a way of avoiding negative values" (Fairclough, 1989, p. 117). Within this text, no example of euphemism expression is discerned since the producers are not concerned with negative values of the statements attributed to Trump's rivals. Meanwhile, those which are attributed to Trump hold positive values without euphemism.

Afterwards, markedly formality and informality of the words is considered. Fairclough in his famous book, *language and power*, elucidates that the concept of formality is about "concern from participants for each other's 'face' [and] respect for

status and position" (Fairclough, 1989, p. 118). On this matter, majority of the clauses are identified to be informal and even markedly informal while only 9 of them are discerned with ordinary level of formality since the Twitter discourse is informal and surely different from the established mainstream media's.

Finally, expressive value leads to subjects and social identities as it is "a trace of and a cue to the producer's evaluation (in the widest sense) of the bit of the reality it relates to" (Fairclough, 1989, p. 112). He accentuates "the text producer's evaluations [which] are expressed by drawing on classification schemes, which are ideologically significant" (Fairclough, 2001, p. 99).

Taken expressive values into consideration along with the previously mentioned classification schemes, most of the Trump's supporters judge him with ultimate certainty as the perfect person with ultimate personality character which makes him acceptable for the presidency position. As long as his popularity is concerned, he is definitely defined as the people's choice unlike other politicians. Trump's business affairs, on the other hand, are perfectly represented as the only successful person among politicians with business successes. His supporters portray him with high certainty as the person who is the most qualified, the most popular, strong, trustworthy, and prosperous while other politicians are the least fitted, the least popular, weak, corrupt, and failing.

Fairclough (1989) maintains that another important textual feature is the utilization of metaphoric expressions. He elucidates that "Metaphor is a means of representing one aspect of experience in terms of another" (pp. 119-120). In this discourse, through the two expressions of *nobody owns you* and *I love the fact that you can't be bought*, independence and financial freedom of Trump is intensively represented in terms of purchasing/selling goods and ownership. In another case, Americans' right to vote, represented as their votes are reserved for Trump, is portrayed as the worthiest asset in the statement *most valuable asset an American owns is their votes* alluding to the worthiness and merits of Trump and simultaneously to the necessity for Americans to use their votes rightly.

In the following tweet, *get out of this mess*, the current situation of the country is explained in the form of mess which needs organization, arrangement, and fresh management *America can be great again with Trump in the helm* is another metaphoric expression comparing leadership and management to driving a

boat with steering wheel. It projects the stormy current situation of the US so that if a true leader does not lead the country soon, it may face challenges and consequences. It projects safeness with Trump in the driver's seat and displays the trust they have in Trump.

Comparing Trump to a fighter in *... always respect Fighters...* and *you are a fighter* give a fighter's characteristics to Trump, as a person, whose dream is winning and who does his best for achieving that. In the tweet *in God, we trust and in Donald we trust,* a simile is used between God and Donald Trump in terms of trustworthiness in which Trump is equalled to God. Mountain lion is another metaphor used to describe Donald Trump in *... no more presidential than an alley cat is a mountain lion,* and *the lion does not concern himself with the opinion of sheep* demonstrating his courage, bravery, and prestige whereas his rivals and opponents are compared to sheep for their lack of bravery, knowledge, and wisdom.

It's time to run America like a business is another expression with a simile comparing leading America to leading a business which is believed to be Donald Trump's expertise. This even shows him more qualified than other career politicians for the job, the US presidency. Similarly, his unique background, which is apart from other politicians, is also described as freshness, change, relief, and freedom which are pleasant and necessary in the tweet *Mr Trump you're a breath of fresh air...*

In the tweet *he is not running for his health*, his benefits are manifested by the word *health* indicating that he will even suffer and sacrifice himself let alone gaining any rewards or benefits from his presidency. *He believes in the Red White & Blue* manifests the United States in terms of colours representing the flag of the country, the political parties, and the soul of the country. According to the Fairclough's (1989) statement that "different metaphors imply different ways of dealing with things" (p. 120), such numerous usages of metaphoric expressions are signs of the various ways supporters realize the superiority of Trump over his rivals.

Grammatical Features. Once the vocabulary textual features are analysed, the three previously mentioned values, experiential, relational, and expressive, of the grammatical features are analysed. As Fairclough (2013) asserts, the experiential values of the grammar deal with the relationships among involved participants, their spatially and temporally related situations, the occurring manner, and so on.

The first sub-question under this value is concerned with the processes and participants which are predominant. Majority of the clauses are 'attributions' to attribute positive merits to Trump and negative features to his opponents. Then, 'action' clauses, which refer to where actions occur, are the second common process expressing Trump's accomplishments and achievements along with his opponents' failures. Lastly, just 8 clauses are 'events' as they involve just one participant, and it is the answer to 'what (has) happened?' (Fairclough, 2013). Meanwhile, the predominant participant is surely *Donald Trump* while other participants are also involved, namely *his opponents, Hillary Clinton, God, politicians, Reagan, Teddy Roosevelt, the people, Putin*, and *Obama*.

In the meantime, all recognized clauses have clear agencies, whether explicitly or implicitly, to unambiguously attribute the characteristics to those agents they are referring. Activeness and passiveness of a statement is the next feature to discern. In this regard, just 3 clauses are passive, which are *ur voice will be heard, ... no one is offended* as well as *I love the fact that you can't be bought*, and the remaining clauses are all active showing that the agents are proud of their utterances and the agents as the actual voters are as important as, if not more than, the statements. As to positivity and negativity of the clauses, majority of the clauses are positive and just 27 are negative. Such negativity, however, is diversely used to negate Donald Trump's negative attributes and negate the merits of his opponents.

When it comes to relational values, firstly, the modes of the statements are scrutinized. In this regard, declaratives are the majority while there are 20 imperatives and 8 grammatical questions. The declarative statements are mainly and persuasively supportive of Donald Trump and critical of his opponents. The imperative ones are mainly about praising and encouraging Donald Trump and even others to act in Trump's favour. On the other hand, the grammatical questions are mostly concerned with either some kinds of surprise and wonder about Trump's accomplishments or questioning his opponents' competence.

About the relational modality, as many participants are involved, there is more than one type of relational modality. Some of them feel connected and close to Trump, then they have a friend-like relation with Trump with repetitive usage of *you*, *I*, and *we*. Some of them, however, consider Trump as a saviour and they admire him. Thus, in their reference to Trump, they use *he* instead. Altogether, they

all consider Trump as a revered and devoted person who has sacrificed, and willing to sacrifice himself, for the sake of the American people.

The next significant feature is the expressive modality which is concerned with "the speaker/writer's evaluation of truth" (Fairclough, 1989, p. 127). The expressive value is high in almost all of the clauses with the frequency of 241 clauses out of 244 clauses. Majority of them are in the form of simple present tense, with rare negativity, representing their statements as genuinely true. Afterwards, the second most utilized tense is simple past tense indicating the facts happened in the past while simple future tense usage is also prominent showing future certainty. In the interim, present perfect and present continuous tenses are also used with lower frequencies. Notwithstanding, it should be mentioned that almost all of them are mentioned with high certainty or high expressive modality.

Meanwhile, modals are also used with different purposes. The modal *can't* is used in three times in the forms of negative questions with the following affirmative implications. Firstly, it shows Trump's absolute power in making Americans' dreams come true. Secondly, it indicates the impossibility of any corruption for Trump. Lastly, it is about the enthusiasm of a supporter for watching Trump in a debate.

Can is used to show the ability and capability of Trump about *making America great again.* Also, *could* is used twice in terms of conditional clauses which show Trump's future success. *Must* is once used referring to the certainty of the assertion which is about the lawlessness of the politicians and the White House. *Shouldn't* is also used to allude to the improbability of the occurrence of problematic situations for the people if they elect Trump as the president.

The text has some logical connectors in terms of subordination and coordination albeit the text mostly consists of simple sentences. *That-clauses* are mostly used as attributions and definitions. *If-clauses* are used to talk about conditions and the consequences which are mostly imaginary. *When* is twice used to refer to time or even situation in terms of subordination. Other logical connectors are, namely *as, since,* and *because* utilized in terms of subordination which show reason. The most applied conjunction is *and* which is repeatedly utilized to refer to connection of clauses in terms of addition or continuation of thought in the form of coordination. *Yet*, *but*, and *on the other hand* are also used to show contrast between

clauses in terms of coordination. For the outside and inside reference, overwhelmingly the following pronouns are applied *it, he, they, this, that, their*, along with article *the*.

Regarding the interactional conventions, the discourse is a monologue without any direct interactions or interruptions between the producers, who are firstly the supporters while Trump is the secondary producer since he retweeted them, and the addressees, who are both Trump and the US citizens. Last of all , the larger-scale structures of the text are the next concerns. The analysed text is Donald Trump's supporters' tweets which he retweeted on his Twitter account. They are expected to be in support of Trump and of course against his opponents. Since there are character limitations for tweets, the structures are in short simple and even abbreviated forms.

Interpretation Stage

Once the first stage is done, in order for evaluating social values and social importance of the text, the text should go through the interpretation and the explanation stages since neither background assumption of discourse nor ideological properties of these assumptions that connect discourse to relations of power and social struggle are apparent to the participants in the discourse. Thus, the interpretation and the explanation stages are "two successively applied procedures of unveiling and demystification" (Fairclough, 2013, p.118). Within interpretation stage, the meaning is constructed and produced from the interplay of the formal features from the description stage, which appear as cues, and MR, member resources, which is also known as background knowledge (Fairclough, 2001). Fairclough (1989, 2013) argues that for the interpretation of a discourse, two steps should be taken, namely *interpretation of text* and *interpretation of context* which are acquired through answering to the two sets of questions.

Interpretation of Text. Regarding interpretation of text, the first component is surface of utterances which are mainly simplistic in grammar, right to the point, and clear while they are in contracted and abbreviated forms of the social media writing, for example sometimes *ur* is written instead of *your* or even *you're* and likewise. The vocabulary used is also simple with no euphemism along with slangs indicating the level of formality of the text which is markedly informal.

Considering the meanings of the utterances, although they are direct and explicit, they also have implicit meanings. The struggle is to explicitly attribute positive characteristics to Trump while the negative attributes are implicitly attributed to his opponents and vice versa. Metaphoric expressions noticeably contribute to the meanings along with rewording and overwording on the one hand and synonymy, hyponymy, and antonymy on the other. Considering local coherence, on the other hand, *and* as well as *but* are the main utilized connectors showing continuation of thoughts as well as contrast while *because* and its synonyms are also employed. Text structure, which is already described, and point of the discourse unequivocally represents Trump as the ideal man for whom Americans have long awaited.

Interpretation of Context. The first component is about *content* in the form of *what is going* on in the text. In terms of this question, there are three subsets, namely *activity*, *topic*, and *purpose*. The activity is a Republican political propagandistic discourse on Twitter which is broadcasted by Trump through his supporters' tweets to exhibit his desirable image of himself. The topic of the discourse is about Trump's merits for the US presidency, the opponents' lack of capability for the job, the supporters' acknowledgement about the change and the hope that he has brought about, and approval of his plans and ideologies. The purpose, as the last subset, signifies the reason for articulating such a discourse, which in this case, is for establishing Trump as the legitimate candidate and the future president whose singular ideology and plan is consistent with the people's demand and different from the career politicians'. It introduces him as an honest person who communicates with people without any protocols or without being politically correct.

The next question is about the subjects through the question of *who is involved*. There are three dimensions of subject positions. Primarily, the position derives from activity type. In this respect, Trump is the producer of the retweets, and his supporters are the producers of the tweets while Trump as well as the US citizens are both the addressees. Afterwards, it is about the position from the institutional perspective. Trump, here, is the Republican candidate who tries to persuade people about the righteousness of the Republican ideology and his presidency. Lastly, the position is considered from the situational point of view in which Trump is the

presidential candidate.

The third question is about the relations with which the participants are involved. Trump as a celebrity, who is also a candidate, is in the high position of power with close social distance with people, so they can converse with him through the social media, Twitter. Trump attempts to empathize with the people about their problems, frustrations, and struggles by retweeting their tweets.

The last question to answer is about the connections through the question of *what is the role of language*. In this case, the language is used to show the people's support of the Trump's presidency. It is produced through written channel although it is more like spoken than written because of the informality of the discourse.

Explanation Stage

Fairclough (2013) ascertains the objective of this stage in terms of depicting "a discourse as part of a social process, as a social practice, showing how it is determined by social structures, and what reproductive effects discourses can cumulatively have on those structures, sustaining them or changing them" (p. 135). He (1989) believes that "Both social effects of discourse and social determinants of discourse should be investigated at three levels of social organization: the societal level, the institutional level, and the situational level" (p. 163).

Politicians from both major political parties, Republican and Democrat, had long been exercising their policies which had resulted in the people's dissatisfaction which was clear in their previous electoral participations. In some people's perspective, politicians were identical political position fillers regardless of their political ideologies and functions since they were similar in overlooking the people's demands and desires. Although they could always coin a new compelling slogan and motto, they could not deliver what they were expected to accomplish and resulted in distrust between the people and the politicians. Thus, the people were in quest of a candidate with different background to appear as their true representative. Meanwhile, Trump could fill the gap as he was a *blue-collar billionaire* (Wells et al., 2016) whose fundamental differences with other typical politicians caused him popularity and acceptance.

Besides, politicians were not transparent with their people due to their lack of regular communication. They were considered politically correct, which was not

what the people expected from their representatives. Trump, in the meantime, came with a solution to further associate with the people. He resolved the communication barriers with his social media accounts. He struggled to declare what were almost taboos in order to display his transparency. In so doing, his business and celebrity background became advantageous to assure the people that he was sufficiently dissimilar to ordinary politicians (Franko, 2006).

Moreover, although he was one of the people and not one of the politicians, which led to his close connection to the people, he still possessed power since he was already a celebrity with an echoed voice. He was already a recognized person across the globe with millions of followers on his social media. He helped his supporters, who were ordinary people with less than 2 thousand followers on social media, through his retweets to be vocal on his populous platform. Notwithstanding the foregoing, he was not considered serious until a surge in his support was perceived by the politicians as well as social and political institutions.

In the societal level, the discourse functions against the status quo in the US and terms the Democrat party as well as Trump's Republican opponents explicitly and overtly untrue and likewise. It effectively contests the social orders and the orders of discourse regarding the political and presidential discourses since the (re)tweets addressed the existing conventions in politics in general, international priorities and so on, as untrue, failing, etc. Institutionally, Trump's ideology is represented to be inconsistent with the Republican Party, let alone the Democrat Party. He proclaimed that the US should engage in those international affairs only if the US benefits are secured since, as he said, America is not the world's police (Allen, 2020). He was infrequently concerned with international crises, such as human rights, racial justice, world peace, climate change, etc.

Regarding the situational level, the same transformation and alteration is occurring since the tweets are broadcasted in different situations and occasions against the status quo, namely debates, interviews, and speeches. The discourse is utilized creatively and not normatively due to the novelty of their expressions. In that, his supporters, indirectly Trump, employed creative medium, Twitter, and applied the discourse, which was creative and novel. It contributed to the status quo transformation in power relations to designate nationalism and economic interests as the prime priority in US politics.

Conclusion

Trump, unlike traditional and career politicians, exceptionally inclined to strategically execute Twitter as a platform to both echo his ideology, as celebrity politicians are quoted several times further than ordinary or unknown politicians (Wallsten 2013) and establish connection with his supporters since Twitter is recognized as an acceptable non-elite source and people could manage to accompany Trump in this regard (Wells et al., 2016). Meanwhile, although Twitter has assisted ordinary people to be able to author their opinions in a public forum, it seems problematic since "authority is severely challenged when everyone can be an author" (Kress, 2005, p. 19). Simultaneously, there were serious doubts about the authenticity of the accounts and thus their discourse since there was considerable number of the Twitter accounts, from which Trump retweeted either did not exist on Twitter or were suspended, or even had not published any tweets.

Three main focused schemas were, namely Trump's personal character, his popularity, and his business prosperity with numerous ideologically condensed and contested words exhibiting the superiority of Trump's nationalism ideology. Additionally, a significant quantity of repetitious words was perceived in terms of rewording, overwording, synonymy, hyponymy, and antonymy. They were predominantly binary in assigning perfectionistic excellence to Trump and legitimizing him while they were discrediting and delegitimizing his opponents. His supporters exhibited him as the omniscient person who was always right and correct with Godlike characteristics which was analogous to the classical rightwing discourse in which they were divinely sent (Wodak, 1989, 2015) whereas his rivals, both politicians and media, were represented as fake, failing, erroneous, and corrupt who devilishly attacked him regardless of his innocence (Şakiroğlu, 2020). It is abundantly clear that there was a direct confrontation of Us versus Them. In this case, Donald Trump was the protagonist holding great characteristics while his opponents were the antagonists who were evil and detrimental to their country and people.

The discourse was simplistic, populist, and repetitious in terms of common informal written language with numerous usages of extreme words and structures. The focused words were highlighted in bold accompanied by numerous exclamation marks to enhance their meaning importance (Ott, 2017).

Moreover, this study indicated that Trump's presence as a celebrity politician was due to the lack of competence and trustworthiness of career politicians who have lost the trust of their people. It was also discovered that the difference in American political discourse through Donald Trump resulted from the need in the society for a novel character who was so dissimilar to other known politicians that people were convinced that he was the only man for bringing them a relief from the traditional politics. Concurrently, Trump's language transformed the existing social order in the realm of American politics.

The present study is limited to the supporters' tweets which were retweeted by Donald Trump. The discourse was restricted to linguistic texts and visuals were not considered at all. In the meantime, his opposing media's social network usage is also to be scrutinized while common people's views are also neglected. In this respect, a comprehensive study about Trump's presidency and his social media utilization may be groundbreaking in the realm of critical discourse analysis.

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Navigating the Continuum: Exploring the Value of Pluralism in Translation Uncertainty Research

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Abstract

In recent years, uncertainty has become a central topic in translation studies, reflecting the increasing significance of this issue in various fields, such as politics, economics, and medicine. However, there is a problem with the application of theories of uncertainty in translation studies as often only a single theory is used to provoke an argument without considering how the plurality of theories could provide a more nuanced understanding. This paper argues for the value of synthesizing these seemingly disparate theories of uncertainty into a rich account that can be used as a model for scholarly analyses and research in translation methods and systems. Through an examination of continuum-based models, which are models suggesting that translation is not a strict binary process but rather a continuum of possibilities, this study illustrates how this approach can offer insights that would not be accessible through a single theory. By providing specific examples mainly from the fields of literary and audiovisual translations, this paper demonstrates how a pluralistic approach to the uncertainty paradigm can further strengthen arguments against continuum-based models, and how it can lead to a better understanding of the translation process.
Keywords: continuum, dichotomy, fuzzy logic, plurality, uncertainty

Introduction

The primary aim of this article is to investigate the potential benefits of utilizing a diverse range of theories of uncertainty within the field of translation studies, in order to gain a more comprehensive understanding and address the issue of uncertainty. Although the richness and nuance that one theory of uncertainty captures may be implicit in other theories, each theory foregrounds certain aspects of a problem and can add further nuance to our argument that would otherwise be missing. Building upon Blumczynski and Hassani's (2019) work entitled "Towards a meta-theoretical model for translation: A multidimensional approach," this study examines continuum-based models as an illustration of the problem of uncertainty. The selection of continuum-based models as an illustration is justified by the prevalence of these models in various theories of translation studies (Blumczynski & Hassani, 2019).

The continuum model is a versatile and influential tool employed in translation studies. It aims to enable researchers to transcend the constraints of binary thinking and gain a more nuanced understanding of the intricacies of translation. This model is employed in the examination of actual translations. It indeed serves as a means of positioning translations on a spectrum between opposing extremes, such as literal and free translation. Additionally, it is utilized in connection to abstract theoretical concepts, such as equivalence.

The concept of equivalence is a fundamental aspect of the continuum model and has been widely discussed by various scholars in their definitions of translation. This includes scholars, such as Jakobson (2000), Catford (1965), Nida and Taber (1982), Newmark (1988), Koller (1995), Halverson (1997), among others. However, a recurring theme in these theoretical accounts is the use of binary dichotomies, such as Nida's (2004) distinction between formal and dynamic equivalence , Catford's (1965) distinction between formal correspondence and textual equivalence, Newmark's (1988) distinction between semantic and communicative translation, House's (1997) distinction between overt and covert translation, Toury's (2012) distinction between adequate and acceptable translation, and Venuti's (2008) distinction between foreignizing and domesticating translation.

In addition to its application in the discussions of equivalence, the continuum model has also been employed in other theoretical discussions of

translation. For example, Henitiuk (2008) emphasizes the wide range of linguistic and cultural transfers along a continuum from literal to free. Colina (2008) refers to the concept of the evaluation continuum, noting that the categories under evaluation are not discrete and bounded, but rather form a continuum each. Meylaerts and Gonne (2014, p. 147) argue that translation studies can "contribute to a new and flexible conceptualization of agent roles within a continuum of overlapping practices." Similarly, Toury's translational norms (2012), which refer to the constraints and regularities that govern translation in a given culture, can be seen as existing on a continuum, allowing researchers to consider the range of possibilities that exists within a culture in terms of the translation norms and practices. Even-Zohar's (1979) polysystem theory, which emphasizes the role of translation in shaping literary systems, also relies on the idea of a continuum to understand the relationships between different literary works and translations. This approach allows for a more nuanced understanding of the role of translation in shaping literary systems and how it interacts with other elements within the system. It also highlights the dynamic nature of literary systems and how they are constantly evolving as a result of the introduction of translated works. Furthermore, the use of the continuum in this context paves the way for the recognition of the diversity of translated works, and how they can have varying levels of influence on the literary system, rather than a simplistic binary approach of *good* and *bad* translations.

