The impact of implementing visual grammar on learning participle adjectives by EFL learners

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Abstract

Purpose – This paper aims to examine the impact of using visual grammar on learning participle adjectives by EFL (English as a Foreign Language) learners.

Design/methodology/approach – The study follows an experimental design in which two groups participated in the study. The experimental group used visual grammar tools in learning participle adjectives. The control group was taught the participle adjectives in a traditional way. A pre–post test was designed and presented to the participants in the two groups.

Findings – The results showed that the experimental group made statistically significant improvements in their performance in using participle adjectives due to the use of visual grammar tools.

Research limitations/implications – The current study is only limited to the effect of visual images on a particular grammatical issue, that is participle adjectives. Besides, the study does not include the gender variable; there may be variation in the results depending on the variable of gender.

Practical implications – The present study can provide language instructors with some guidelines on how to incorporate visual grammar applications in teaching grammar aspects. Learners can also be encouraged to have a better understanding of English grammar, using the different connotations of visual images.

Social implications – Using visual images in teaching grammar will increase the learners' ability to think beyond their classroom environment. They can use this experience whenever they face visual images in different societal activities.

Originality/value – This paper is one of the initial attempts to investigate the effect of using visual grammar on learning participle adjectives.

Keywords Visual grammar, Participle adjective, Technology, 3D application, Learning grammar, Image

Paper type Research paper

Introduction

Learning English grammar is not an easy task for many learners. Language learners face many difficulties in mastering grammar rules. This poses a burden for language instructors to adopt different strategies and tools to teach grammar rules. One of the strategies of teaching and learning grammar is to use new technologies. The integration of technology in learning languages has become a buzzword in many institutions. Using visual grammar in teaching and learning grammar has been examined in several studies (e.g. Antonova *et al.*, 2019; Forrest, 2017; Guo and Feng, 2017; Latham, 2021; Novawan, 2011; Wang, 2020; Wilson and Kam, 2013; Winny Gunarti, 2018).

However, no single study, as far as the authors know, examined the effect of visual grammar on learning adjective participles. Thus, the current study aims at examining how visual grammar can be a useful tool to help English language learners learn adjective participles well.

Review of the literature

There is no doubt that grammar is one of the most important pillars of any language. Second and foreign language learners usually focus on learning the grammar of the target language more than anything else. This is quite justified, given the fact that it is deeply rooted in their mind, that learning any language starts by learning its grammar. Many researchers think that learning grammar is more important than communication, claiming that effective communication cannot take place without having a good command of grammar. This claim has been emphasized by Ferreira and Engelhardt (2006) who stressed that English language learners cannot communicate and express their ideas and thoughts without learning syntax. According to them, "any model of language production must explain how speakers create utterances optimally given constraints on processing capacity, while at the same time respecting grammatical constraints, at least most of the time" (p. 61). Thus, there are some constraints that should be maintained while trying to create correct meaningful sentences, and that these constraints are grammatical that cannot be skipped or overtaken in the process of producing correct utterances. The relationship between grammar and communication is undebatable. No one can deny the fact that effective communication is based on good command over grammar. This issue has highly been stressed by Canale and Swain (1980) who stated that grammatical competence is an integral part of communicative competence. It is this integration that leads to a good discourse whether written or spoken. It is already confirmed that a person who knows how to use the grammar and vocabulary of the target language can reach his communicative goals successfully. However, having a good command of grammar does not necessarily mean that a second language learner is not supposed to commit some grammatical errors in the target language. Errors can still be committed but not to the extent that communication is spoilt by these errors.

William (2006, p. 53) discussed that grammar deals with the structure and analysis of sentences. That is to say, grammar must compact language with two levels: form and function. Sentences are composed of single words, and these words fall into particular grammatical categories, and this is their form. Language exists primarily as sentences, not only as single words, and as soon as we put words into sentences to operate together in various ways which lead us to function. As a result, we can say the grammar of a language represents the characteristics of rules in which forms can transform the grammatical expressions and can be embedded within sentences. When grammar rules are used uncarefully, it would be violated, and English communication may be suffered.

Hammer (2002, p. 15) clarified that learners of English have many problems with grammar rules. That is to say, they know the grammatical rules of the English language subconsciously to generate an infinite number of sentences. While some grammatical rules are fairly straightforward, others are extremely difficult, and some grammatical rules seem to have been escaped accurate descriptions so far. Thus, nonfinite verb forms are one of the major problems in which forms can trigger the grammatical behavior of other forms around them. Furthermore, learners of English lack knowledge of nonfinite verb forms, i.e. they make an error. They often use deviant forms of nonfinite verb forms. Many verbs can be followed by one or more than one verb forms. So, the problem is that most of the learners of English cannot recognize which form is appropriate to be used. Nonfinite verb forms occur in long and complex sentences. Learners of English usually do not comprehend the structure of the sentences, or they can comprehend the structure but have difficulty locating nonfinite verb forms. Learning nonfinite verb forms are extremely important because they can help learners of English overcome these problems by systematically drawing their attention to the

construction or formation of these forms, and to express themselves more concisely and fluently. Learners of English simply seek rules to help them decide where to put nonfinite verb forms within sentences. Of course, crucial decisions about sentences' position depend on context and emphasis, and often need to be constructed sentence by sentence.

Grammar and the field of error analysis

As a matter of fact, this field, i.e. analyzing errors committed by second and foreign language learners while learning English as a second language has been the scope of many studies. Abumathkour (2004) discussed errors committed by Jordanian students in using English prepositions. The study revealed many significant points that are worth noticing. The study analyzed the errors made by 47 preparatory school students in using the prepositions of (*at, for, in, on, since and ø*). The results showed that these students face a lot of difficulty in using these prepositions. The study found that the preposition *'since'* was the easiest to use compared with other prepositions. Another study was conducted by Bin Khayyal (2014) in which he investigated and analyzed the errors committed by Libyan secondary school students in using English prepositions of time. The study showed that most of the frequent errors were in using "at" "in" and "on". The results also revealed that most of the students found difficulty in selecting the correct prepositions. The study confirmed that the main reason for committing errors was first language interference. In other words, students learn patterns that are drastically different from the patterns of their native languages. Therefore, they resort to translating the meaning literally before they form English patterns. Garrido and Rosado Romero (2012) carried out a significant study on the errors committed by first-year university students in using English tenses