As the above discussion illustrates, continuum models have been widely used to understand the complexities of translation. However, despite the prevalence of continuum models in translation studies, their limitations have not been fully explored. This lack of critical examination may limit the ability of researchers to fully understand the intricacies of translation and to develop more effective and nuanced approaches to translation studies.

Previous research in translation studies has acknowledged certain limitations of continuum-based models in addressing dichotomous thinking (e.g., Torresi, 2013; Tymoczko, 2010). However, Blumczynski and Hassani's (20119) work is the only study to date that has systematically evaluated these limitations and proposed a solution. Our analysis suggests that their critique of continuum-based models could be enhanced by incorporating a broader range of theories of uncertainty, instead of solely relying on fuzzy logic. To fully grasp the concept of

uncertainty and the need for a pluralistic approach, it is important to provide some background information. We will begin by briefly summarizing Blumczynski and Hassani's (2019) findings for readers who may not be familiar with their work. We will then build on their research by presenting additional evidence from translation practice to support the limitations of continuum-based models. Our argument is that, by utilizing various theories within the uncertainty paradigm, we can further demonstrate the inadequacies of continuum-based models and improve our understanding of the uncertainty problem. Each additional theory of uncertainty incorporated into our argument adds depth and explanatory power to our argument.

They start from a critique of bivalence—the tendency to reason in terms of only two mutually exclusive possibilities—which is widespread in most areas of translation research despite a lack of empirical evidence to support it. Translation practitioners and theorists as early as Saint Jerome, through Friedrich Schleiermacher (2021), to as late as Nida (2004), Catford (1965), Newmark (1988), House (1997), Nord (1997), Venuti (2008), and Pym (2014) have all conceptualized translation more or less in bivalent terms. While discounting bivalent reasoning as a reductive and limiting understanding of translation studies, they ask why it has become such a dominant mode of theorizing translation. They trace it to the centuries-old tradition of classical logic that has been the default mode of thinking for the West for much of its history. In this logic, among others, based on Aristotle's law of non-contradiction and law of excluded middle, categories are mutually exclusive: there is no way that a given translation can be both formal and dynamic simultaneously, or for it to be both foreignized and domesticated for that matter. Nevertheless, as our experience with translating a text, however simple, shows, it is virtually impossible to pin down translation with such neat polarizations.

Not that this bivalent reasoning has not been contested. Pym (1995, p. 5) accuses Schleiermacher of suppressing the "living translator" through his proposed binary pair. Chesterman's (1991) treatment of the issue of definiteness vs. indefiniteness in some languages exposes the naiveté of the definiteness/indefiniteness division. These critics further argue that the problem of polarization has traditionally been addressed with continuum-based models. Instead of viewing translation as a polarized dichotomy, we should view it as a continuum: a given translation can be plotted at any point on a continuum. In a continuum-based

model, then, a given translation can be both formal and dynamic or foreignized and domesticated to some degree. This shifts the focus from the either/or paradigm to a both/and or more/less paradigm.

Continuum-based models, however, would solve the problem of bivalent reasoning if translation were a zero-sum concept, the argument goes (Blumczynski & Hassani, 2019). A concept is called zero-sum where one aspect of a translation necessarily negates the other, and zero-sum thinking occurs when people focus on the scarcity of a contested resource: the more formal a translation is, the less dynamic it is, and vice versa. On a continuum, motion is invariably linear, going from one direction to the other. The farther you get from one pole, the closer you get to the other, which is precisely the case in zero-sum situations. That a translation that is 20% foreignized is necessarily 80% domesticated is methodologically "not at all different to the Aristotelian requirements of non-contradiction and excluded middle" (Blumczynski & Hassani, 2019, p. 338). By conceptualizing translation as a non-zero sum concept and with frequent real-world examples, they show that a given translation can be, say, 25% formal and 35% dynamic (where the sum of the percentages does not necessarily reach 100%) or 65% formal and 70% dynamic (where the sum of the percentages exceeds 100%), all at the same time. This is exactly what continuum-based models will miserably fail to capture.

It is also important to note that, while formal and dynamic equivalence cannot be easily quantified, it is still possible to discuss the degree to which a translation leans towards one or the other. In other words, it is difficult to assign precise percentages or values to formalism and dynamism, yet we can still use these concepts as frameworks to discuss and analyze the choices made by translators. By looking at a translation and evaluating the degree to which it adheres to the source text (formal equivalence) or prioritizes the target audience and context (dynamic equivalence), we can gain a better understanding of the translation strategies used.

Moving Towards a Multidimensional Model

Blumczynski and Hassani (2019) propose a shift away from the traditional one-dimensional view of translation as a continuum, and instead, propose representing it on a coordinate grid where each element of a binary pair can score high or low independently of the other. This approach not only avoids the pitfalls of

zero-sum thinking, but also adds a new dimension to translation theorizing. While two-dimensional models, often invoked through metaphors, such as area, zone, turn, or field fail to fully capture the complexity of translation. Three-dimensional models, as seen in descriptions of translation as thick (Appiah, 1993), rhizome (Deleuze & Guattari, 2004), or in the application of the Actor-Network Theory (Latour, 2005) in translation, provide a more robust framework. However, given the inherent complexity of translation, the authors suggest moving towards a multidimensional model without specifying a particular number of dimensions. Their multidimensional model is "contrastable with numerous oppositions, rather than a single one" (Blumczynski & Hassani, 2019, p.342). This solution, combining non-zero-sum reasoning and fuzzy logic, offers a potential alternative to dichotomous and continuum-based models.

However, before going further, we would like to point out that, this paper will not focus on providing a solution to the problem at hand, but rather on examining the potential issues and limitations of continuum-based models. We aim to explore the potential problems and challenges associated with these models in order to shed light on their limitations and potential areas for improvement.

This study employs a qualitative methodology that aimed to provide further reasons for the implausibility of continuum-based models as a solution to the problem of translational bivalence. The study was based on the analysis of four real-world examples of translation from the film industry (*The Father* and *Lost in Translation*) and literature (*L'Étranger* and *And Quiet Flows the Don*). These examples were selected to represent a wide range of translation types, including intersemiotic, audiovisual, and literary. Additionally, these examples were used to illustrate the inadequacies of continuum-based models of translation and to argue for the need for a plurality of uncertainty theories.

In order to avoid interrupting the theoretical discussion with lengthy contextual explanations, essential and relevant information on the examples was provided in advance. The examples were selected based on the availability of the translated texts and their relevance to the research question. A comparative analysis was conducted to identify the areas where the continuum-based models of translation failed to capture the nuances of translation. The findings were then used to argue for the need for a plurality of uncertainty theories. The researchers also

consulted relevant literature in the field of translation studies to contextualize the findings and to further support the arguments made in the paper.

It is also important to note that this study mainly focuses on Nida's formal-dynamic dichotomy and Venuti's foreignization-domestication dyad as proxies for other similar binary opposites. However, we recognize that in doing so, we may have cut a few corners and glossed over many of the finer points and delicate nuances of these dichotomies. To be sure, we do not claim that Nida's formal-dynamic dichotomy or Venuti's foreignization-domestication dyad are the only ways to think about translation; rather, we used them as a starting point for our discussion. In addition, Venuti's translation strategies, namely foreignization and domestication, are often discussed in contrast to each other, as if they are two opposing and distinct approaches. However, Venuti himself does not see them as a dichotomy or a fixed set of options. Nonetheless, the practical application of his strategies often results in an either/or situation, which can be seen as a dichotomy. While Venuti (2008) does not see these approaches as mutually exclusive, in practice, translators often find themselves having to choose between the two. This can result in a dichotomy of sorts, where the translator must decide whether to prioritize the source text's original form and style or to adapt it to the target audience's cultural and linguistic norms.

Real-world Translation Examples

The Father: *The Father* is a 2020 psychological film, co-written and directed by French playwright Florian Zeller. It is an adaptation for the screen of Zeller's 2012 French play *Le Père*, a highly original example of intersemiotic translation based on Jakobson's (2000) classical taxonomy. It is an emotional and sensitive portrayal of the decline of an ailing octogenarian patriarch named Anthony, who must confront the harsh realities of cognitive incapacity and the looming possibility of involuntary institutionalization. The themes of the play, as translated for the screen, correspond to a narrowing of the elderly protagonist's experiential horizons: loss of memory, spatial disorientation, deterioration of social skills, loss of personal autonomy, and dependency on others. One day, he is encountered by a man in his apartment who claims to be the husband of his daughter Anne. Anne appears to her father as another woman when she returns to the apartment. His son-in-law also appears to him as two different men. He also cannot remember moving into

Anne's apartment. Moreover, despite his pathological obsession with his watch, he finds it difficult to keep track of time: An event in the evening still appears to him as an event in the morning. These memory losses, flashes of time looping over one another, and difficulties recognizing people and things are all typical symptoms of creeping senile dementia.

However, the film is intended to be viewed from the perspective of its protagonist, Anthony. Like all successful films, the experience of the viewer is transformative. In this particular instance, the transformation relates to the themes of memory and reality. The film poses a potent challenge to the stability of our mental states as we are left uncertain about the identity of Anne's true husband, the location in which they reside, and even the true identity of Anne herself. Adding to the complexity of the narrative, the role of Anthony is played by the actor Anthony Hopkins, who shares the same birth date as his fictional counterpart, causing confusion as to which Anthony we should focus on in any given scene. The objects and furniture in the apartment undergo subtle yet significant alterations, causing us to question our own sanity and prompting the desire to rewatch the film to confirm our perceptions. Ultimately, the effect on the viewer is a blurring of memories, similar to the disorientation experienced by Anthony.

The purpose of these scenes in the film is to establish an emotional connection with the character of Anthony. Through the use of various narrative techniques, the audience is able to gain an intimate understanding of Anthony's mental state, effectively experiencing his confusion and bewilderment as if it were their own. This skillful manipulation of emotion has been noted by NYTimes critic, Jeannette Catsoulis (2021), who states that "maintaining any kind of emotional distance is impossible."

Mother: According to Ryan Bloom (2012), the translation of just a few sentences into English has proven to be nearly as contentious as the translation of the opening line of Albert Camus's (1942) novel *L'Étranger*: *Aujourd'hui, maman est morte*. These words are spoken by the novel's protagonist, Meursault, a French settler in colonial Algeria. Meursault is sentenced to death for the murder of an Arab man involved in a conflict with one of Meursault's neighbors. The translation of this seemingly simple French sentence has presented two main challenges. One challenge relates to the translation of the word *maman*, and the other pertains to the

arrangement of the words in the English translation.

To date, four translations of this novel into English have been published. The first was by Stuart Gilbert in 1946, who translated the title as *The Outsider* and the opening line as *Mother died today*. Joseph Laredo and Kate Griffith subsequently undertook a new translation, translating the title as *The Stranger* but retaining Gilbert's translation of the opening line. Finally, in 1988, the American poet Matthew Ward retranslated the novel, keeping the title as *The Stranger* but translating the opening line's reference to *maman* from *mother* back to its original French.

As Bloom (2012), in the website of The New Yorker, presents a compelling argument regarding the importance of the translation of the word *maman* into English.

A large part of how we view and—alongside the novel's court—ultimately judge Meursault lies in our perception of his relationship with his mother. We condemn or set him free based not on the crime he commits but on our assessment of him as a person. Does he love his mother? Or is he cold toward her, uncaring, even? (para, 5)

In Bloom's (2012) view, the use of the term *mother* in the English translation of *The Stranger* does not accurately convey the warmth, attachment, and love that Meursault feels for the woman who gave birth to him in the original novel. Furthermore, he suggests that the use of the word *mommy* in the translation would not be faithful to the original French due to its childish connotations. Instead, Bloom argues that Ward's decision to retain the French word *maman* in the English translation is a clever solution.

The use of the French word *maman* in the novel's opening sentence serves a number of purposes. Firstly, its familiarity in various languages allows for easy comprehension by English readers. Additionally, the retention of the original French word serves to establish a sense of otherness and unfamiliarity in the novel's setting. Finally, the introduction of this foreign word allows for readers to approach it without the preconceived connotations associated with similar words in the English language. This allows for a more objective interpretation of Meursault's relationship with his mother.

However, the correct translation of *maman* does not necessarily guarantee

the accuracy of the entire sentence. The placement of the word *today* at the beginning of the novel holds existential significance, as it reflects both Meursault's worldview and, to a certain extent, Camus's own. Altering the placement of *today* within the sentence would detract from the reader's understanding of Meursault's character.

Throughout the course of the novel, the reader comes to see that Meursault is a character who, first and foremost, lives for the moment. He does not consciously dwell on the past; he does not worry about the future. What matters is today. The single most important factor of his being is right now (Bloom, 2012, para 14).

It is therefore concluded that an accurate translation of the line in question is, "*Today, maman died*."

Cossacks: Farahmand (2014) demonstrates how the mistranslation of a single word in Sholokhov's acclaimed novel *And Quiet Flows the Don* affects its thematic meaning across multiple translations. The novel chronicles the trials and tribulations of Cossacks in the early 20th century. They are primarily East Slavic people who originated in Ukraine and European Russia. In all three Persian translations of this work, none of which are from the original Russian, Cossacks (کازاک‌ها) has been translated as Kazakhs (قزاق‌ها), a Turkic people in Eastern Europe and some parts of Central Asia. Because these two words refer to two different peoples, the translations can cause unnecessary confusion among readers interested in the novel's historical storyline. It seems strange to them that a Turkic and Muslim people from Central Asia should appear in European Russia, adopt Russian names, be Christian, and have a culture so different from the Kazakhs.

Lost in Translation: *Lost in Translation* is a 2003 movie directed by Sophia Coppola. In this movie, a struggling American actor travels to Japan to make a commercial for Suntory whisky and meets a young American woman whose marriage is falling apart. The two began a romantic liaison that grew out of the shared difficulties of assimilating into Japanese culture. In a funny scene in the movie, the Japanese sections were not subtitled in the US version of the film. During the commercial shoot, the Japanese director gives lengthy and passionate instructions several times in Japanese, none of which the lead actor understands. The director's lengthy, impassioned tirades are invariably translated into short and incomplete sentences in English by a flustered interpreter. On one occasion, for

example, the director's one-minute instructions are simply translated as "He wants you to turn around and look at the camera. O.K.?" to which the actor incredulously replies, "Is that all he said?", hence the title *Lost in Translation*. The director's decision to create a language barrier by not subtitling the Japanese dialogue is a brilliant stroke, as it leaves the non-Japanese-speaking viewer in much the same confusion and loss as the American actor. Subtitling would have made it clear what the actors were saying and thus undermined the central theme of communication breakdowns.

Although framing dichotomies as continua helps us view things via a spectrum rather than two static points, the concept of continua seems to be a kind of multi-headed hydra— every time we think we've pinned down a facet of its nature, another one rears its head. One fundamental flaw in a continuum-based translation model lies in the underlying assumption that the two elements at either end of a continuum have a stable and unambiguous meaning, are diametrically opposed to each other, and can be reached by a particular set of tools. Take Nida's (2004, p. 159) formal-dynamic equivalence continuum as an example. Submission to the linguistic and cultural norms of the source text leads to formal equivalence, while adapting the message of the source text in terms of grammar, lexicon, and cultural references to the linguistic norms and cultural expectations of the receiver leads to dynamic equivalence, which in turn aims at what Nida calls *equivalent effect.* For a translation to achieve an equivalent effect or similar response in receptors, it should have as little foreignness and interference from the source text as possible, and it should have a natural form of expression (regardless of what naturalness really means, of course). However, this model fails to take into account cases, such as the translation of Coppola's *Lost in Translation* or Camus's *Mother*, in which foreign elements, such as unsubtitled Japanese words or original French phrases and word order are retained to achieve a similar response or dynamic equivalence. This problem highlights the limitations of a continuum-based translation model and the need for a more nuanced approach.

Contrary to the belief of those who advocate for the use of binarisms, the elements at the ends of a scale do not have fixed and predetermined meanings. As a result, the techniques used to realize them may vary greatly from one translation to another, such that the techniques used to achieve a certain type of translation in one

case may be the opposite of those needed to achieve its polar opposite in another case. For example, Nida's prescription for achieving dynamic equivalence is to minimize the foreignness and interference of the source text and to make as much linguistic adaptation to the norms of the target language as possible. However, in the case of both *Lost in Translation* and *Mother*, the opposite is true: the more foreign and alienating, the more dynamic and natural the translations are, and the more likely they are to elicit a similar response. This complexity of translation should lead us to avoid predetermined definitions and techniques, and instead let provisional categorizations organically materialize from the analysis at hand (Baker, 2010). For example, lip-synching in dubbing that retains the form of the original is often done in the name of dynamic equivalence.

Additionally, if the Japanese segments had been naturally and freely subtitled, or if Camus's opening line had been translated into natural English, the translations would not be considered dynamic and would not elicit a similar response. However, they would also not fit the definition of formal equivalence, which preserves the formal features of the source text. This highlights the need for a mechanism beyond continua to account for the complexities of translation. Queiroz and Atã (2019) use the framework of complexity science to demonstrate how a translation process can be perceived paradoxically from different perspectives. Blumczynski and Hassani (2019) propose a solution of multidimensionality, suggesting that if a translation is not literal, it does not necessarily mean it is free; rather, it could be liberal, figurative, poetic, spiritual, literary and so on.

Continuum-based translation theories have another notable flaw: their inclination to idealize translations by prioritizing correctness. Incorrect or less accurate translations, straying from this idealized image, often go unnoticed. Even when a translation leans towards foreignizing or domesticating, these theories struggle to explain translations that do not fit these categories due to their inaccuracy. An illustrative instance is found in Mansoor Motamedi's (1998, p. 23) review of Abdorrahim Govahi's translation of Robert Humes's *The World's Living Religions* into Persian, where a misinterpretation humorously distorts the meaning due to formatting constraints. This incident challenges the rigid placement of translations on formal-dynamic continua, highlighting the existence of mistranslations and dysfunctional translations in the realm of translation—a critical

aspect overlooked by many continuum theories. This realization points to a need for a more nuanced understanding that accounts for the complexity and diversity of translation.

Overwhelming evidence from Gestalt psychology (Snell-hornby, 1995) reminds us that a small translation mistake can throw off an entire work because the human mind likes to see the big picture. It forges connections between things and considers the ideas as one large, unified whole. More importantly, because continuum-based models are inherently linear, one-dimensional, reductive, and, in the words of Baker (2010, p. 113), have a "streamlining effect," they project an illusion of Newtonian clockwork predictability of translation: under certain conditions, such and such states will follow as in linear systems. However, since translation is a nonlinear and complex system, with various factors such as text type, readership, and payment contributing to its emergence, it is virtually impossible to control all conditions and, consequently, to predict the outcome (Atã & Queiroz, 2016; Longa, 2004; Marias, 2015; Marais & Meylaerts, 2019; Marais & Meylaerts, 2022; Pym, 2014; Tymoczko, 2019). Chaos theory, the science of nonlinear dynamical systems and their behavior in the presence of sensitivity to initial conditions, has much to teach us about translation: in a complex system like translation, even slight changes in initial conditions can grow exponentially and lead to markedly different outcomes.

Closely tied to this limitation is that conceptualizing translations as continua risks imposing explicit order. Quantum theorist David Bohm (2002) introduced this term, along with its counterpart, implicate order, to describe different aspects of reality. Explicate order deals in separateness, while implicate order is holistic and mutually enfolding. In the explicate order, A contains B, but within the implicate order, A and B are mutually contained (Peat, 2002, pp. 62–63). This concept is exemplified by a holograph, where each point in the scene is enfolded over the whole, unlike ordinary photography (Peat, 2002, p. 64). Bohm (2002, p. 91) refers to this as "holomovement," representing movement of everything in relation to everything else, embodying an ongoing process of creation. Holomovement is a multidimensional reality where all things are enfolded and unfolded simultaneously. It is evident in translation or any linguistic act, where an excerpt from a translation mirrors the whole in terms of style, tone, and the translator's approach. The choice of

words or phrases in the translated text aligns with the global objectives, illustrating the implicate order. Maintaining this holistic view in translation is crucial; locally-driven decisions that do not align with global objectives can disrupt the translated text's cohesion, coherence, and style. Translations resemble fractals in chaos theory, forming infinite self-similar patterns across different scales. Each translation iteration involves decisions guided by the original's global objectives and existing translations, resulting in a new iteration of the fractal pattern. This iterative process is ongoing as the translator repeats it. Harding (2019) suggests examining narrative in translation from a complex-theoretical perspective, where a fractal perspective allows analyzing both small and large narratives, recognizing their self-containedness, connectedness, and openness to other narratives.

If the practice of translation itself represents an unbroken whole, and if it also represents what Bohm (1980/2002) calls "universal flux," i.e., a constant state of process and becoming, why should its analysis and metalanguage be any different? There is little doubt that an organization of translation based on a graded continuum lacks the depth and intrigue necessary to do justice to this chaotic and gestalt-like structure of translation.

Perhaps the most troubling aspect of our times is that uncertainty permeates every aspect of our lives. Not only do we now face the kinds of disasters and conflicts that have plagued history, but our day-to-day lives are also shaped by an array of new threats—terrorist attacks, environmental calamities, pandemics, economic upheavals, increasing intolerance, and other evils. Yet one of the greatest sources of uncertainty is not something we can easily identify or measure. The world has never been more interconnected than it is today, but that very fact makes it harder to make sense of what is happening around us. We live in a global village where information flows unimpeded and instantaneously across the planet. The upshot is that we have never had so much information, but we have not necessarily become less uncertain, as our ability to process this deluge remains limited by our ability to understand. In our efforts to make sense of a complex world, we are hampered by the fact that our cognitive abilities have not kept pace with technological advances. In the course of evolution, our brains were developed for an environment where information was scarce and often unreliable; in today's hyper-connected world, they struggle to cope with the sheer volume of data available to us.

We are like fish swimming in a sea of information, unable to process it all. The result is a feeling of overwhelm, confusion, and a growing sense of powerlessness in the face of forces beyond our control.

If we take translation as a reflection of this larger trend, then no single theory of uncertainty—be it fuzzy logic, probability, quantum physics, chaos, or complexity science—seems capable of capturing the full scope of the phenomenon. The truth is that no single theory really does so. Instead, each provides a useful heuristic and parallax view for understanding the human experience of uncertainty in the modern world, but none has achieved the status of a comprehensive theory. However, a pluralistic approach to theorizing in translation that recognizes the limitations of each uncertainty theory while also acknowledging its utility in specific contexts is not so much a form of compromise as a way of thinking critically and creatively about human communication. If we accept that there is no single grand narrative about human communication, then we can resist the temptation to fetishize any particular theory and focus instead on understanding how each contributes to our understanding of the complexities of language use in different contexts. As we saw earlier in this study, a fuzzy-logical approach to the problem of translation continua helped to expose their linear and one-dimensional nature. This was apparently almost all that fuzzy logic had to offer. It did tell us to view translation as a complex network of elements rather than as a series of points on a continuum, but fuzzy logic fails when it comes to giving us a theoretical framework to explain why the sum of values does not necessarily have to reach 100% (30% formal and 40% dynamic, regardless of how these percentages are measured) or why it can exceed 100% (80% formal and 60% dynamic). Then we had to resort to the concept of the zero-sum game, a maxim of game theory. The zero-sum game showed us that in dynamic systems like translation, the whole is greater than the sum of its parts. In search of a theoretical basis for this assertion, we had to turn to other theories of uncertainty, such as complexity, chaos, Gestalt, and quantum mechanics. Only through a plurality of theories and the ability to draw on a wide range of concepts can we begin to understand the dynamics of translation. Unfortunately, the reality of theorizng and dealing with uncertainty problems in translation studies would paint a very different picture.

Pym (2014) outlines six paradigms that define the field of translation

studies today: Equivalence, Purpose, Description, Localization, Cultural Translation, and Uncertainty. On the paradigm of uncertainty, he cites various theories for dealing with uncertainty. The list includes illumination, consensus, hermeneutics, constructivism, game theory, theories of semiosis, and nonlinear logic, which in turn includes complexity theory, fuzzy logic as partial set membership, and fuzzy logic as simultaneous set membership. However, the number of mentions of each of these theories in *Complexity Thinking in Translation Studies: Methodological Considerations* (Marais & Meylaerts, 2019) is revealing. The volume consists of 12 chapters written by 15 scholars from cultural contexts as diverse as the United States, South Africa, Brazil, and Iran. The volume explores nonlinearity, uncertainty, and complexity in translation without much reliance on any theories other than complexity theory. If we go strictly by the numbers, fuzzy logic appears only once, hermeneutics four times, and semiosis 39 times (31 times in a single chapter on intersemiotic translation); the other theories listed above get no mention at all.

Conclusion and Further Thoughts

In this study, we built on the work of Blumczynski and Hassani (2019) and identified several other reasons for the invalidity and implausibility of continuum-based models as theoretical constructs. To that end, we harnessed the power of multiple uncertainty theories as outlined by Pym (2014). We showed how a plurality of theories could be used to make sense of a phenomenon in a way that is more robust than any one theory alone. The question now arises: what is to become of the binary models and, by extension, the continuum-based models that have reigned supreme in translation studies for so long? Should they be banished from the metalanguage of translation studies?

As mentioned earlier, conceptualizing translation in terms of continua has become so entrenched that it is difficult to shake off, and those who have challenged it have failed to dislodge its hold on translation discourse. Part of the reason lies in the fact that translation researchers have been plagued by a persistent *imposter syndrome*, which despite their best efforts to move beyond bivalent reasoning, creeps into their thinking and writing about translation. The centuries-long dominance of classical logic as their default mode of thinking has led to a deep-

seated dependence on dichotomous thinking that has been passed down to generations of researchers. Because conceptualizing translation in terms of continua is so deeply ingrained in our psyche that it feels natural, even obvious and self-evident, we have been unable to recognize that it is, in fact, an artifact of bivalent reasoning. Moreover, despite all the immanent shortcomings of binary and continuum-based models, they are still indispensable cognitive tools that we cannot do without in any serious theoretical discussion of translation studies. They are convenient mental shortcuts with heuristic and pedagogical applications (Blumczynski & Hassani, 2019). We are hardwired to categorize and compartmentalize the world around us, and our minds gravitate toward linear thinking as a coping mechanism against information overload. How can translation be taught without resorting to the time-honored dichotomy of literal vs. free or word-for-word vs. sense-for-sense? The concept of continua comes in really handy in explicating some models of translation. Caroline Mangerel (2019), while critically reflecting on the implications of complexity thinking in relation to knowledge translation and binary oppositions, cannot help but use the word continuum in the title: "Knowledge translation and the continuum of science " (259). In spite of her complexity thinking, which arose largely as a reaction to linear thinking and is almost synonymous with nonlinearity, she still places knowledge translation on the translation continuum of interlingual, intralingual, and intersemiotic.

Even rejecting binary models sometimes necessitates setting up another binary model (binary vs. non-binary). Just as "complexity thinking is not a binary opposite of reductionism but a meta-position that includes and subsumes reductionism" (Marais, 2021, p. 24), non-continuum models, including Blumczynski and Hassani's (2019) multidimensionality thinking, should be treated as meta-theories that enfold continuum-based models within themselves.

The shift from the Ptolemaic to the Copernican model of the universe, which challenged the geocentric model and introduced the heliocentric model, did not necessitate the abandonment of terms such as sunrise and sunset, and we still use units of hours, minutes, and seconds to measure time, despite the fact that it is a fundamentally relative concept. Similarly, the shift from reductionism to a meta-positional or multidimensional approach should not require the discarding of

continuum models as a means of organizing and structuring our thoughts. (Note that due to space constraints, in this study, we have focused primarily on the reasons for the invalidity of continuum models without proposing a solution or an alternative. We do concur with Blumczynski and Hassani's (2019) multidimensional model as an alternative to continuum-based models.)

However, they are tools that must be used with the utmost care and under continuous critical examination of their limitations. Insufficiently aware of these limitations, some translation theorists and practitioners continue to operate within an outdated paradigm that fails to meet the need for theoretical developments and practical solutions demanded by the 21st-century translation scenario. While it is helpful to simplify concepts so that we can teach them to others, this can cause us to miss the underlying complexity and lead us to wrong conclusions. In our pursuit of simplicity, we sometimes strip out richness and fail to do justice to subtle complexities. The world is a complex place, and the best solutions do not necessarily come in neat packages. The best solutions are often counterintuitive and require us to challenge our assumptions. Therefore, the results of any scholarly research based on these models should not be taken at face value. These studies should tacitly or overtly acknowledge that the cognitive, heuristic, and pedagogical applications of these models are just that and not discourage us from addressing those aspects of translation that do not fit into simplistic binary classifications and continuum-based models.

"If our concepts do not fit reality, we should not adapt reality but our concepts and refuse to choose between binary oppositions" (Marais & Meylaerts, 2019, p. 10). "It is only by refusing to look closely and by willfully ignoring this reeling complexity—and by convincing the reader to do the same—that the scholar can go on pretending to refer his or her reductive binary categories and the 'limits' between them to reality" (Robinson, 2000, p. 20).

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Syntactic Complexity in Novice and Expert L2 Academic Writing: The Role of Syntactic Elaboration and Diversity

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Abstract

Syntactic complexity (SC) is an important construct for gauging L2 writing proficiency. Previous studies, including Biber et al. (2016) and Dong et al. (2023), have largely focused on syntactic elaboration and disregarded syntactic diversity. This study investigates how academic writing proficiency is associated with SC, through an evaluation of both the variety and elaboration of sentence structures. To that end, a corpus of the abstract sections of MA theses, PhD dissertations, and empirical research articles in applied linguistics produced by Iranian English medium academic writers was compiled. Drawing on automated text analysis tools (Stanford Core NLP and L2 SC analyzer), we measured syntactic elaboration and diversity of the texts written by three distinct sets of academic authors. The results indicated that phrasal and global measures of syntactic elaboration significantly predicted academic writing proficiency in both novice and expert writers. The results of the second phase of the study indicated that the incorporation of syntactic diversity measure considerably increased the predictive power of the model. The pedagogical implications of the findings for academic writing instruction through consciousness-raising activities for both novice and expert writers are discussed.

Keywords: academic writing, expert and novice writing, syntactic diversity, syntactic elaboration, syntactic complexity

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Introduction

Indices related to the complexity of sentence structures have demonstrated their crucial utility for research purposes in numerous domains connected to language, including the acquisition of language by children, (e.g., Lu, 2009), language impairment (e.g., Leonard et al., 2007), language and aging (e.g., Kemper et al., 2003), and second language acquisition (e.g., Kyle, et al., 2021). More specifically, in second language acquisition contexts, syntactic complexity (SC) has been used to explore and categorize learners' proficiency levels (e.g., Li et al., 2023). The main rationale behind using SC for measuring L2 learners' writing proficiency is that, as L2 learners progress through more advanced levels of language production, their SC increases (Larsen-Freeman, 2009). Although writing skill cannot be solely measured by SC (Lu, 2011), it is recognized as one of the most significant factors, since it is one of the most prominent ones, and measures like embedding and subordination encourage the generation of complex ideas (Beers & Nagy, 2009).

Over the past decades, SC in academic writing has featured prominently in a number of important research strands. Most of the studies in this field have mainly concentrated on the progress of writing skills (e.g., Crossley & McNamara, 2010; Parkinson & Musgrave, 2014), disciplinary variations (e.g., Staples et al., 2016), L1 backgrounds (e.g., Ruan, 2018), and genre variations (e.g., Staples & Reppen, 2016). Although these studies have furthered our understanding of the role of SC in academic writing for measuring performance and proficiency, most measurement practices in academic writing research have solely focused on syntactic elaboration. However, this approach has overlooked the importance of syntactic diversity, which is an equally important dimension of SC (See Bulté & Housen, 2012). Accordingly, without syntactic diversity, we would have a "hantchy SC picture of L2 writing" (Bi & Jiang, 2020, p. 3). While some recent studies (e.g., Casal et al., 2021) have incorporated more measures into their investigations of the construct of SC, the potential influence of other relevant domains such as syntactic diversity in determining SC and SC development is still a desideratum (De Clercq & Housen, 2017). This is probably because the construct is poorly defined and used with different meanings (in a way that its multidimensionality is not fully recognized or reflected terminologically).

Despite the growing interest in SC in academic writing research, very few studies (e.g., Ansarifar, et al., 2018; Karami & Salahshoor, 2014; Mohamadi Zenouzagh, 2020; Valizadeh & Soltanpour, 2021) have investigated the relationship between SC and writing proficiency in Iran. However, these studies have primarily focused on measuring SC using a few selected features and have not considered the multidimensionality of SC, particularly syntactic diversity. Hence, the goal of this study is to address this issue by exploring the relationship between SC, encompassing both elaboration and variety, and academic writing proficiency among Iranian English medium academic writers. Through this effort, we aim to promote knowledge and comprehension of SC in the context of Iranian EFL writers and highlight the importance of considering syntactic diversity in measuring writing proficiency.

Literature Review

Measures of SC in Previous Literature

Different research studies have attempted to quantify the construct of SC by means of reliable metrics which could capture development, performance, and proficiency in various academic contexts. Kyle and Crossley (2018), for example, argued that, traditionally, SC has been characterized using broad measurements that gauge complexity either at the clause or sentence level (e.g., mean length of the clause/sentence). Bulté and Housen (2014) claimed that most research studies have employed measures of complexity with the underlying belief that language becomes more complex as it includes a larger number of linguistic elements. Generally, the measures commonly used for measuring SC are classified into five main groups, which are outlined in Table 1.

Table 1

Lu's (2011) Classification of SC Measures

Measure
Type 1: Length of production
Mean length of clause (MLC)
Mean length of sentence (MLS)
Mean length of T-unit (MLTU)
Type 2: Sentence complexity

Clauses per sentence (C/S)

Type 3: Subordination

Clauses per T-unit (C/T)

Complex T-units per T-unit (CT/T)

Dependent clauses per clause (DC/C)

Dependent clauses per T-unit (DC/T)

Type 4: Coordination

Coordinate clauses per clause (CP/C)

Coordinate clauses per T-unit (CP/T)

T-units per sentence (T/S)

Type 5: Particular structures

Complex nominals per clause (CN/C)

Complex nominals per T-unit (CN/T)

Verb phrases per T-unit (VP/T)"

Note. Adapted from "A corpus-based evaluation of SC measures as indices of college-level ESL writers' language development" by X. Lu, 2011, *TESOL Quarterly*, *45*(1), 42.

A large proportion of studies in previous literature on SC used one or two of the measures listed in Table 1 targeting complexity at clausal or sentential level and, to a lesser extent, at phrasal level. In the words of De Clercq and Housen (2017), this line of research is called a "reductionist approach" to investigating L2 complexity, as it provides singular focus on SC. While some recent studies have attempted to address these criticisms (e.g., Kyle & Crossly, 2018; Naserpour et al., 2020; Yoon & Polio, 2017), little is known about the incorporation of syntactic diversity measures. Present research is, accordingly, concerned with the examination of SC in advanced academic writing through the lenses of both syntactic elaboration and syntactic diversity. If SC is defined as the degree of variety, sophistication, and elaboration of grammatical forms used in production (Norris & Ortega, 2009), the study of syntactic elaboration alone is, by no means, an accurate indication of syntactic growth and development. It is now widely recognized that syntactic elaboration on its own should not automatically be taken as a sign of increased proficiency. Thus, syntactic diversity measures (the topic we deal with below) "may further refine the descriptive toolset used in complexity research by considering the variation of syntactic structures in relation to proficiency" (De Clercq & Housen 2017, p. 4).

Syntactic Diversity Measures

Since previous studies largely focused on syntactic elaboration and overlooked syntactic diversity, it remains to be seen which syntactic diversity metrics can be reliably used across proficiency levels in different research contexts. L2 writing researchers have employed a few syntactic diversity metrics such as syntactic diversity index (SDI) (Bi & Jiang, 2020), verb phrase construction (Verspoor et al., 2012), and so forth in previous literature. However, these measures need to be used with caution as they may not always be a reliable index of diversity in different research contexts. For example, Bi and Jiang (2020) noted that SDI can only capture syntactic diversity of particular constructions, such as clause types and ignore other important language features.

One of the most recent measures of syntactic diversity proposed by Bi and Jiang (2020) is concerned with dependency relations. The term "dependency grammar" is not used to describe a specific theory of grammar; rather, it is a way of describing grammatical relations between two grammatical units. In contrast to constituency parsing, which concerns itself with groups of words, dependency parsing is concerned with the binary relation, that is, "a grammatical relation that holds between a governor and a dependent" (De Marneffe & Manning, 2008, p. 2). Dependency parsing is based on the assumption that words have grammatical functions in relation to other words in a sentence (De Marneffe & Nivre, 2019). Dependency parsing is sometimes preferable to constituency parsing because it makes "some syntactic analyses (e.g., identifying arguments of a verbs) much more convenient than constituency parsed representations" (Kyle, 2016, p. 42). As Chen and Manning (2014) put it, "The accuracy of POS tags is reported to be around 97% with training data" (p. 745). Figure 2 shows how dependency parsing works on a sample taken from the corpus of the present study.

Dependency parsed structures are used for analyzing grammatical relations among words or phrases with respect to their syntactic functions (e.g., direct object). The relationships are analyzed in terms of head words and the words that modify those heads. Unlike constituency parsing which is based on the hierarchical investigation of phrase structures, dependency parsing is concerned with governors and dependents, which makes it much more convenient for such analyses as identifying the arguments of verbs (Kyle, 2016). Figure 1 displays dependency

parsing of a sentence borrowed from the texts of the present research.

Figure 1

Visual Depiction of Dependency Relations
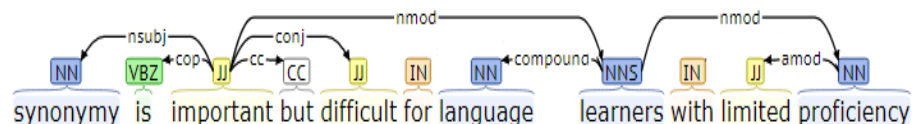
SC and Academic Writing Proficiency

One of the important functions of the construct of SC and its proposed measures in the previous studies within the genre of academic writing was characterizing development and discriminating proficiency differences. A considerable body of investigations has centered on how SC is connected to the quality of writing as operationalized by the scores assigned by human raters (e.g., Casal & Lee, 2019). Nevertheless, the challenge with this line of research is that evaluating the texts by means of manual analysis is a time-consuming method for comparing samples within an existing corpus, particularly when dealing with large corpora, and demands a considerably high level of proficiency on the part of coders. Another method is to contrast the written material created by novice and expert writers. Novice texts refer to "unpublished pieces of writing that have been written in educational or training settings" (Scott & Tribble, 2006, p. 133), while expert texts refer to "pieces of writing that has been published" (Römer & Arbor, 2009, p. 148). Thus, it is unnecessary to manually scrutinize the texts to assess the writers' skill levels.

Some prior research studies have centered on examining sentence complexity in the writing of novice and/or expert authors. Ansarifar et al. (2018), for example, examined phrasal complexity in academic writing. A dataset was built that included the abstract sections of Master's theses, PhD dissertations, and empirical research articles (RAs) in the field of applied linguistics. Their contention was that the student writers in both MA and PhD groups were considered to possess equivalent levels of proficiency since they had passed the same entrance examination and received education based on the same official curriculum. However, they concluded that PhD level students are more experienced in academic

writing because (1) they are chosen based on a strict selection procedure which consists of a nationwide assessment test for admission and an appraisal of their research experience and (2) they complete four extra years of intensive courses compared to MA students. Parkinson and Musgrave (2014) investigated the complexity of phrases in texts written by students of English for academic purposes, in a manner that is comparable to the present study. They compiled a corpus of texts created by students who were preparing for graduate studies (lower-proficiency group) and those who had already enrolled in graduate programs (higher-proficiency group). The findings confirmed the writing development phases suggested by Biber et al. (2011), according to which less proficient writers tend to rely heavily on features like attributive adjectives that are typical of early writing stages. In addition, the higher-proficiency group used modifying features at a frequency that was similar to that found in published academic writing.

While there are some studies conducted in the Iranian context with the aim of analyzing how writing skill is associated with the complexity of sentence structures (e.g., Azadnia et al., 2019; Esfandiari & Ahmadi, 2021; Shadloo et al., 2017; Yazdani, 2018), the investigation of syntactic diversity is still an under-researched area. Azadnia et al. (2019), for example, conducted a study that examined the resemblances and variations between written works generated by college-level English students and those created by individuals who are native speakers of English. They discovered that two out of the four metrics, i.e., the mean number of modifiers and sentence syntax similarity, were identified as distinguishing factors between texts written in a person's first language (L1) and those written in their second language (L2). However, "left embeddedness and minimal edit distance" (p. 235) were found to be similar in both sets of texts. Moreover, Shadloo et al. (2017) examined the predictive power of SC measures in the argumentative writings of the learners from different proficiency levels. The findings indicate that phrasal features cannot be used as reliable measures for predicting SC development in the genre of argumentative essays. As a result, although there is an increasing amount of literature concerning SC in writing, incorporating studies from Iran underscores the significance of examining this topic within specific language contexts.

The current state of research on SC in L2 writing proficiency among

Iranian learners highlights the need for further investigation into the role of both comprehensive measures of SC and syntactic diversity, which has yet to be explored in this specific context. Esfandiari and Ahmadi (2021), for example, conducted a corpus-based study to explore the correlation between metrics of sentence complexity and academic writing proficiency among professional and student writers. Their results showed that phrasal measures of SC were significantly associated with writing proficiency, particularly for the student group. In another study, Yazdani (2018) investigated the SC of Iranian learners' written and spoken English. The study revealed that the learners' written texts exhibited higher levels of SC than their spoken language. Building on previous research, our study aims to investigate the contributions of both syntactic diversity and syntactic elaboration to L2 writing proficiency among Iranian learners.

In order to conduct a more multidimensional investigation of SC in academic writing, the present study intended to examine SC in academic register by focusing on two important dimensions of the construct simultaneously (i.e., syntactic elaboration and syntactic diversity). Accordingly, we specifically focused on two academic contexts of student-written and professional prose to represent novice and expert academic writing. We, therefore, sought to answer the following two research questions.

1. Do syntactic elaboration measures predict the writing proficiency of expert and novice academic writers?
2. Does the incorporation of a diversity measure enhance the predictive power of SC measures in determining the writing abilities of novice and expert academic writers?

Method

Construction of the Corpus

In order to conduct quantitative analyses in the present study, we compiled two corpora of expert academic writing and novice academic writing. The former consisted of the abstract sections of RAs in applied linguistics published in Iranian journals (Table 2). The latter encompassed abstract sections extracted at random from theses and dissertations available in databases of the most prominent state-run universities in Iran that offer Master and PhD degrees in applied linguistics. All the

texts were published between 2019 and 2021. We chose recently-published texts because they reflect current trends in academic language use. To eliminate extraneous variables that are not related to the concept being studied, such as rhetorical organization of the texts, we only chose empirical research studies and discarded other types.

Table 2

Overview of Iranian Journals Included in the Corpus

Journal	Years of Publication
Iranian Journal of Applied Language Studies	2009-ongiong
Journal of Teaching Language Skills	2009-ongoing
Journal of English Language Teaching and Learning	2010-ongoing
Journal of Language and Translation	2010-ongoing
Journal of Research in Applied Linguistics	2010-ongoing
Issues in Language Teaching	2012-ongoing
Applied Research on English Language	2012-ongoing
Iranian Journal of Language Teaching Research	2013-ongoing
Iranian Journal of English for Academic Purposes	2015-ongoing

The rationale behind selecting abstracts was twofold: primarily, their length is manageable, thereby allowing for a more extensive examination of a greater quantity of texts for cross comparisons than other parts (e.g., Introduction, Methods, Results, and Discussion). Second, they are the initial sections that editors and journal gatekeepers face, and they may decide whether or not to keep reading the rest of the manuscripts based on the abstracts. Thus, RA abstracts, as a major part-genre, play an important role in academic writing as they "foreground important claims, minimize methodology and background statements, and pack information into visuals" (Hyland, 2000, p. 86). The selection of texts followed a stratified random sampling approach, which involved dividing the texts into groups based on different attributes of the texts.

Table 3

Details Providing a Description of the Three Datasets

Datasets	Quantity of texts	Average length of abstracts	Total number of words
MA	240	238.84	57321
PhD	144	398.94	57448
EW	327	175.57	57412

SC Metrics

To measure SC of the written materials generated by expert and novice academic writers in the current study, we employed the indices introduced by Lu (2011), who categorized them based on the functions they served (See Table 1). To choose the measures of SC, we set the criteria of multidimensionality and distinctness (Norris & Ortega, 2009). In essence, each metric was required to encompass a specific aspect of SC without duplicating or overlapping with others. Thus, considering Lu's (2011) categorization of SC indices which included five different kinds of complexity metrics, we selected one measurement index from the second, third and fifth categories, and two indices from the first category. We chose two measures from the first category because, as Norris and Ortega (2009) noted, despite their superficial similarity, MLC does not capture complexity at the clausal level just the same as MLTU; rather, MLC gauges the complexity of phrases "as it can only increase through the addition of pre- or post-modification within a phrase or through nominalization" (p. 238).

Automated Text Analysis Tools

SC analyses were carried out by means of Syntactic Complexity Analyzer (SCA), which is an accessible free of charge web-based program, designed to automate 14 SC measures (See Lu, 2010). The reason why we employed SCA was that the tool allows for multidimensional investigation of SC (each measure is said to tap into the complexification of one particular dimension) and batch processing. In contrast, some computational tools, such as Biber Tagger, are not freely available. Additionally, SCA has a high reliability index which is between 0.83 and 1.00 in terms of its agreement with human annotators (Lu & Ai, 2015). With regard to text segmentation, SCA draws on Stanford parser as the first stage, which is followed by tokenization.

Following Bi and Jiang (2020), in order to calculate syntactic diversity of the texts, the count of grammatical relations in the text (tokens) and the total types of grammatical relations (types) were considered. Since TTR is sensitive to text length (Crossley & McNamara, 2010), we corrected the formula in this study in order to avoid this problem. To this end, we drew on a new measure called MSTTR-50 (mean 50-segmental TTR of dependency relations) (See Bi & Jiang, 2020), where each text was divided into different parts.

$$\text{MSTTR-50} = \frac{1}{n} \sum_{i=1}^{n} \text{TTRi}$$

The reason why 50 was chosen was that "there were approximately 50 dependency relation types in English according to the Stanford typed dependencies manual" (p. 4). As a result, the value of syntactic diversity was assessed through the aforementioned "equation where n equals the number of segments with 50 dependency relations" (p. 4). It is worth noting that the texts were automatically annotated through Stanford Core NLP Version 3.9.2., a useful tool for natural language processing in Java and Python environments. According to Miestamo et al. (2021), dependency relations are directed links between pairs of words in a sentence, where the link represents a syntactic association between the head and modifier. An example of a dependency relation would be the relation between the word "book" and its modifier "the" in the sentence "The book is on the table." In this case, "the" is a dependent of "book" and the dependency relation between them would be labeled as a determiner-noun relation.

Statistical Analyses

To analyze the relationship between SC of the texts and academic writing proficiency, we used ordinal logistic regression (OLR) by employing five measures of SC as independent variables to predict the academic writing proficiency (dependent variable). This was operationalized on academic writing texts written by MA and PhD students, and on published texts of expert writers. OLR is a type of regression analysis used to predict the ordinal level data such as proficiency levels where the predictor variable can be either continuous or categorical (Perry, 2020).

There are different ways for performing ordinal logistic regression using different statistical packages. Probably the most convenient statistical package for

performing OLR is SPSS, where the analysis can be carried out through three different routes (i.e., Ordinal Regression, Multinominal Logistic Regression, and Generalized Linear Model). The major problem with the first route is that there is not a clear consensus in the literature about how to interpret the information such as pseudo-R square (Pituch & Stevens, 2015). In addition, it does not produce information on the Odd Ratio (OR), which is the probability of a case falling at the next higher level. The second route is through MLR, which is rarely recommended for ordered data. The third route is through GLM, which provides us with more detailed, precise depiction of the associations between the independent variables and the dependent variable (Zheng & Agresti, 2000) (i.e., academic writers' proficiency levels in the present study). SPSS and other statistical software programs utilize a model known as proportional odds (PO). In sum, GLM offers "the advantage of using the original scale, being numerically simple to interpret regardless of the choice of probability distribution for the GLM, and it is thus comparable in numerical value across GLMs with deferent links and choices of probability distribution" (Zheng & Agresti, 2000, p. 1780). Accordingly, we employed GLM to find the relationship between the predictor variables and outcome variables in the present study.

Results

Research Question 1

Table 4 summarizes the descriptive statistics of five SC measures used in the current study. Expert, PhD and MA texts had the mean length of 30.09, 28.95, and 26.45 words per sentence, 28.74, 26.71, and 22.14 words per T-unit, and 18.78, 15.81, and 14.02 words per clause, respectively. In addition, there were 1.81, 1.60, and 1.65 clauses per sentence, 0.59, 0.46, and 0.51 dependent clauses per T-unit, and 4.18, 3.51, and 2.73 complex nominals per T-unit in expert, PhD, and MA texts, respectively.

Table 4

Descriptive Statistics of Complexity Measures Across Proficiency Levels

Measure	Group	Number of texts	Mean	Std. Deviation
Mean length of T-unit (MLTU)	EW	240	28.74	4.38
	PhD	144	26.71	4.23
	MA	327	22.14	5.65
Mean length of clause (MLC)	EW	240	18.78	4.39
	PhD	144	15.81	5.12
	MA	327	14.02	3.78
Clauses per sentences (C/S)	EW	240	1.81	0.34
	PhD	144	1.60	0.23
	MA	327	1.65	0.26
Dependent clauses per T-unit (DC/T)	EW	240	0.59	0.37
	PhD	144	0.56	0.31
	MA	327	0.51	0.28
Complex nominals per T-unit (CN/T)	EW	240	4.18	1.13
	PhD	144	3.51	0.99
	MA	327	2.73	1.12

Preliminary analyses were conducted to confirm that there were no violations of the assumptions. The variables and the values were exported to SPSS (Version 25) for statistical analyses. Table 5 displays the findings, which indicate that the Likelihood Ratio Chi-Square test revealed a significant improvement in fit of the full model compared to the null model (which had no predictors), with a $\chi^2(5)$ value of 44.112 and $p < 0.003$. This indicates that using the predictors in the present study to predict the outcome variable yields significantly more precise predictions than a frequency-based prediction that does not consider predictor variables.

Table 5

Omnibus Test of SC Measures

Likelihood Ratio Chi-Square	df	Sig.
44.11	5.00	0.00

Table 6 shows that, out of the five measures of SC analyzed, three of them (MLTU, MLC, CN/T) had a statistically significant impact on the model. The EXP(B) values demonstrated that MLC had the strongest influence on academic writing proficiency levels, with an odds ratio of 12.13. This indicates that, for every one-unit increase in MLC, the chances of being in a higher category of writing proficiency increase by a factor of 12.13. The second most influential factor was CN/T, with an EXP(B) value of 3.41, followed by MLTU with an EXP(B) value of 2.37.

Table 6

Tests of Model Effects and Parameter Estimates of Phrasal Complexity Measures

Predictor variables			Type III		
	B	Exp(B)	Wald Chi-Square	df	Sig.
MLC	3.23	12.13	13.98	1	0.00
CN/T	1.12	3.41	6.04	1	0.00
MLTU	0.91	2.37	3.18	1	0.01

Drawing upon the obtained data from Table 6, we can conclude that the syntactic elaboration measures employed in the present research, particularly MLC, CN/T, and MLTU, can predict the writing proficiency of expert and novice academic writers to a significant extent. The exact extent of their predictive power varies for each group, but MLC consistently emerges as the strongest predictor for all groups.

Research Question 2

For the second research question, five syntactic elaboration and one syntactic diversity measures were entered into the combined model including MLTU, MLC, CN/T, DC/T, C/S, and MSTTR-50. Table 7 shows that our combined

model was a remarkable improvement in fit over syntactic elaboration model (no diversity measures included) [$\chi^2(5) = 53.214$, $p < 0.001$]. The dependent variable, therefore, in terms of the measures of syntactic elaboration and diversity is more accurate than syntactic elaboration alone. The strongest predictor variable in the combined model was MSTTR-50 with an EXP(B) value of 13.98, which implies that, for every additional point scored on the measure of syntactic diversity, the likelihood of being in a higher proficiency level of writing increases by a factor of 13.98.

Table 7

Omnibus Test of the Combined Model

Likelihood Ratio Chi-Square	df	Sig.
53.21	6.00	0.00

The incorporation of a measure of syntactic diversity (i.e., MSTTR-50) significantly improved the predictive power of the model that included both syntactic elaboration and diversity measures in predicting the writing proficiency of expert and novice academic writers. As shown in Table 7, the Likelihood Ratio Chi-Square test value of 53.214 (df = 6.00, $p < 0.001$) confirms the significant impact of the inclusion of a measure of syntactic diversity (MSTTR-50) on the predictive power of the combined model. MSTTR-50 emerged as the strongest predictor in the combined model, suggesting that syntactic variety is a crucial element to consider in addition to syntactic elaboration measures when predicting writing proficiency across all three groups (MA students, PhD students, and expert writers).

Discussion

We set out to explore Syntactic Complexity (SC) in academic writing by analyzing the texts produced by expert and novice writers. In this part, we present and discuss the findings and compare them with those of previous research.

In response to our first research question, we found that three measures of SC, namely MLTU, MLC, and CN/T, were statistically significant predictors of academic writing proficiency. According to Norris and Ortega (2009), MLTU is a measure of global SC, while MLC measures complexity at the phrasal level. However, global measures like MLTU do not provide information about the specific

modifications that contribute to the complexity of the structures (Kreyer & Schaub, 2018). Therefore, global measures are sometimes referred to as "omnibus measures"(Biber et al., 2020) since they amalgamate multiple structural units into a single measure.

Regarding the two measures (clauses per sentences and dependent clauses per T-unit), which did not make a significant contribution to the model, there are two potential reasons. First, it is possible that they were not as strongly correlated with writing expertise as the other three measures. Second, they might have been highly correlated with other measures, leading to multicollinearity. We checked multicollinearity and found that it was not the reason why two of the measures did not make a significant contribution to the model. Instead, these measures were not strongly correlated with writing expertise compared to the other measures that did make a significant contribution.

However, the present study identified two length-based measures of SC that significantly predicted academic writing proficiency. This finding supports the conventional belief that longer structural units lead to more syntactically complex structures (Ortega, 2003). Nonetheless, measures solely based on length may not offer insights into the particular modifications made within the structures, making it difficult to interpret the scores. (Kyle & Crossly, 2018). Yet they represent the overall dimension of complexity and can measure long-term changes that other measures may not capture (Norris & Ortega, 2009).

The results obtained from this study, which introduces MLTU as a significant predictor of academic writing proficiency, are consistent with the findings of some previous research, such as Crossley and McNamara's (2014) work, but are in contrast to those of other studies, such as Youn's (2014). On the whole, the previous literature implies that texts generated by more skilled L2 writers typically exhibit longer T-units (Kyle & Crossly, 2018). However, differences in participant proficiency levels, academic genres, and other methodological issues may account for the mixed results across studies. For instance, Youn's (2014) study involved undergraduate academic writers with different L1 backgrounds (e.g., Japanese, Korean, and Chinse), whereas the present study focused on graduate and expert academic writers who shared the same L1 (Farsi).

The finding that both global and specific measures of SC were able to

differentiate between the proficiency levels of academic writers suggests that different stages of writing development may require different measures for assessing SC. This idea is consistent with the dynamic systems theory (DST) (Larsen-Freeman, 2006) approach to learning, which posits that language development is not a discrete, stage-like process, but rather a dynamic, adaptive system where particular structures may be progressive or regressive at different times. Thus, given the ever-changing nature of learners' syntactic abilities at different acquisition stages, language learners may use different syntactic devices (such as complexity through coordination, subordination, phrasal elaboration, etc.) to complexify their texts. As Bi and Jiang (2020) noted, "results of previous studies targeting advanced college-level EFL learners may not be applicable to less proficient EFL learners" (p. 2).

The results of this investigation demonstrated that phrasal indices of SC were able to predict writing proficiency in both novice and professional academic writers. This part of results is consistent with the assertion made by Biber et al. (2011) that skilled academic writers tend to incorporate a larger number of noun phrase modifiers into their writing. However, this improvement in phrasal measures did not come at the expense of global measures (MLTU), indicating that there is a trade-off between phrasal and global metrics. Biber et al. also suggested that complex noun phrases are more frequent in scholarly writing, while clausal structures are more common in conversations. Similarly, Staples et al. (2016) argued that phrasal constructions continue to evolve throughout the university years even for native English speakers. These results indicate that the complexity features used to assess advanced academic writing need to be different from those used to assess other registers that are typically developed without formal instruction (e.g., spoken register).

The finding that subordination-based measures of SC did not distinguish academic writers in terms of writing proficiency does not necessarily imply that advanced academic writing is not complex in terms of these linguistic features. Instead, it suggests that academic writers do not use these features with greater or lesser frequency (Casal & Lee, 2019).

The present study's findings regarding phrasal features are consistent with earlier research on L2 writing development. For example, Crossley and McNamara (2014) found that, over a semester, L2 learners produced texts aligned with the

features of academic writing, including greater use of nouns and phrasal complexity. Similarly, Staples et al. (2016) argued that phrasal features become more prevalent as academic level increases, while clausal features are more common in lower-level texts. According to Staples and Reppen (2016), phrasal features represent an important component of scholarly writing associated with higher proficiency in both L1 and L2 writing.

An interesting finding of the present study was that the syntactic diversity measure (MSTTRDR-50) was the strongest predictor of academic writing proficiency in the combined model. Furthermore, including the diversity measure improved the predictability of the model by 9.10% compared to the previous model that did not include it. These results suggest that syntactic diversity is a crucial predictor of academic writing proficiency in the L2 context.

Conclusion and Implications

The present study investigated the relationship between various measures of SC and writing proficiency among young EFL learners. The findings indicated that global and phrasal measures (MLTU, MLC, and CN/T) had a significant unique contribution to the prediction of writing proficiency. Furthermore, the insertion of syntactic diversity measure (MSTTR-50) improved the prediction of proficiency, emphasizing the significance of assessing SC from multiple dimensions by using various methods of elaboration. The findings suggest that global and specific measures of SC can complement each other in assessing academic writing proficiency, and new length-insensitive indices capturing complexity as syntactic diversity can provide a clearer picture of the construct of SC in academic writing.

The implications of the study can be meaningful in the instruction of academic writing, as the findings suggest that L2 writing classes should provide clear guidance on producing varied and complex sentence structures. Classroom activities should assist new writers in recognizing the widespread utilization of elaborated/diversified features in academic writing, identifying the contexts where these features can be used, and using these features in their own writing. The present study has some limitations, such as investigating only one particular part-genre and using only one syntactic diversity measure, which should be considered in future research.

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TEFL Master's Degree Students' Incorporation of Peer Feedback in Academic Texts

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Abstract

The examination of the literature reveals that scant attention has been paid to L2 graduate students' engagement with feedback on their academic texts. To fill this gap in the literature, the current study investigated the engagement of 53 TEFL master's degree students with peer comments using a host of data collection and analysis tools, including eye-tracking, stimulated recall interviews, and content analysis. The participants exchanged computer-mediated comments on an academic writing task (i.e., thesis proposal) and were asked to revise their texts based on these comments while their eye movements were being captured using an eye-tracking application. Then, the eye-tracking videos were employed as stimuli to extract the participants' reasons for not applying the comments. In addition, the participants' first and revised texts underwent content analysis, and their feedback incorporation strategies were identified. The findings of this study indicated that the participants applied more than two-thirds of the comments; however, justified elaborated feedback was adopted more than elaborated and concise general feedback. The participants also applied justified elaborated feedback more accurately than the other feedback types. Finally, the results showed that four main feedback qualities (being too general, incomprehensible, inapplicable, and faulty) adversely affected L2 MA students' feedback incorporation.

Keywords: academic writing, engagement, feedback incorporation, peer feedback, second language writing

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Introduction

One of the factors that can affect the success of feedback on non-native students' academic texts is the extent to which learners engage with the provided feedback to both learn a new item and modify their texts while they are fully motivated to accomplish their task (Berndt et al., 2018). Thus, unlike the mainstream trend in second language writing studies, which chiefly focuses on the *providing* side of the feedback exchange, the study of learners' engagement with feedback mainly emphasizes the role of *receiving* side of the feedback exchange in the success of feedback activities.

While several studies have investigated L2 (referring to both foreign and second language) learners' engagement with feedback in general English and undergraduate contexts, L2 graduate students' engagement with their peer feedback has still remained an underexplored research area, and empirical studies are required to uncover to understand how graduate students engage with feedback on their academic texts. Furthermore, eye-tracking technology that can provide precise data on writers' engagement with feedback has been used minimally in second/foreign language learning contexts.

As an attempt to bridge a part of these gaps in the literature, the present study focuses on the examination of Iranian L2 master students' engagement with peer feedback on their thesis proposals by analyzing their incorporation strategies, the accuracy of their revision, and reasons for not applying their peer comments. To collect accurate data, the researchers recorded the participants' incorporation process using an eye-tracking application and used them in stimulated recall interviews to uncover the learners' reasons for not engaging with the incoming comments.

Literature Review

The importance of learner engagement with feedback has been well-documented in the literature on second language writing. Behavioral engagement is reported to determine the success of a feedback practice and explain the differential success of students receiving comments in second language writing programs (Han, 2017; Han & Hyland, 2019). The examination of empirical studies on students' engagement with feedback reveals that students' poor engagement with feedback results in their failure to learn from comments (Sinclair & Cleland, 2007).

In recent years, some scholars (Han & Hyland, 2019; Yuan & Kim, 2018; Zhang & Hyland, 2018) have attempted to redefine the concept of engagement to match it with feedback on students' written products. Zhang and Hyland (2018) asserted that the three components of learner engagement were relevant to feedback activity. For instance, emotional (affective) engagement deals with learners' attitudinal reactions to feedback. The extent to which learners feel frustrated, stressed, or motivated determines learners' emotional engagement with feedback. The literature on feedback on L1 and L2 writing literature has accommodated studies (e.g., Donia et al., 2022; Mulliner & Tucker, 2017; Ryan & Henderson, 2018; Zhan et al., 2022) examining learners' perceptions and attitudes toward teacher and peer feedback. Cognitive engagement refers to "how students attend to feedback encompassing the use of revision operations (strategies) and cognitive (metacognitive) strategies" to uptake the provided items (Zhang & Hyland, 2018, p. 9). Yuan and Kim (2018) argued that within feedback activities, students' behavioral engagement equals the extent to which they examine their peers' or teachers' comments and incorporate them into their texts.

Studies on Learners' Engagement with Feedback

Some studies have investigated the reasons that prevented graduate students' engagement with feedback. For instance, the results of the mixed-methods study conducted by Carless (2006) showed that one of the significant reasons that hindered students' incorporation of comments was their inability to comprehend them. Carless (2006) maintained that students' lack of academic discourse knowledge could lead to this incomprehensibility, which can affect the revision pattern. Similarly, Sadler (2010) admitted the significant role of learners' self-perceived ability to apply comments in forming students' level of engagement. Hoomanfard and Rahimi (2020) found that learners with higher English language proficiency levels were more successful in understanding comments and incorporating them into their revised versions.

Another set of studies has examined how feedback type can affect L2 writers' engagement with comments. Gielen et al. (2010) found that receiving justified feedback (i.e., arguments, explanations, or reasons provided in support of a specific evaluation) significantly improved students' revision performance.

Likewise, Walker (2015) found that justified comments (explanation of a correction to a content or skills shortcoming, or explanation of why something is praiseworthy) resulted in the highest number of changes and adaptations in texts. The research carried out by Bai and Hu (2016) also showed the effect of feedback type on second language learners' incorporation patterns. Another study by Berndt et al. (2018) investigated the effect of peer feedback content (concise general vs. elaborated specific feedback) and sender's competence on students' perceptions, revision performance, and mindful cognitive processing. In a more recent study, Mohammed and Al-Jaberi (2021) investigated graduate students' engagement with feedback and found that feedback type could determine their feedback incorporation.

Eye-Tracking Technologies in Feedback Studies

Few researchers have used eye-tracking technologies to examine learners' responses to written feedback on their texts. Eye-tracking data have been used to understand whether different feedback types made a difference in learners' acquisition of grammatical items. For instance, Shintani and Ellis (2013) benefited from eye-tracking data to examine the extent to which direct written corrective feedback and metalinguistic explanation affected second language learners' explicit and implicit knowledge of a specific grammatical item in English. Eye-tracking has also been employed to uncover the effects of different feedback types on learners' behavioral engagement with feedback. Bolzer et al. (2015) and Berndt et al. (2018) examined the performance of tertiary level students who were assigned to elaborated specific and elaborated specific plus justification feedback groups and identified how the change in the feedback influenced learners' behavioral engagement with feedback. Ranalli (2021) also found that specific comments were significantly more effective than general comments in engaging learners.

The Present Study

Although the literature on second language learning has emphasized the significance of learner engagement with feedback (Han & Hyland, 2019; Ranalli, 2021), this area has remained an underexplored one (Amiryousefi, 2019; Aubrey et al., 2020; Stevenson & Phakiti, 2019). The examination of the literature shows that most previous studies have focused on the product of learners' engagement with

supervisor (instructor) feedback, and few recent studies (Mohammed & Al-Jaberi, 2021; Ranalli, 2021) have examined L2 graduate students' behavioral and cognitive engagement with peer feedback on their academic texts.

Furthermore, the number of studies using eye-tracking technologies to examine feedback is limited to a few (Berndt et al., 2018; Bolzer et al., 2015; Cutumisu et al., 2019; Ranalli, 2021; Shintani & Ellis, 2013). Eye-tracking technology is significant since the data obtained from this data collection option can provide researchers with accurate information about feedback receivers' cognitive processes (Ranalli, 2021).

The present study aimed to fill a part of the mentioned gaps in the literature by using content analysis to examine how L2 master's degree students use peer comments on their thesis proposals. The participants' revision accuracy was also examined in this research. This study also investigates the extent to which L2 MA students apply their peers' comments, and their reasons for not applying the comments are studied using eye-tracking technology and stimulated recall interviews. The following questions guided this study.

1. To what extent do L2 master's degree students incorporate peer comments into their thesis proposals?
2. What reasons prevent L2 master's degree students from applying peer comments?
3. Does different peer feedback type affect L2 master's degree students' accuracy of feedback incorporation?

Method

Participants and Corpus

The sample consisted of 53 TEFL master's degree students who were required to write research proposals in their Academic Writing course. The participants attended two classes (*N1* =23 and *N2* =30) at a university in Shiraz, Iran. They were selected based on a convenience sampling procedure. Both male (*N*= 24) and female (*N* = 29) students participated in this study, and their ages ranged between 23 and 34 (*M* = 26.4, *SD* = 3.1). Only two students had published papers in national peer-reviewed journals before the data collection started, and the rest of the participants did not have any academic texts published. All participants had already

worked with Microsoft Word to write academic texts and exchange comments. However, a link to a 30-minute video showing how to use Microsoft Word was sent to all users so that they learn how to use Word to exchange comments.

The corpus of this study included 53 research proposals (maximum 1200 words excluding references). The mean length of texts was 1413 words (*SD* = 98 words). These proposals were prepared by the participants to be submitted to their thesis supervisors. All proposals included introduction, literature review, and method sections. The revised (second) drafts of these proposals and the peer comments were other parts of the studied corpus. The details about the provided comments are provided in the Results Section.

Instruments

Eye-Tracking Program

To capture the participants' eye movements, the researchers used *GazeRecorder* software. Unlike other options, which required the participants to come to a data collection site, GazeRecorder works with the webcam of the participants' laptop or desktop computers. This feature improved the quality of data collection since it was done less obtrusively since no extra device was attached to their computers, and they applied the comments at their preferred place. This program tracks the eye movements of each person and can show the areas which were focused on for a longer time. Figure 1 shows an image of the eye-tracking data. A short video of the eye-tracking data collection is also accessible via this link to short a video. The colors recorded showed the amount of time each learner spent on a specific area of the text. While blue and green showed a low amount of time, yellow and red points were indicatives of a higher amount of fixation on an area.

Stimulated Recall Interview

The researchers used stimulated recall interviews to examine the participants' reasons for not incorporating peer comments. The researchers used the videos from the eye-tracking procedure to stimulate learners to talk about their thoughts while applying their peer comments. The videos were played right after the participants finished applying the comments. The participants were asked to talk about their thoughts as they watched the videos of their eye movements. The

researchers asked about the reasons for fixations, pauses, and revisions. These interviews were audio-recorded and transcribed for further analysis. In stimulated recall interviews, which intend to uncover cognitive processes, simple questions such as *Why did you do so? What were you thinking about then? What were you doing then?* are asked (Godfroid & Hui, 2020). The same questions were employed in this study to uncover the participants' thoughts while applying the comments.

Figure 1

A Sample of Eye-tracking Data
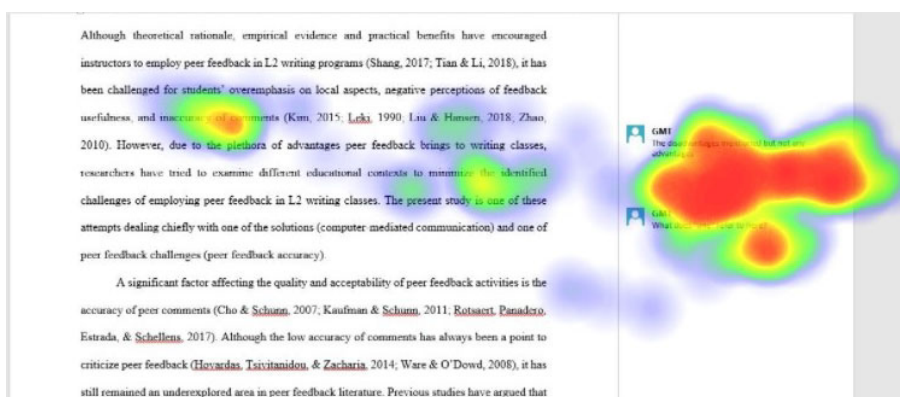
Procedure and Data Collection

The data required to answer the research questions were collected during the Covid-19 Pandemic; thus, all activities involved in this study were incorporated into the present computer-mediated classes. This condition facilitated the data collection process for the researchers, who could participate in all sessions as non-participant observers. The data of this study were collected in two online academic writing classes at a university in Shiraz, Iran. In the first six sessions, the participants were given lectures on how to write a thesis proposal. Meanwhile, the participants were provided with high-quality peer feedback provision and incorporation features. They were also required to accomplish minor writing tasks, provide peer feedback on their peers' texts, and finalize their thesis topics with their instructors.

As the main assignment of their course, the participants had to write proposals (maximum 1200 words excluding references) and submit them by the 14th session. These proposals were reviewed by the participants' peers from the same

classes. The participants were paired by the instructor so that they could exchange their texts and comments. The participants had to select the topics of their proposals. The participants were required to provide comments in a week and send the comments to the instructor. Figure 2 provides a schematic summary of the data collection procedure. Although instructor feedback was also used in the course, its data were not included in our study since this feedback type was out of the scope of the present research.

Figure 2

Data Collection Steps

Based on an agreed-upon schedule, the participants went online for the feedback incorporation task. In this data collection phase, one of the researchers (who was not the instructor of the classes) handled the feedback incorporation sessions. First, the participants calibrated the eye-tracking system using their webcams. Then, they were shown the commented-on drafts. The comments were in the form of Track Changes, marginal comments, or general concluding comments. The students had 150 minutes to read the comments, decide whether and how to apply them, and revise their texts. The participants' eye-tracking data were recorded in cloud storage. On average, each student spent 78 minutes ($SD = 8.63$) revising their papers. Immediately after each feedback incorporation session, the stimulated recall interviews were initiated. Each student was shown the video, and she/he was asked about her/his thoughts or emotions. The researcher interrupted the silence for more than 30 seconds with a question asking about the interviewee's thoughts. The researchers informed the participants that the screen content and their voice were recorded before starting the feedback incorporation activity to observe the ethical considerations.

Data Analysis

The comments provided by Iranian L2 master's degree students were deductively categorized into three main categories (Table 1), which were taken from the related literature in general education (Berndt et al., 2018; Bolzer et al., 2015; Walker, 2015).

Table 1

Feedback Types Based on Feedback Specificity

Feedback type	Concise general feedback	Elaborated feedback	Justified elaborated feedback
Description	Mention the problem in the text with no further information	Provide not only the position and error type but information on how to proceed to solve the problem	Provide an explanation of a correction to a content or skills shortcoming, or an explanation of why something is praiseworthy.
Feedback examples	Your conditional sentences are not correct.	Use were instead of are in the If clause	It is conditional type II, and you should use past tense in the if-clause.
	You have to elaborate on your ideas more.	Explain your idea and provide examples.	To have a persuasive paragraph, you need to support your topic sentence using explanations and examples.

As Table 1 shows, the three feedback types included comments ranging from the most general ones (concise general feedback) to justified elaborated feedback, which is the most detailed one. The comments provided by the study participants were first categorized by one of the researchers in this study. Then, an assistant professor in the field of applied linguistics categorized half of these comments deductively, and the inter-coder reliability of .96 was obtained. The few disagreements were discussed carefully until unanimous decisions were made.

To answer the first research question, the researchers analyzed the first and

revised versions as well as comments on proposals to determine the percentages of applied comments, ignored comments, and text modification to avoid feedback incorporation. This part of the analysis was carried out in a number of steps. First, the researcher excluded those comments that only included feedback providers' positive opinions about the text since these comments did not require modification. All directive (including requests, questions, and orders) and negative expressive comments (implying changes in the text) were studied to check if they were applied. In those cases where both expressive and directive comments addressed a single issue, only one of them was counted.

To ensure the credibility of the coding process, several measures were taken. First, a researcher and a TEFL associate professor out of the current research team examined 50 percent of the comments to code them deductively as applied, ignored, and text modification to avoid feedback incorporation, and the inter-coder reliability of .92 was obtained. All of the discrepancies were related to the comments on global aspects of writing (content and organization). These comments were analyzed in an extensive meeting until unanimous decisions were made.

The second question was answered by analyzing the participants' reasons for not applying the comments: a) the stimulated recall interview data were transcribed carefully; b) one of the researchers categorized the statements that showed their reasons for not applying the comments inductively. Four main categories were identified. The same coder, introduced above categorized one-third of the statements deductively and the inter-coder reliability (Cohen's Kappa) was .96. The discrepancies were discussed until both parties reached a full agreement. Next, c) a member check was done by asking four participants to code one-third of the statements into the categories deductively, and the inter-coder reliability values of .97, .98, .97, and .95 were achieved. To reach referential adequacy, the researchers provided some direct quotations for each category to elucidate the issues for the audience. It should be noted that the researchers of this study were not the instructors of the examined classes, and the participants were informed that their cooperation in this research could not affect their scores.

To answer the third research question, which addressed the effect of feedback type on L2 students' accuracy of feedback incorporation, the researchers examined the first versions, second versions, and comments to examine the extent to

which comments had been incorporated accurately. The analysis of form-related comments was straightforward. One of the researchers and an external reviewer, an experienced English language instructor with a PhD in TEFL, examined the accuracy of the revisions required by form-related comments, and the inter-coder reliability of .93 was achieved. However, since examining the revision accuracy of content-related comments was subjective, two researchers of this study examined the revisions individually and reached the inter-coder reliability of .86. After discussing the discrepancies and reaching unanimous decisions, the instructor (mentioned in this paragraph) examined half of the comments, and the inter-coder reliability was .96. The three researchers attended an online meeting and reached unanimous decisions for the remaining items.

Results

The examination of the data showed that a total of 1402 comments were left on the participants' texts. On average, they received 32.11 ($SD = 6.86$) comments on their texts each. The mean length of texts was 943 ($SD = 49.3$) words, and the mean length of comments was 14.2 ($SD = 3.6$) words. The comments provided by the students addressed both form-related (798, 56.92 %) and content-related ($N= 604$, 43.08 %) issues. The analysis of the provided comments indicated how the provided comments were distributed in the three feedback types and five major feedback focuses (Table 2).

Table 2

Feedback Types Provided by Master's Degree Students

	Concise General Feedback	Elaborated Feedback	Justified Elaborated Feedback	Total
Grammar	110 (32.64%)	146 (43.32%)	81 (24.03%)	337
Mechanics	98 (36.29%)	99 (36.66%)	73 (27.03%)	270
Organization	106 (33.65%)	124 (39.36%)	85 (26.98%)	315
Content	115 (39.79%)	120 (41.52%)	54 (18.68%)	289
Vocabulary	59 (30.89%)	97 (50.78%)	35 (18.32%)	191
Total	488 (34.8%)	586 (41.79%)	328 (23.39%)	1402

As Table 2 shows, the most frequent feedback type was elaborated feedback. The participants provided 586 elaborated comments on their peers' texts, accounting for 41.79 percent of all comments. The second frequent feedback type was concise general feedback ($N = 488$, 34.80 %), and the least frequent feedback type was justified elaborated feedback ($N = 328$, 23.39 %). This table also presents how different writing aspects were commented on using these three main feedback types.

Table 3

Incorporation Strategies Based on Feedback Types

	Applied	Text modified	Ignored	Total
Concise general feedback	276 (56.54%)	28 (5.73%)	184 (37.7%)	488
Elaborated feedback	373 (63.66%)	76 (12.96%)	137 (23.38%)	586
Justified elaborated feedback	287 (87.5 %)	15 (4.57%)	26 (7.92%)	328
	936 (66.76%)	119 (8.49%)	347 (24.75%)	1402

Feedback Incorporation

To examine the participants' behavioral engagement with comments, the researchers categorized the comments under three categories: applied, text modified without applying the comment, and ignored. First, the participants' behavioral engagement was examined based on feedback types (Table 3 above).

As indicated in Tables 3 and 4, the participants applied two-thirds of the comments ($N = 936$, 66.76%), and 65.27 ($N = 611$) of these incorporated comments were applied accurately. A more detailed analysis of the data showed that the highest level of feedback incorporation accuracy belonged to justified elaborated comments (77.7%), followed by elaborated feedback (61.93%) and concise general feedback (56.88%).

Table 4

Accuracy of Feedback Incorporation

	Incorporated					
	Correct			Incorrect		
	*CGF	EF	JEF	CGF	EF	JEF
Grammar	32 (29.09)	67 (45.89)	57 (70.37)	26 (23.63)	46 (31.5)	19 (23.45)
Mechanics	34 (34.69)	36 (36.36)	51 (69.86)	28 (28.57)	24 (24.24)	12 (16.43)
Organization	36 (33.96)	53 (42.74)	62 (72.94)	27 (25.47)	33 (31.13)	13 (15.29)
Content	43 (37.39)	42 (35)	32 (59.25)	30 (26.08)	28 (23.33)	12 (22.22)
Vocabulary	12 (20.33)	33 (34.02)	21 (60)	8 (13.55)	11 (11.34)	8 (22.85)
Total	157	231	223	119	142	64
	(56.88%)	(61.93%)	(77.7%)	(43.11%)	(38.07%)	(22.29%)

*CGF= concise general feedback, EF= elaborated feedback, JEF= justified elaborated feedback

The data provided in Tables 3 and 5 show that the participants ignored 347 peer comments (24.75%) and modified their texts to avoid feedback incorporation (N = 119, 8.49 %). The results also showed that the feedback type affected the incorporation strategies. The data analysis also indicated that the participants ignored more than two-thirds of concise general comments (N = 184, 37.7 %), followed by 23.38 percent of unincorporated elaborated feedback. The lowest rate of ignored comments belonged to the justified elaborated feedback condition, where 7.92 percent of comments (N = 26) were not applied by the students. The last incorporation strategy was text modification. The highest text modification level to avoid feedback incorporation was recorded for the elaborated comments (N = 76, 12.96 %). The lowest rate belonged to the justified elaborated feedback (N = 15, 4.57 %), and concise general feedback resulted in text modification in 5.73 percent of cases (N = 28).

Table 5

Feedback Unincorporated

	Text Modified			Ignored		
	CGF*	EF	JEF	CGF	EF	JEF
Grammar	8 (7.27%)	16 (10.95%)	2 (2.46%)	44 (40%)	18 (12.32%)	3 (3.7%)
Mechanics	7 (7.14%)	12 (12.12%)	3 (4.1%)	29 (29.59%)	27 (27.27%)	7 (9.58%)
Organization	6 (5.66%)	14 (13.2%)	5 (5.88%)	37 (34.90%)	24 (22.64%)	5 (5.88%)
Content	4 (3.47%)	18 (15%)	3 (5.55%)	38 (33.04%)	32 (26.66%)	7 (12.96%)
Vocabulary	3 (5.08%)	16 (16.49%)	2 (5.71%)	36 (61.01%)	36 (37.11%)	4 (11.42%)
Total	28	76	15	184	137	26

*CGF= concise general feedback, EF= elaborated feedback, JEF= justified elaborated feedback

Reasons for Feedback Non-Incorporation

To collect the participants' reasons for not incorporating peer feedback on their master's thesis proposals, the researchers employed eye-tracking data to stimulate the participants to talk about their thoughts while applying peer comments on their texts. The thematic analysis of the interview data showed four main reasons for not applying the comments (Table 6).

Table 6

Extracted Categories of Reasons for Not Applying Peer Comments on Academic Texts

Theme	Sub-themes
Too general	- Not specifying the erroneous item among correct ones - Not providing steps to take to improve the text
Inapplicable	- Perceived low level of writing or subject-area knowledge - Unrealistic expectations of the feedback provider
Faulty	- Not being compatible with the instructor's guideline - Providing faulty information
Incomprehensible	- Including difficult lexical items or grammatical structures - Using symbols (such as question marks or exclamation marks) without any word - Using jargons

Table 7

Reasons for Not Applying the Comments

Reason	Frequency	Percentage
Too general	152	32.61
Inapplicable	60	12.87
Being faulty	125	26.82
Incomprehensible	129	27.68
Total	466	100

As reported in Tables 6 and 7, one of the reasons that the participants mentioned for not applying the comments was the feedback specificity level. The participants stated that comments which were too general were not easy to incorporate. Two sub-themes extracted from the interviews were identified in learners' responses. The participants had difficulty applying comments when the comment included a general requirement or asked for a modification without elaboration. The followings are examples of these sub-themes.

> *I did not apply this comment because I couldn't do so! It asked me to remove unnecessary 'the's from the text, but which ones were erroneous? Which ones were correct? So, I decided to ignore this comment.*

> *The comment asked me to work on the logical order of the arguments, but how could I do that? If the feedback provider were more detailed, maybe I could modify my text.*

The second reason reported by the participants addressed the inapplicability of some comments. The participants mentioned this factor 60 times (12.87 %) as the cause of their unincorporated comments. The following two quotations are examples of this theme.

> *I think a very good student had provided comments on my text because the comments were so difficult. I think my introduction was good, but he/she wanted me to write a more persuasive one to show the significance of the study. I believed that I could not apply this comment, so I did not apply it.*

> *I deleted these two sentences since I could not elaborate on the issue. I think this level of elaboration is for a Ph.D. dissertation and not an MA thesis, so I deleted the sentences not to be required to write supporting sentences which were beyond my ability.*

The third reason for not applying comments appeared to be that the participants' considered some comments as faulty. More than a quarter ($N = 125$, 26.82 %) of the unincorporated comments were reported to be faulty. The participants found these comments faulty or against what is suggested in well-known references or their instructors' instructions. Examine the following quotes taken from the stimulated recall interviews.

> Why didn't I apply this comment? It was wrong. This comment asked me to write independent samples t-test to compare four groups. No, I had to write One-way ANOVA, and I didn't change it.
>
> Our instructor had asked us to avoid writing hypotheses when the study was descriptive, but this comment had asked me to write hypotheses. She/he has written in capital letters too (laughing)!

The last reason for not applying comments was said to be comment incomprehensibility. The participants stated that some comments were difficult to understand; therefore, they did not/ could not apply them. Around a quarter of unincorporated comments fell into this category ($N = 129$, 27.68 %). The followings are some quotations from the interviews.

> [Talking about a reduced conditional type 2] I did not understand this comment. I had some thoughts, but I decided to avoid taking risks, so I omit my sentence.
>
> [Talking about three question marks] I didn't understand this comment. What's wrong with my paragraph? I didn't understand its meaning, so I ignored it.
>
> I didn't understand the meaning of 'heritage learners', and I thought my text was OK without this phrase, so I ignored it.

Discussion

The present study examined how Iranian L2 master's degree students engaged with peer feedback on their thesis proposals. The objectives of this study were to examine the extent to which master's degree students apply peer comments on their thesis proposals and why they tend to avoid some peer feedback on their thesis proposals. This study also studied how feedback types could affect the participants' accuracy of feedback incorporation. The results of this study supported

the feedback engagement model provided by Ellis (2010) by showing how different factors can result in learners' feedback use; however, the following paragraphs provide the discussion of results using prior theories and empirical studies.

The findings showed that L2 master's degree students incorporated around two-thirds of their peers' comments, which seems to be a high level of behavioral engagement. However, the analysis of the data indicated that feedback content in terms of specificity could noticeably affect graduatfication in addition to a detailed correction were the most successfuL2 learners are involved in the process of a more complicated task to identify the requirements of comments (Lachner & Neuburg, 2019). Furthermore, general comments can also impose adverse affective effects on learners, resulting in higher anxiety levels as they are less sure how to apply a comment which does not provide specific instruction on how to proceed (Fernando, 2020). This uncertainty can also result in negative feelings that can exacerbate the situation since the negative affective engagement with a comment can disrupt the cognitive and behavioral engagement of L2 writers. The resultant uncertainty may lead to learners' adversely-affected task self-confidence and motivation (Stevenson & Phakiti, 2019). The lowered self-confidence and motivation can, in turn, impact the behavioral and cognitive engagement with other comments in the same and subsequent feedback incorporation tasks.

The analysis of eye-tracking and stimulated recall interviews revealed four main reasons why the participants did not incorporate the comments: being too general, inapplicable, faulty, and incomprehensible. The effect of comment specificity on L2 writers' cognitive and behavioral engagement was discussed above. Master's degree students also stated that some comments were inapplicable. They argued that these comments were too difficult for them, that is beyond their abilities or skills, so they had no choice but to ignore them. Prior studies have also reported the adverse effects of the mismatch between learners' knowledge and the provided comments (Davin, 2013; Herazo et al., 2019). The suitability of comments for learners' (perceived) level has been controversial since the 1980s. Several scholars have discredited feedback activities as useless or even harmful if they are not matched with feedback receivers' knowledge (Truscott, 1996). Even in approaches, such as sociocultural theory, where feedback is a crucial factor in learning, the issue of reciprocity, which reflects how learners respond to mediation that has been

offered (Poehner & Wang, 2021), plays a significant role in the success of feedback activities. This responsiveness, which reflects learners' engagement with feedback, has been identified as a significant factor since comments do not modify learners' cognitive structures if learners have not reached the required cognitive ability. Moreover, it must be noted that there could have been some instances in which learners were behaviorally (as they applied the comments) but not cognitively engaged with comments (they did not learn them through cognitive/metacognitive strategies). Case studies can be conducted to identify the cases in which cognitive engagement is missing while behavioral engagement is evident.

The third issue that the participant mentioned for not applying the comments was the faultiness of the comments. The examination of peer feedback literature shows that there are reservations about the accuracy of peer feedback. Prior studies have shown that inaccurate peer comments can have adverse effects on learners' perceptions of peer feedback (Kaufman & Schunn, 2011; van der Kleij & Lipnevich, 2020), which can, in turn, decrease feedback receivers' engagement with the incoming comments since they are not sure if the comments include accurate information (Patchan & Schunn, 2015). Trust has been identified as a significant factor in L2 learners' feedback-seeking behaviors and can affect feedback recipients' engagement with comments (Sedikides et al., 2016). The literature on peer feedback displays that learners are less trustful when they feel the comments are provided by a less competent peer (Bahari & Gholami, 2022; Patchan & Schunn, 2015; Zhai & Ma, 2022). The extraction of this theme from the interview data shows that even in graduate writing contexts, the issue of trust is a significant factor that should be taken into consideration. Master's degree students with different levels of L2 writing ability and subject-area knowledge took part in this study, and the disparity between their knowledge might have resulted in the comments perceived as inaccurate. However, the participants' assessment of comments as inaccurate can be examined in another study.

The fourth factor mentioned as the reason for not incorporating comments was the incomprehensibility of comments. The first step of applying a comment is understanding its meaning, and applying an incomprehensible comment is unlikely to happen (Fan & Xu, 2020; Han, 2017; Patchan & Schunn, 2015). Previous studies have shown that one of the disadvantages of written comments is that feedback

providers cannot realize the extent to which their comments are understood until they read the revised version (Ellis, 2010), and feedback receivers are not able to ask for clarification immediately when feedback provider is not readily available to answer. This temporal gap can result in feedback receivers' inability to understand comments or misunderstanding them, which can disrupt the process of feedback incorporation.

Sasch and Polio (2007), emphasizing the significance of feedback understanding, argue that feedback receivers' identification and understanding should be ensured to make their feedback uptake possible. The examination of the dual-layered awareness in a feedback activity has shown that the noticing level of awareness is not sufficient, and students should reach the level of understanding to benefit from a comment (Rosa & Leow, 2004). In the same line, in his oft-cited model of second language acquisition, Robinson (1995) argues that although considerable currency has been given to alertness and orientation, the golden gate of learning an item is detection, which is the cognitive registration of the provided stimuli and can be actualized solely when a learner understands the provided stimuli. These insights from the literature vividly reveal the significance of understanding in learning. In the present study, it was witnessed that students' difficulties in understanding comments accounted for one-third of all ignored comments.

The findings also showed that peer feedback types could affect the participants' accuracy of feedback incorporation, and L2 master's degree students applied justified elaborated comments more accurately than concise general and elaborated comments. It seems that when feedback providers support their comments with justifications, feedback receivers have a less difficult cognitive task of incorporating comments into the revised version accurately since these justifications can guide feedback receivers on how to apply the comments (Gu'enette, 2007; Zhu & Carless, 2018). These justifications are reported to increase feedback receivers' engagement with comments and enable them to access their previously learned items more easily (Fernández-Michels & Fornons, 2021). This can increase the chances of high-quality revisions and learning (Berndt et al., 2018; Bolzer et al., 2015; Walker, 2015). In addition, justification can function against learners' negative perceptions of peer feedback credibility since feedback receivers are provided with explanations for the provided suggestion/correction (Han &

Hyland, 2019; Yu et al., 2019). This positive perception can, in turn, increase learners' attention to the feedback and increase the chances of accurate feedback incorporation.

Conclusion

Drawing on the data collected using eye-tracking technology, stimulated recall interviews, and content analysis, we examined L2 Iranian master's degree students' engagement with peer feedback on their academic texts. Based on the findings of this study, L2 graduate students apply justified elaborated feedback more than elaborated and concise general feedback. Similarly, the lowest level of ignoring comments belonged to justified elaborated feedback; text modifications to avoid feedback incorporation are not noticeably different across the three feedback types. In line with previous studies (Bai & Hu, 2016; Berndt et al., 2018; Mohammed & Al-Jaberi, 2021; Walker, 2015), this research shows that feedback type can project its effects on L2 postgraduate students' feedback incorporation decisions and those comments which include justifications are more successful in enabling feedback receivers to apply them in their revised versions. Given these findings, teachers are recommended to invite their students to provide detailed and justified feedback on their peers' texts. This can both deepen feedback providers' understanding of the issue (Walker, 2015) and, as we witnessed in this study, affect the feedback incorporation rate.

Finally, the results of this study demonstrate that L2 MA students apply peer comments more accurately when they are detailed and justified rather than concise and general. L2 learners might benefit from the cognitive facilitators (e.g., elaborated explanations) that guide learners through the cognitively-demanding journey of feedback incorporation and help them uncover how to apply their peers' comments. Feedback receivers' emotional engagement with feedback has been reported to affect their cognitive and behavioral engagement, and positive feelings have been found to positively affect learners' feedback incorporation and learning (Han & Hyland, 2019; Zhang & Hyland, 2018). Again, these findings imply that second language instructors had better encourage their students to provide elaborated feedback plus justification to increase the accuracy of feedback incorporation.

There were some limitations to this study that can be mentioned here. First, the researcher used eye-tracking technology to collect a part of the required data, but a few participants (not more than five students) did not follow the instructions in the practice phase (before starting the data collection stage), which took some extra time and might have negatively affected their revision process. In addition, this study benefited from remote eye-tracking technology, which can be practiced when the participants are not physically available, but using more precise eye-tracking equipment could possibly provide us with more detailed data. Furthermore, the focus of this study was on L2 academic writing, and the findings have to generalized cautiously to other writing settings since the context of feedback studies has been reported to affect learners' needs and wants (Stevenson & Phakiti, 2019).

While the present study fills a part of the gap in the literature, and these findings provide empirical evidence for the significant issue of peer feedback incorporation o by L2 MA students, further studies can be conducted to examine the reasons behind unincorporated comments in other contexts (e.g., general English courses and undergraduate courses, supervisor feedback). Furthermore, other researchers can examine the extent to which different feedback types result in learners' uptake. Using eye-tracking data and stimulated recall interviews, other researchers can uncover the extent to which different feedback types could result in learning in the short and long-run.

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The Effect of Textual Awareness-Raising on Undergraduate EFL Learners' Reading Comprehension: A Focus on Degrees of Text Complexity

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Abstract

This study aimed to find out the effect of text awareness-raising with two degrees of complexity (linguistically and cognitively complex vs. linguistically complex and cognitively simple) on Iranian EFL learners' reading comprehension. A factorial design with the use of pretest-treatment-posttest was utilized. In this regard, 120 students in four intact classes formed the sample of the study. They were randomly divided into two experimental and two control groups. In one experimental group, the awareness of linguistically and cognitively complex texts was raised and in the other the awareness of linguistically complex and cognitively simple texts was raised. In the control groups, the same texts were employed without textual awareness-raising. The results of Two-way MANOVA revealed the significant main effect of textual awareness-raising on both types of texts. The results also showed a significant interaction effect of teaching method and text complexity. It means the effect of textual awareness-raising was high when the text was linguistically and cognitively complex and it was low when the text was linguistically complex and cognitively simple. The results can be useful for teachers, students, syllabus designers, and course book writers.

Keywords: cognitively complex texts, cognitively simple texts, linguistically complex texts, text structure, textual awareness-raising

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Introduction

Since the early 1990s, the genre-based analysis of spoken and written discourse has received increasing attention (e.g., Howatt & Widdowson, 2004; Hyon, 1996). This was motivated by the need to provide appropriate models of various genres for English language learners' disciplines. The genre-based approach is linked to the development of the English for Specific Purposes (ESP) approach and text structure (Swales, 1990). It involves the examination of text structural patterns or, as noted by Swales, the "move structure", through which the author's communicative purpose is achieved. Within genre-based pedagogy, providing awareness about text structure is important. Swales (1990) considers the consciousness-raising of text structure as important as a consciousness-raising of grammar. Research (e.g., Hall et al., 2005) has also revealed that readers who know the text organization are more successful in detecting the important ideas and associations within the text. Understanding the text structure is helpful to readers as it assists them to draw out relevant background information and schemas from memory to shape the text's meaning (Cain et al., 2004).

In addition to awareness-raising of text structure, the notion of comprehensibility which is related to text complexity is important. Kirkland and Saunders (1991) state that text complexity is a factor that is connected to the readability of a text. It is affected by information density involving the frequency and nature of vocabulary used, the extent of explanation included in the text, and the number of interrelationships between concepts. Various definitions have been generated to indicate the importance of the issue. According to (Bulté & Housen, 2012), complexity is defined as the extent to which the text includes complex structures such as long paragraphs with long sentences. The number of phrases as well as clauses in a sentence has been expressed as the metrics of text complexity (Housen et al., 2019; Housen & Kuiken, 2009). It can be cautiously assumed that the notion of text complexity can be associated with linguistic and cognitive complexity, which can be the predictor of the learners' success in academic settings.

The linguistic complexity of a reading text has an important role in the readers' comprehension of the text. Based on the standards set by World-Class Instructional Design and Assessment (WIDA) for English Language Development (WIDA ELD Standards, 2012), linguistic complexity refers to the types of

grammatical structures as well as their variety, the arrangement, and the interrelatedness of ideas. Compared to linguistic complexity, cognitive complexity contains lexical phrases related to emotional features, which might make challenges for the learners in understanding the text (Granello, 2001; Pennebaker et al, 2007). It can be claimed that the cognitive complexity of the text can be logically treated if the learners are provided with efficient instruction concerning the most common types of lexical phrases that are used in different types of texts (both academic and non-academic).

In the EFL context of Iran, teaching higher-order levels of comprehension processes to readers, for example, cognitive functions, that allow readers to be flexible with their learning in unfamiliar situations, appears to be overlooked (Fotovatian & Shokrpour, 2007; Riazi & Mosalanejad, 2010). Lacking awareness of the so-called strategies might lead to poor comprehension of the texts, especially at the university level when the students encounter an array of academic texts with different cognitive and linguistic complexities. Although teaching text structure has abundantly been investigated (e.g., Ghorbani et al., 2019; Newman, 2007; Schwartz et al., 2017), and more importantly almost all research on text complexity has been conducted regarding the students' writing ability (Biber & Gray, 2016; Kormos, 2011), there appears to be little-to-no research considering degrees of text complexity, both cognitively and linguistically, as two main components in alignment with teaching text structure. Therefore, this study intended to explore whether raising the EFL learners' awareness of the structure of informational/expository texts with different linguistic and cognitive complexities would lead to a better comprehension of the texts.

Literature Review

Studies that work on the possible effects of teaching text structure can be divided into three parts. Some studies suggest direct instruction to make students explicitly aware of the text structure (e.g., Carrell, 1985; Duke & Pearson, 2002). ESP teachers tend to utilize this approach with non-English-speaking students, leading to criticism that the instruction of genre specifications inhibits creativity (Master, 2005). The second line of research emphasizes the use of graphic organizers to enhance students' familiarity with the text structure (e.g., Alvermann,

1986). These kinds of studies use semantic maps as a visual representation of a thought or conceptual connections within a text. The third one focuses on strategy training in reading comprehension. For instance, the use of strategies, such as making summaries, semantic mapping techniques, and predicting have been seen to develop an understanding of text structure and realization of the texts (Block & Pressley, 2002).

There have been numerous studies on genre-based instruction since 1985, which have applied this approach to students' reading comprehension (e.g., Kalali & Pishkar, 2015; Karbalaei & Hejazi, 2015; Shishehsaz, 2006). Newman (2007) investigated the impact of providing instruction on expository text structure on third-grade EFL students' comprehension of reading texts. The experimental groups were trained on text structure practicing various reading strategies; in contrast, the control group worked on traditional guided reading. Following the posttest, the experimental group had a better understanding of expository texts than the control group.

Studies on textual awareness show its significance in different learning contexts. Numerous investigations have been done in the Iranian EFL context regarding this issue. Salmani-Nodoushan (2010) conducted a study, which aimed to investigate whether explicit teaching of causative and descriptive text structure influenced the participants' reading recall. The outcomes of the immediate recall test revealed that the experimental group, in which the explicit teaching of text structures was provided, showed a better reading recall than the control group.

In line with the previous study, Chalak and Nasr Esfahani (2012) investigated the effect of providing information regarding text structure strategy on Iranian EFL learners' comprehension of reading passages. Forty advanced learners classified into two groups participated in the study. The experimental group received instruction on reading comprehension through text structure awareness-raising within four weeks and the control group practiced the traditional implicit methods of teaching. The results indicated that the experimental performed better in the reading comprehension test.

Elmianvari and Kheirabadi (2013) also explored the impact of raising text structure awareness on EFL learners' reading comprehension. The study was run with the assumption that the learners who already knew the organizational pattern of text would realize text structure and would apply it as a technique to comprehend the

text. The participants took reading comprehension tests before and after the accomplishment of the treatment. Their study revealed that the students who applied the text structure strategy outperformed those who were not exposed to the text structure training on reading comprehension. The researchers concluded that understanding text structure and the direct instruction of expository text structure could contribute to the students' comprehension.

Zarrati, et al. (2014) examined the effect of text structure awareness in improving strategic reading among EFL students. They provided 85 Iranian EFL students with training on discourse organizing signals (punctuation marks, code glosses, frame markers, and transitional words) throughout one semester. It was indicated that the explicit instruction of textual features and metacognitive realization of text structure contributed to the learners' reading comprehension.

Schwartz et al. (2017) examined whether Spanish university students could develop their reading comprehension through exposure to text structure instruction. The possibility of transferring the instruction from English to Spanish was also taken into consideration. They showed that providing instruction on text structure significantly improved the university students' reading comprehension although the researchers did not come to a logical conclusion concerning the transfer of the intervention to their L1. They concluded that "spontaneous transfer of the use of the strategy does not guarantee large gains in what or how much is recalled" (p. 13).

In a recent study, Ghorbani et al. (2019) explored the possible effects of raising text structure awareness on the reading comprehension of upper-intermediate university students. They made the participants familiar with various kinds of expository text structures. The results indicated the significant outperformance of the textual awareness-raising group in reading comprehension compared to the control group. They suggested that teaching text structures could be conducted in alignment with considering text complexity in terms of linguistic and cognitive complexity.

Research on the text structure and its influence on reading comprehension has been restricted to examining narrative and expository texts (Zabrucky & Moore, 1999). There is a scarcity of research in the literature showing the effect of text complexity in terms of linguistic complexity (LC) and cognitive complexity (CC) and/or simplicity (CS) on the comprehension of these texts. This study attempted to

look at this issue from a new perspective and focused on the role of text complexity, especially in the Iranian EFL setting. Consequently, the study intended to explore the gap in the previous research studies by uncovering the effects of the dual roles of text complexity and textual awareness-raising on EFL learners' comprehension of reading texts. In this regard, the following research questions were posed (+TAR is the group that received textual awareness-raising; -TAR reflects the group undergoing the conventional instruction; LC refers to linguistic complexity; CC is cognitive complexity, and CS points out to the cognitively simple texts).

1. Is there a significant main effect of the teaching method (+ TAR vs. -TAR) on EFL learners' reading comprehension?

2. Is there a significant main effect of text complexity (LC & CC vs. LC & CS) on EFL learners' reading comprehension?

3. Is there a significant interaction effect of teaching method and text complexity on EFL learners' reading comprehension?

Method

Participants

The main sample included 120 students selected based on the Oxford Quick Placement Test (OQPT) from among 160 undergraduate EFL students in Roudbar, Iran. The sample included both female (f= 82) and male (f=38) students who were between the ages of 18 to 40. Four intact classes of about 40 students were employed. The same teacher taught students in these four classes. To ensure the homogeneity of the students, the OPT was administered to the four classes. The students whose scores fell within the range of 40 to 49 were at the upper-intermediate level and comprised the main sample of the research (30 students in each class). The classes were randomly assigned into four groups as follows:

Group 1(Experimental 1): with textual awareness-raising of linguistically and cognitively complex texts (LC & CC + TAR).

Group 2 (Experimental 2): with textual awareness-raising of linguistically complex and cognitively simple texts (LC & CS + TAR).

Group 3 (Control 1): without textual awareness-raising of linguistically and cognitively complex texts (LC & CC - TAR).

Group 4 (Control 2): without textual awareness-raising of linguistically complex and cognitively simple texts (LC & CS - TAR).

Instruments and Materials

The following research instruments and materials were applied in the present study:

QPT. QPT (Syndicate, 2001) is a standardized English proficiency test, which was designed and validated by Oxford University Press and Cambridge ESOL (Geranpayeh, 2003). As mentioned by Geranpayeh (2003) in his review of the English Quick Placement Test, the items of this test have been checked for their quality through Cambridge ESOL and more than 6000 students have confirmed its validity in 20 countries. The reliability of this test was estimated in this study through Cronbach's Alpha and an acceptable coefficient of .82 was obtained.

Pretest and Posttest. In order to measure the participants' reading comprehension ability both at the beginning and after the accomplishment of the treatment, two pretests and two posttests were administered. Each test contained two reading passages of expository type with ten multiple-choice items that were adapted from TOEFL reading passages for the intermediate level students. The first pretest included two reading comprehension texts that were linguistically and cognitively complex while the second pretest included two reading comprehension texts that were linguistically complex but cognitively simple. The passages in the pretests 1 and 2 contained 710 and 696 words, respectively. Cognitive complexity of the reading passages was measured through Linguistic Inquiry Word Count (LIWC) developed by Pennebaker et al., (2007). The same procedure was repeated for the first and second posttests. However, the reading passages were different from the pretests but their lengths were almost the same. The first posttest included 700 words and the second posttest included 690 words. For the correct response, one point and for each wrong answer zero point was assigned. Therefore, the minimum and maximum scores for each test were 0 and 20, respectively. Cronbach's Alpha was run to estimate the reliability of reading comprehension tests, and the reliability coefficients of .81 and .85 were obtained for the pretest and the posttests, respectively, indicating the internal consistency of the items as they were higher than the minimum value required (i.e., α= .70) as suggested by Cohen et al. (2007).

Measures of Linguistic and Cognitive Complexity of the Texts. The required texts for the treatment and pre/posttests were selected from different TOEFL texts based on their linguistic and cognitive complexity. In order to measure

the linguistic complexity, an automated readability tool was used that calculates Flesch Reading Ease according to the formula as suggested by Flesch (1948). This formula considers word length and sentence length. The resulting score is between 0-100 and the criteria for determining the level of difficulty or easiness of a text are as follows: 90-100 (text is very easy), 80-89 (text is easy), 70-79 (text is fairly easy), 60-69 (text is standard), 50-59 (text is fairly difficult), 30-49 (text is difficult), and 0-29 (text is very confusing). Because this study dealt with the texts that were linguistically complex, the difficult texts with almost the same length were selected. Moreover, these texts were also measured for their cognitive complexity through Linguistic Inquiry Word Count (LIWC) (Pennebaker et al., 2007). The LIWC is an electronic software that is used for word analysis and has many applications in the social sciences (Graesser & McNamara, 2012).

There are different dimensions in the output of LIWC software. Based on LIWC criteria, the higher the resulting score, the more cognitively complex a text would be. Therefore, in this study, the expository texts with higher scores on cognitive words were selected as cognitively complex texts and those with lower scores were considered as cognitively simple texts to be used in the treatment sessions and pretests and posttests.

Procedure
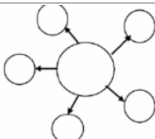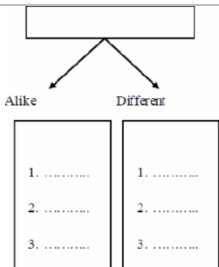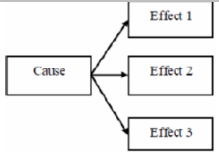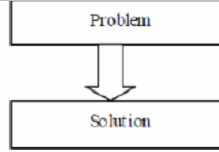
After establishing the homogeneity of the participants concerning their general language proficiency, the researchers assigned them to four groups and administered two reading comprehension pretests. The Pretest 1 had two reading passages that were linguistically and cognitively complex and the Pretest 2 had two reading passages which were linguistically complex and cognitively simple.

The treatment was introduced over ten weeks. In the two textual awareness-raising groups, the students in the Experimental group 1 were exposed to the cognitively and linguistically complex texts and in the Experimental group 2 to the linguistically complex and cognitively simple texts. Effective strategies were introduced to these groups to familiarize them with different textual patterns and how they can analyze different informational texts. It was attempted to develop the language learners' familiarity with the text structures using Tompkins' (1998) model.

In the first session, the students were provided with an overview of the course and the primary organizational text structure. The teacher explained that writers use text structures to organize their information. Therefore, the teacher focused on signal words and presented phrases that identify the text structure of multiple expository texts and explained and introduced the graphic organizers that had different patterns. (Figure 1).

Figure 1

Text Structures, Their Signal Words, and Graphic Organizers

Text Structure	Signal Words	Graphic Organizer
Description	to illustrate, including, is like, such as, for instance, characteristics, for example	
Sequence	first, second, third, since, when, after, later, previously, finally, then, before, next	
Comparison	yet, in comparison, likewise, just as, just like, in the same way, either/or, same as, alike, different, in contrast, also, although, similarly, but, on the other hand, nevertheless, however	
Cause and Effect	this led to, thus, due to, for, so that, since, consequently, because, therefore, as a result, reasons why, if/then	
Problem and Solution	question/answer, so that, because, if/then, dilemma is, problem is	

The first session provided some background knowledge to the students regarding the organizational patterns of different types of texts. According to

Akhondi et al. (2011), when teaching expository texts, it is better to start with the description and end with the comparison/contrast patterns, which is followed in most reading textbooks; therefore, we followed the same order in the treatment sessions. In the following sessions, the students worked on organizational pattern utilizing the texts with the specified complexities every two sessions (i.e., linguistically and cognitively complex texts for one TAR group, and linguistically complex and cognitively simple texts for the other TAR group). The teaching procedure began with the recognition part, continued with practices, and ended to production. Firkins et al. (2007) employ the concept of "cyclic strategic" to describe the teaching stages through genre-based approach, which are: (a) text modeling, (b) joint construction of a text, and (c) independent construction of a text. In modeling phase, the instructor selected a particular type of text to develop the classroom activities. Through working on thinking aloud, the teacher taught the students the way they could recognize the signal words and phrases within the text. In the think aloud strategy, the teacher read aloud a paragraph and paused at appropriate points to share her own comprehension strategies and understanding of the text. For example, she talked about the clues she used to identify the text structure. Moreover, she modeled the drawing of the related graphic organizer to reflect the structure of the text.

Next, a text was given to the students and the teacher asked them to highlight the signal words and phrases that identify the structure of the text. After that, the students applied the skills and strategies they had learned for independent practice. The teacher gave them a text with blank parts and the students were directed to fill-in-the blanks by the appropriate signal words and phrases that they had learned. While working on texts, the students were also asked to highlight the topic sentence, general main idea, and supporting sentences. To do more exercises, the teacher gave them another text and an incomplete graphic organizer related to the text. They were asked to read the text (sometimes in small groups and sometimes individually) and complete the graphic organizer with the information they got from the text. One more practice was using jigsaw activities. Some scrambled sentences were given to each group and they were asked to combine them as a whole text. They discussed and produced a cohesive text out of the jumbled sentences. Consequently, the teacher created chances for the students to encounter different texts with varied patterns of organization and helped them do the analysis for the

texts' structures.

However, the two -TAR groups worked on linguistically complex and cognitively complex texts (Group 3/Control 1) and linguistically complex and cognitively simple texts (Group 4/Control 2) in the traditional implicit instructional method without receiving any specific instruction and practice regarding textual awareness-raising. After ten weeks, the students in four groups were post-tested twice to determine the possible effects of the intervention program on their reading comprehension of texts with different complexities.

Design

The study was a quasi-experimental research with a factorial design, which included pretest-treatment-posttest. In this regard, teaching method (with two levels of with TAR and without TAR) and text complexity (with two levels of LC & CC and LC & CS texts) were the independent variables and reading comprehension in two conditions of LC & CC (pretest 1 and posttest 1) and LC & CS (pretest 2 and posttest 2) was the dependent variable of the study.

Data Analysis

The collected data were analyzed using SPSS 22. Two one-way ANOVAs were conducted on pretests to check the reading comprehension of the four groups before the treatment. After checking the assumptions and confirming the equality of the groups, a Two-way MANOVA was carried out on the posttests' scores to answer the research questions. The teaching method and text complexity were the two independent variables and posttests as the dependent variables. The Alpha Level was set at .05 in all analyses. The preliminary assumption checking revealed the normality, linearity, homogeneity of variance-covariance matrices, and multicollinearity were met.

Results

Descriptive statistics were run for the results of the pretest scores of reading comprehension. The results are presented in Table 1.

Table 1

Descriptive Statistics for the Pretest Scores of LC & CC and LC & CS Texts

		N	Mean	SD	Skewness	Kurtosis
Pretest 1	Group 1: + TAR of LC & CC	30	13.10	1.91	-.121	13.81
(LC&CC)	Group 2: + TAR of LC & CS	30	12.86	1.94	.019	13.59
	Group 3: - TAR of LC & CC	30	13.36	2.14	-.740	14.16
	Group 4: - TAR of LC & CS	30	12.60	2.62	-.712	13.57
	Total	120	12.98	2.16	-.539	-.068
Pretest 2	Group 1: + TAR of LC & CC	30	15.93	1.83	-.289	16.61
(LC&CS)	Group 2: + TAR of LC & CS	30	15.06	1.77	-.029	15.73
	Group 3: - TAR of LC & CC	30	15.53	1.81	-.206	16.21
	Group 4: -TAR of LC & CS	30	15.60	2.29	.713	16.45
	Total	120	15.53	1.94	-.351	-.619

Note. LC& CC=linguistically complex and cognitively Complex; LC &CS= linguistically complex and cognitively Simple; + TAR= with textual awareness-raising; - TAR= without textual awareness-raising

As shown in Table 1, the highest mean for the pretest of linguistically and cognitively complex texts was related to the Group 3 ($M = 13.36$, $SD = 2.14$) and the lowest mean score was related to the Group 4 ($M = 12.60$, $SD = 2.62$). In the case of the second pretest, using the texts which were linguistically complex and cognitively simple, the highest and lowest mean scores were related to the Group 1 ($M = 15.93$, $SD = 1.83$) and Group 2 ($M = 15.06$, $SD = 1.77$), respectively. In order to examine if the mean differences among the four groups were statistically significant, one-way analysis of variance was run. Before running one-way ANOVA, the homogeneity of the variances was checked out through computing Levene's test (See Table 2).

Table 2

Levene's Test for Examining the Homogeneity of Variances (Pretest Scores)

	Levene Statistic	df1	df2	Sig.
Pretest 1 (LC&CC)	1.046	3	116	.375
Pretest 2 (LC&CS)	.966	3	116	.411

Note. LC& CC=linguistically complex and cognitively Complex; LC &CS= linguistically complex and cognitively Simple

*$P < .05$

The findings of Levene's statistics showed that the group variances were similar in both pretests because the *p*-values were more than the set alpha level (.05).

When it comes to the normality assumption, the results of the Kolmogorov-Smirnov as shown in Table 3 were used.

Table 3

Kolmogorov-Smirnov Test

		Statistic	df	Sig.
Pretest 1 (LC&CC)	Group 1 : + TAR of LC & CC	.150	30	.082
	Group 2: + TAR of LC & CS	.139	30	.145
	Group 3: - TAR of LC & CC	.150	30	.085
	Group 4: - TAR of LC & CS	.167	30	.057
Pretest 2 (LC&CS)	Group 1 + TAR of LC & CC	.153	30	.073
	Group 2: + TAR of LC & CS	.168	30	.055
	Group 3: - TAR of LC & CC	.135	30	.173
	Group 4: -TAR of LC & CS	.169	30	.058

Note. LC& CC=linguistically complex and cognitively Complex; LC &CS= linguistically complex and cognitively Simple; + TAR= with textual awareness-raising; - TAR= without textual awareness-raising
*$P < .05$

The *p*-values for the Kolmogorov-Smirnov test were higher than alpha level (α = .05). Therefore, the assumption of normality was met. After establishing the main assumptions of parametric tests, two one-way ANOVAs were run on the results of the pretests (See Table 4).

Table 4

One-Way ANOVA for the Pre-Test Scores of Reading Comprehension

		Sum of Squares	df	Mean Square	F	Sig.
Pretest 1 (LC&CC)	Between Groups	9.633	3	3.211	.679	.566
	Within Groups	548.333	116	4.727		
	Total	557.967	119			
Pretest 2 (LC&CS)	Between Groups	11.467	3	3.822	1.011	.390
	Within Groups	438.400	116	3.779		
	Total	449.867	119			

Note. LC& CC=linguistically complex and cognitively Complex; LC &CS= linguistically complex and cognitively Simple

The significance values of the F test were more than alpha level (.05) for both pretests. This indicated that the four groups were homogeneous regarding their reading comprehension of texts with linguistic complexity and cognitive complexity/simplicity at the beginning of the study ($F_{pretest\ 1}(3, 116) = .679, p=.566 > .05$ and $F_{pretest\ 2}(3, 116) = 1.011, p=.390 > .05$).

The First Research Question

To see the effect of teaching method (with and without TAR) on EFL learners' reading comprehension, the descriptive statistics were carried out for the posttests 1 and 2 (See Table 5).

Table 5

Descriptive Statistics for the Posttest Scores

		N	Mean	SD	Skewness	Kurtosis
Posttest 1	Group 1: + TAR of LC & CC	30	15.80	1.84	-.038	-.973
(LC&CC)	Group 2: + TAR of LC & CS	30	15.36	2.10	-.070	-.938
	Group 3: - TAR of LC & CC	30	13.50	2.08	-.850	-.108
	Group 4: - TAR of LC & CS	30	12.70	2.46	-.679	-.029
	Total	120	14.34	2.47		
Posttest 2	Group 1: + TAR of LC & CC	30	18.06	1.52	-.429	-.787
(LC&CS)	Group 2: + TAR of LC & CS	30	17.16	1.57	-.181	-1.517
	Group 3: - TAR of LC & CC	30	15.73	1.94	-.103	-.385
	Group 4: - TAR of LC & CS	30	15.70	2.33	-.393	-.712
	Total	120	16.66	2.10		

Note. LC& CC=linguistically complex and cognitively Complex; LC &CS= linguistically complex and cognitively Simple; + TAR= with textual awareness-raising; - TAR= without textual awareness-raising

The normality of the scores in the posttests was established since Skewness values were within the range of ±2. The experimental groups had the highest mean scores and the control groups had the lowest mean scores. The highest mean score for the posttest 1 was related to the Group 1 ($M = 15.80, SD = 1.84$) in which linguistically and cognitively complex texts were introduced with TAR during the treatment period. The lowest mean score was related to the Group 4 ($M = 12.70, SD = 2.46$) in which linguistically complex and cognitively simple texts were introduced

without TAR. In the case of the second posttest, the highest mean score was related to the Group 1 (*M* = 18.06, *SD* = 1.52) and the lowest mean score was related to the Group 4 (*M* = 15.70, *SD* = 2.33). The multivariate test was run to inspect the effect of teaching method (± TAR) on learners' reading comprehension (Table 6).

Table 6

Multivariate Tests for the Posttest Scores

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Teaching method	Pillai's Trace	.357	8.41	6.00	232	.00	.179
	Wilks' Lambda	.666	8.64	6.00	230	.00	.184
	Hotelling's Trace	.467	8.86	6.00	228	.00	.189
	Roy's Largest Root	.373	14.42	3.00	116	.00	.272

*P < .05

The significance value of the main effect for the "Teaching method" was less than the determined alpha level (.05), indicating that the effect contributed to the model. Partial eta squared for "Teaching method," compared to Cohen's (1988 as cited in Cohen et al., 2007) criteria (.01= small, .06 = moderate, .14= large effect) suggested a large effect size (η^2= .184). About 18% of the variance in the reading comprehension was explained by the teaching method (See Figure 2).

Figure 2

The Groups' Marginal Mean Scores in the Posttests 1 And 2
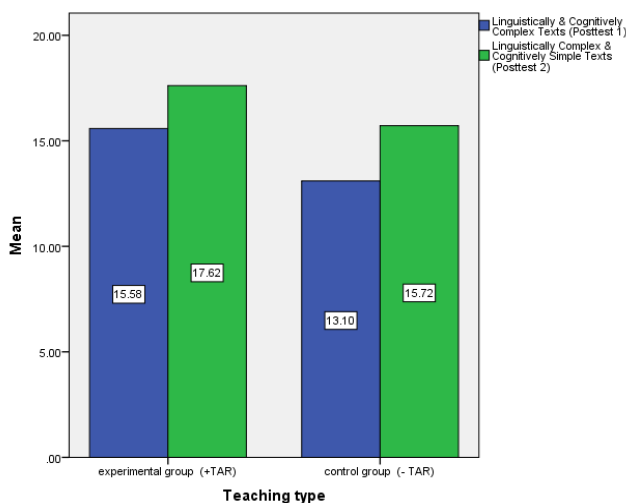
As Figure 1 reflects, textual awareness-raising groups did better than the control groups in both posttests. The mean scores of the experimental groups were higher than their counterparts in the control groups. The multivariate test showed the positive impact of textual awareness-raising on learners' reading comprehension.

The Second Research Question

In order to examine the main effect of text complexity (LC & CC vs. LC & CS) on EFL learners' comprehension of reading, the results of multivariate tests for text complexity are given in Table 7.

Table 7

Results of Multivariate Tests for the Effects of Text Complexity on Posttest Scores

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Text complexity	Pillai's trace	.021	1.23	2	115	.294	.021
	Wilks' lambda	.979	1.23	2	115	.294	.021
	Hotelling's trace	.022	1.23	2	115	.294	.021
	Roy's largest root	.022	1.23	2	115	.294	.021

Note. LC& CC=linguistically complex and cognitively Complex; LC &CS= linguistically complex and cognitively Simple

The Wilks' Lambda value (.979) was not significant (p=.294) with a small effect size (partial eta squared= .021) for the text complexity. This meant that only 2% of the test scores is explained by the degree of text complexity which is negligible. Therefore, the second question was answered negatively. Figure 3 also showed clearly the marginal means for the text complexity.

Figure 3

Experimental and Control Groups' Marginal Mean Scores in the Posttests 1 and 2
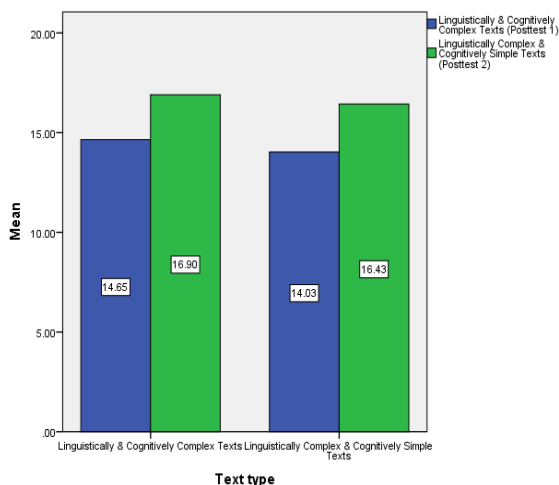
In Figure 3, no difference is seen in the effects of text complexity on the participants' mean scores in the posttests 1, $M_{LC\&CC}$= 14.65, $M_{LC\&CS}$= 14.03, and posttests 2, $M_{LC\&CC}$= 16.90, $M_{LC\&CS}$= 16.43.

The Third Research Question

In order to examine the effects of teaching method and text complexity on EFL learners' comprehension of reading texts, the results of interaction from the multivariate tests were used (See Table 8).

Table 8

Results of Multivariate Test for the Interaction Effect between Teaching Method and Text Complexity

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
teaching method * text complexity	Pillai's Trace	.087	5.499	2	115	.035	.087
	Wilks' Lambda	.913	5.499	2	115	.035	.087
	Hotelling's Trace	.096	5.499	2	115	.035	.087
	Roy's Largest Root	.096	5.499	2	115	.035	.087

Note. LC& CC=linguistically complex and cognitively Complex; LC &CS= linguistically complex and cognitively Simple

The interaction effect was statistically significant for the teaching method and text complexity (Wilks' Lambda= .913, p= .035 < .05) with a moderate effect size (partial eta squared= .087).

Discussion and Conclusion

The main concern of the present study was to explore the effects of two teaching methods (+TAR vs. –TAR) and two degrees of text complexity (LC & CC vs. LC & CS) on EFL upper-intermediate learners' reading comprehension. The results of two-way MANOVA revealed three points: (1) there was a significant main effect of teaching method, (2) there was no significant main effect of text complexity, and (3) there was a significant interaction effect of teaching method and text complexity.

Regarding the teaching method, it was found that textual awareness-raising group outperformed the control group in which no textual awareness-raising was used. In the experimental groups (+TAR), the teacher used different strategies including graphic organizer, teaching text structure and signal words, and thinking aloud to raise the learners' awareness of text structure. In contrast, for the control groups (-TAR), the teacher did not use any strategies or awareness-raising methods. In the case of text complexity, there was no significant difference between the effects of texts that were LC & CC and LC & CS on the learners' reading comprehension. Although cognitively complex texts appeared to be more demanding on their own for the language learners to comprehend than cognitively simple texts, providing language learners with textual awareness prepared them to infer the intended meaning and enabled them in responding to the cognitively challenging texts. On the other hand, cognitively simple texts required little in the way of analyzing and comprehending the passages. Therefore, learners in the two groups performed the same in the tests of reading. However, language learners who worked on cognitively complex texts needed more support to enhance their understanding of the texts, and the instruction on textual awareness-raising simplified the demand of cognitively complex texts. Considering the interaction effect, it was found that the effect of one teaching method was dependent on the kind of the text, that is, textual awareness-raising was more effective, in the students' reading comprehension, with the treatment of LC & CC text than the LC &

CS text in both tests and mainly in the posttest 2.

The findings disclosed that making students familiar with text structure helped them in different steps of reading comprehension. In fact, the students' familiarity with the text structure assisted them in actively constructing meaning from the reading passages through using their background knowledge and integrating the meanings inferred with their existing knowledge. The results are in accord with the literature of textual awareness-raising indicating the major role of familiarity of the students with the text structure in improving their comprehension ability (e.g., Aghasafari & Aziz Malayeri, 2015; Block & Pressley, 2002; Cain et al., 2004; Carrell, 1985; Chalak & Nasr Esfahani, 2012; Hall et al., 2005; Hebert et al., (2016); Meyer & Ray, 2011; Rabini et al., 2015; Roehling et al., 2017; Roller & Schreiner, 1985; Salmani-Nodoushan, 2010; Simonsen, 1996; Newman, 2007; Vahidi, 2008; Williams, 2018). Thus, the explicit instruction of a text by the use of certain strategies mentioned above leads to an increased comprehension (Williams, 2018). In line with these studies, this study highlighted the structure of informational/expository texts, through different strategies, to the students and the results verified that conscious and close attention to the structure of texts with different patterns and difficulty levels could enhance reading comprehension of EFL learners. The results indicate the positive role of engaging students with complex texts in their comprehension of both cognitively complex and cognitively simple texts. The results also verify the view that if the students encounter more challenging texts they gradually become strong readers and increase their reading comprehension (Lapp et al., 2015).

Williams et al. (2004) and Hall et al. (2005) believe that the numbers of instructional programs that have been designed for teaching expository text structure are very limited; therefore, there is a need for research to develop and assess instructional programs. Since applying expository text structure in text processing can improve readers' comprehension, recall, and retention of text (Mayer& Moreno, 1998), the information relating to the expository text structures and the effective use of these structures as a reading strategy need to be explicitly taught. Because teaching text structure facilitates memory for textbook information and makes the reader ready to form a mental representation of the information and to see the logical relationships offered by the authors (Ogle & Blachowicz, 2002).

The study implies different useful findings for implementation in the EFL reading classroom. The students should be encouraged to differentiate between different types of texts, especially, expository texts that are mostly encountered at the university level. For this reason, the teacher can explicitly teach and highlight the structure of the texts with different patterns. This can be practiced in different ways such as (a) analysis of the text for signal words and phrases, (b) use of graphic organizers, (c) synthesis of scrambled sentences to form a complete text, and (d) completion of the text with missing signal words and phrases. Therefore, awareness-raising about text structure can be applied as an effective strategy to improve readers' comprehension and recall of the text (Namjoo & Marzban, 2014; Pearson & Duke, 2002; Simonsen, 1996) because when the learners understand how a text is structured they can create a mental representation of the text information and find relationships between different ideas of the author (Hall et al., 2005; Ogle & Blachowicz, 2002).

In this regard, Pearson and Gallagher (1983) note that while students may develop their reading comprehension over time without receiving instruction on implementing strategies, training on strategies may help them enhance their reading comprehension faster. Almasi (2003) advocates provision of explicit strategy instruction and indicates that it is difficult for learners to discover comprehension strategies by themselves. Thus, explicitly instructing a text by the use of certain strategies can help students learn how to analyze the text and enhance their comprehension (Presley & McCormick, 1995). Based on the findings of the study, the informational texts can be introduced to the students at different levels of complexity. The texts can be linguistically or cognitively complex or both linguistically and cognitively complex to challenge the students' cognitive capacity since it is believed that providing the students with increasingly complex and challenging texts enhances their comprehension ability (Lapp et al., 2015).

The results of the study can be useful for teachers since they can focus on awareness-raising strategies as the most proficient strategies to enhance EFL learners' reading ability. It can also be useful for the students because being aware of the strategies and using them when reading texts enhance their knowledge of text structure, which can later be used as schemas in their future readings. It has been indicated that good readers are aware of text structures and they are strategic readers

(Block, 1992; Sheorey & Mokhtari, 2001).

Several suggestions are proposed for future research studies. This study was conducted on upper-intermediate level students; future studies can be conducted on other levels. The study did not consider gender as a variable, future studies could replicate the study across gender. The text awareness-raising was conducted on expository texts; future research can be done on different types of texts including argumentative and narrative texts.

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Abstracts
in Persian

ایجاد فضای یادگیری از طریق بازخورد اصلاحی
در کلاس‌های درس همزمان برخط انگلیسی
به‌عنوان زبان خارجی

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چکیده

این مقاله مطالعه‌ای را در مورد چگونگی استفاده معلمـان از تسـهیلات بـرخط بـرای ایجـاد فضـاهای یـادگیری و به‌حداکثررساندن فرصت‌های یادگیری زبان ارائه می‌دهد. در حالی که پژوهش‌های پیشین اهمیت فضای یـادگیری را در بهبود نتایج یادگیری زبان برجسته کرده‌اند، بررسی‌های محدودی به این پرسش که چگونه معلمان می‌تواننـد از تسهیلات برخط و راهبردهای تعاملی برای ایجاد فضاهای یادگیری در توالی‌های بازخورد اصلاحی استفاده کنند پرداخته‌اند. برای کاهش این خلأ پژوهشی، این مطالعه از بازخورد اصلاحی را در کلاس‌های درس انگلیسی برخط همزمان به‌عنوان زبان خارجی توسط ده معلم مورد بررسی قـرار داد. ایـن پـژوهش بـا اسـتفاده از تحلیـل مکالمه، هفتاد و پنج ساعت مشاهدات ویدئویی ضبط شده را بـرای کشـف ابزارهـای بـرخط و راهبردهـای تعامـل کلامی مورد ِ استفاده توسط معلمان برای ایجاد فضاهای یادگیری تحلیل کرد. یافتـه‌هـا نشـان داد کـه معلمـان از جعبه‌های گفت‌وگو، دفترچه‌های یادداشت برخط و اتاق‌های فراخوان بـه‌عنـوان تسـهیلات بـرخط بـرای تسـهیل فرصت‌های یادگیری زبان استفاده می‌کنند. یافته‌های این پـژوهش مـی‌توانـد بـه معلمـان زبـان انگلیسـی بینشـی ارزشمندی در مورد بهترین شیوه‌ها برای استفاده از ابزارهای آموزشی برخط همزمان و منابع تعـاملی بـرای ایجـاد فرصت‌های بهتر یادگیری زبان برای زبان‌آموزان ارائه دهد.

کلیدواژه‌ها: فضای یادگیری، کلاس درس انگلیسی به‌عنوان زبان خارجی همزمان، زبان‌آموزان انگلیسی بـه‌عنـوان زبان خارجی، بازخورد اصلاحی، فرصت‌های یادگیری، تسهیلات برخط

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ارزشیابی پویا به کمک رایانه به صورت همزمان و غیرهمزمان بر مهارت‌های نوشتاری سطوح بالا و پایین

کبری توسلی[*۱]

مریم رحمت اللهی[۲]

چکیده

این پژوهش می‌کوشد تأثیر متفاوت ارزشیابی پویا به‌کمک رایانه به‌صورت همزمان و غیرهمزمان بـر مهارت‌هـای نوشتاری مرتبه بالاتر و پایین‌تر فراگیران زبان انگلیسی را بررسی کند. در این پژوهش نیمه‌تجربـی کـه بـه شـکل پیش‌آزمون-پس‌آزمون انجام گرفت، ۶۰ دانشجوی دختر و پسر ایرانی مشغول به تحصیل در رشته زبان انگلیسـی به روش نمونه‌گیری دردسترس انتخاب و به‌طور تصادفی در دو گروه تجربی قرار گرفتند. زبان‌آموزان این دو گروه، به مدت ۱۲ هفته، رویکردهای مربوط به ارزشیابی پویا را تجربه کردند و برای نوشتارشـان بـه‌صورت همزمـان یـا غیرهمزمان آموزش دریافت کردند. مهارت‌های نوشتاری مرتبه بالاتر و پایین‌تر آن‌ها توسط پژوهشگران بـر اسـاس معیار نمره‌دهی گروه آموزش نوشتار ویرجینیای غربی (۲۰۱۱) مورد بررسی قرار گرفت. یافته‌های تحلیل واریـانس چندگانه نشان داد که هر دو گروه در پس‌آزمون نوشتاری در همۀ مهارت‌های نوشتاری مرتبـه بـالاتر و پـایین‌تـر به‌طور چشمگیری پیشرفت داشتند. با این وجود، هیچ تفاوت بین‌گروهی قابـلِ‌تـوجهی در مهارت‌هـای نوشتاری تمرین‌شده در یافته‌های پس‌آزمون یافت نشد. همچنین، ۱۰ شرکت‌کننده به‌طور تصادفی از هر گروه انتخاب شدند تا برداشت‌ها و نگرش‌هایشان نسبت به مراحل ارزشیابی پویا به کمک رایانه بررسی شود. بررسی پاسخ‌ها نـشان داد که اعضای گروه ارزشیابی پویا به‌کمک رایانه به‌صورت غیرهمزمان نگرش مثبت بیشتری از نوشتن، سـطح نگرانی کمتر، و ارتباط نزدیک‌تری با معلم شان داشتند. یافته‌های این پژوهش تأثیر بالقوه ارزشیابی پویـا بـه‌کمـک رایانـه به‌صورت همزمان و غیرهمزمان برای تقویت مهارت‌های نوشتاری مرتبه بالاتر و پایین‌تر زبـان‌آمـوزان را برجـسته می‌سازد.

کلیدواژه‌ها: غیرهمزمان، ارزشیابی پویا به‌کمک رایانه، مهارت‌های نوشتاری مرتبه بـالاتر، مهـارت‌هـای نوشتاری مرتبه پایین‌تر، همزمان

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دونالد ترامپ و مخالفانش در بازتوئیت‌های مبارزات انتخاباتی ریاست جمهوری امریکا در سال۲۰۱۶: مطالعه‌ای با رویکرد تحلیل انتقادی گفتمان

ابراهیم دوزنده[۱]

محمدحسین شرف‌زاده*[۲]

آمنه زارع[۳]

چکیده

۱۰۶ توئیت دستچین‌شدۀ حامیان دونالد ترامپ که در طول مبارزات انتخاباتی ریاست جمهوری ۲۰۱۶، از روز قبل از اعلام نامزدی یعنی ۱۵ ژوئن ۲۰۱۵ تا روز به قدرت‌رسیدن یعنی ۲۰ ژانویه ۲۰۱۷ بازنشر شده بودند با رویکرد فرکلاف به تحلیل انتقادی گفتمان مورد پژوهش قرار گرفت. هدف از انجام پژوهش از این قرار بود: ۱) شناسایی ویژگی‌های زبانی، گفتمانی و اجتماعی خاص به‌کاررفته در بازتوییت‌های دونالد ترامپ؛ (۲) بازنمایی اینکه چگونه دونالد ترامپ در بازنشر توئیت‌هایش معرفی شده است ۳)؛ و بررسی اینکه چگونه مخالفان دونالد ترامپ آن را در بازنشر توییت‌ها نشان داده‌اند. یافته‌ها نشان داد که اعتبار ریتوییت‌های ترامپ زیر سؤال رفته بود زیرا حساب‌های توییتری که او از آن‌ها بازتوییت می‌کرد در توییتر وجود نداشتند. افزون بر این، وی اغلب به نمایش ما در مقابل آن‌ها پرداخته بود؛ یعنی ویژگی‌های خداگونه به او نسبت داده می‌شد در حالی که مخالفانش ضعیف به تصویر کشیده می‌شدند. همچنین، او بیشتر بر خصوصیات شخصی، محبوبیت و موفقیت مالی‌اش متمرکز بود. از نظر گفتمانی، گفتمان او ساده‌انگارانه، پوپولیستی، غیررسمی، تکراری و سرشار از واژه‌های افراطی بود که ایدئولوژی‌های ملی‌گرایانه و اقتصادمحور را توصیف می‌کرد. به‌طورکلی، این گفتمان برای مشروعیت‌بخشیدن به ترامپ به‌عنوان نامزد اصلی و مشروعیت‌زدایی از مخالفان و بر پایه نارضایتی مردم از سیاستمداران حرفه‌ای تلاش می‌کرد. این پژوهش نشان داد که حضور ترامپ به‌عنوان یک سیاستمدار مشهور به‌دلیل نیاز جامعه به شخصیتی بدیع به‌عنوان فردی رها از سیاست سنتی بوده و همزمان زبان او نیز نظم اجتماعی موجود در قلمرو سیاست امریکا را متحول کرده‌است.

کلیدواژه‌ها: تحلیل گفتمان انتقادی، بازتوییت‌های ترامپ، نمایش نامزدی ترامپ، مشروعیت نامزدی ترامپ، گفتمان توییتری

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هدایت پیوستار: بررسی اهمیت کثرت‌گرایی
در مطالعۀ عدم‌قطعیت در ترجمه

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چکیده

در سال‌های اخیر، موضوع عدم‌قطعیت به مبحثی مهم در مطالعات ترجمه تبدیل شده است کـه نمایـانگر افـزایش اهمیت روزافزون این موضوع در زمینه‌های مختلفی همچون سیاست، اقتـصاد و پزشـکی اسـت. بـا ایـن حـال، در کاربرد نظریه‌های عدم‌قطعیت در مطالعات ترجمه مشکلی وجود دارد، بدین‌صورت که معمولاً فقط از یـک نظریـۀ عدم‌قطعیت برای پیشبرد استدلالی علیه دیدگاهی خاص استفاده می‌شود و تأثیر ترکیب نظریـه‌هـای مختلـف بـر درک دقیق‌تر موضوع مورد بررسی نادیده گرفته می‌شود. این مقاله در مورد اهمیـت ترکیـب نظریـه‌هـای مختلـف عدم‌قطعیت در قالب توجیهی توانمند بحث می‌کند که می‌تواند به‌عنوان مدلی برای تحلیل و پژوهش‌های علمی در روش‌ها و نظام‌های ترجمه استفاده شود. با بررسی مدل‌های ترجمۀ مبتنـی بـر پیوسـتار، مـدل‌هـایی کـه نـشان می‌دهند ترجمه یک فرآیند دو گزینه ای نیست، بلکه پیوستاری از احتمالات است، این پژوهش نشان می‌دهد کـه چگونه رویکرد کثرت‌گرا نسبت به موضوع عدم‌قطعیت بینشی در اختیار ما قرار می‌دهد که هیچ نظریه‌ای به تنهایی قادر به ارائۀ آن نیست. این مقاله با ارائه نمونه‌هایی، عمدتاً از حوزه‌های ترجمه ادبی و دیـداری-شـنیداری، نـشان می‌دهد که چگونه رویکرد کثرت‌گرا به پارادایم عدم‌قطعیت می‌تواند استدلال‌های علیه مدل‌های مبتنی بر پیوستار را تقویت کند و به درک بهتر فرایند ترجمه کمک کند.

کلیدواژه‌ها: پیوستار، دورستگی، منطق فازی، عدم‌قطعیت، کثرت‌گرایی

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پیچیدگی نحوی در نوشتار دانشگاهی مبتدی و متخصص در زبان دوم: نقش بسط و تنوع نحوی

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چکیده

پیچیدگی نحوی یک ساختار مهم برای سنجش مهارت نوشتاری در زبان دوم است. پژوهش‌های پیشین، از جملـه بایبر و همکاران (۲۰۱۶) و دونگ و همکاران (۲۰۲۳)، تا اندازۀ زیادی بر بسط نحوی تمرکز کرده اند و تنوع نحوی را نادیده گرفته‌اند. این مطالعه چگونگی ارتباط مهارت نوشتاری دانشگاهی با پیچیدگی نحوی را از طریـق ارزیـابی تنوع و بسط ساختار جمله بررسی می‌کند. به‌همین‌منظور در این مطالعه پیکره‌ای تهیه شد که مجموعه‌ای از بخش‌های چکیده پایان‌نامه‌های کارشناسی ارشد، رساله‌های دکتری و مقاله‌های پژوهشی در زبان‌شناسی کاربردی نویسندگان دانشگاهی ایرانی را در خود جای می‌داد. با استفاده از ابزارهای خودکار تجزیه و تحلیل متن (استنفورد Core NLP و تحلیلگر L2 SC)، بسط نحوی و تنوع نحوی متون نوشـته‌شـده توسط سـه مجموعـه جداگانـه از نویسندگان دانشگاهی مورد سنجش قرار گرفت. نتایج نشان داد که معیارهای عبارتی و کلی بسط نحـوی بـه‌طـور معناداری مهارت نوشتاری دانشگاهی را در نویسندگان مبتدی و متخصص پیش‌بینی می‌کند. یافته‌های مرحله دوم پژوهش نشان داد که گنجاندن معیار تنوع نحوی به‌طور چشمگیری قدرت پیش‌بینی مـدل را افـزایش مـی‌دهـد. مفاهیم آموزشی یافته‌ها برای آموزش نگارش دانشگاهی از طریق فعالیت‌هـای افـزایش آگـاهی بـرای نویـسندگان مبتدی و متخصص مورد بحث قرار گرفته‌است.

کلیدواژه‌ها: نوشتار دانشگاهی، نوشتار متخصص و مبتدی، تنوع نحوی، بسط نحوی، پیچیدگی نحوی

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به‌کارگیری بازخورد همتایان در متون دانشگاهی

به‌وسیله دانشجویان کارشناسی ارشد آموزش زبان انگلیسی

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چکیده

بررسی پیشینه پژوهش نشان می‌دهد که مشارکت دانشجویان تحصیلات تکمیلی که به زبان دوم مـی‌نویسـند در فعالیت‌های بازخورد بر متون دانشگاهی به‌طور جدی نادیده گرفته شده‌است. به‌منظور پُرکردن بخشی از ایـن خـلأ پژوهشی، مطالعه حاضر مـشارکت ۵۳ دانـشجوی کارشناسی ارشد کـه متـون دانشگاهی خـود را بـه زبان دوم می‌نویسند را در فعالیت بـازخورد همتایان مـورد بررسـی قـرار داد. در ایـن پـژوهش از فنـاوری ردیـابی چـشم، مصاحبه‌های یادآوری برانگیخته و تحلیل محتوا استفاده شد تا به پرسش‌های پژوهش پاسخ داده شود. در پژوهش حاضر، شرکت‌کنندگان بر متون پیشنهادۀ پایان‌نامۀ همکلاسی‌های خود بازخورد بـا واسطۀ رایانـه ارائـه کردنـد و اعمال بازخوردها را در حالی که حرکات چشم آن‌ها با یک نرم‌افزار غیرمداخله‌گر ردیابی می‌شد انجام دادند. سپس از ویدئوهای ردیـابی چشم بـه‌عنوان محرک بـرای اسـتخراج دلایـل عـدم اسـتفاده از بـازخورد شـرکت‌کننـدگان در مصاحبۀ یادآوری برانگیخته استفاده شد. افزون بر این، محتوای متون اول و بـازبینی‌شـده شـرکت‌کننـدگان مـورد تحلیل قرار گرفت و راهبردهـای اعمـال بـازخورد آن‌هـا شناسـایی شـد. یافتـه‌هـای ایـن پـژوهش نشان داد کـه شرکت‌کنندگان بیش از دوسوم نظرات را اعمال کردند؛ با این وجود، بازخورد مفصل توجیه شده بیـش از بـازخورد مفصل و بازخورد کلی اعمال شدند. شرکت‌کنندگان همچنین بازخورد توجیه شده را با دقـت بیـشتری نسبت بـه دیگر انواع بازخوردها اعمال کردند. در نهایت، یافته‌ها نشان داد که چهار مشخصۀ بـازخورد (بـیش از انـدازۀ کلـی، نامفهوم، غیرقابل اجرا و معیوب) بر اعمال بازخورد دانشجویان کارشناسی ارشد زبان انگلیسی تأثیر منفی گذاشتند.

کلیدواژه‌ها: بازخورد همتایان، مشارکت، اعمال بازخورد، نگارش دانشگاهی، نگارش به زبان انگلیسی

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تاثیر افزایش آگاهی متنی بر درک مطلب خواندن دانشجویان کارشناسی زبان انگلیسی به عنوان زبان خارجی: تمرکز بر درجات پیچیدگی متن

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چکیده

هدف این مطالعه بررسی اثر افزایش آگاهی از متون با دو درجه پیچیـده (زبـانی و شـناختی پیچیـده در مقابـل زبانی پیچیده و شناختی ساده) بر درک مطلب دانشجوان ایرانی زبان انگلیسـی بـود. بـه دلیـل وجـود متغیرهـای مستقل چندگانه (روش آموزش و پیچیدگی متن)، یک طرح آزمایشی شبه‌تجربـی بـا اسـتفاده از پیش‌آزمـون-درمانی- پس‌آزمون استفاده شد. در این رابطه، ۱۲۰ دانشجو در چهار کلاس یکسان نمونه مطالعه را تشکیل دادند. آن‌ها به طور تصادفی به دو گروه آزمایشی و دو گروه کنترل تقسیم شدند. در یک گروه آزمایشی، آگاهی از متـون زبانی پیچیده و شناختی افزایش یافت و در دیگری آگاهی از متون زبانی پیچیده و شناختی ساده افزایش یافت و اعمال شد. در گروه‌های کنترل، همان متون بدون افزایش آگاهی از متون استفاده شد. یافته‌های تحلیـل واریـانس چندمتغیره دوطرفه نشان داد افزایش آگاهی متن تأثیر اصلی معناداری بـر روی هـر دو نـوع مـتن داشـت. نتـایج همچنین اثر تعاملی معنادار از روش آموزش و پیچیدگی متن را نشان داد. این بـدان معناسـت کـه تـأثیر افـزایش آگاهی از متن زمانی‌که متن زبانی و شناختی پیچیده بود، بیشتر بود و زمانی‌کـه مـتن زبـانی پیچیـده و شـناختی ساده بود، کمتر بود. یافته‌ها می‌تواند برای معلمان، دانشجوان، طراحان متون درسی و نویسندگان کتاب‌های درسی مفید باشد.

کلیدواژه‌ها: متون پیچیده شناختی، متون ساده شناختی، متون پیچیده زبانی، افزایش آگاهی متنی، ساختار متن

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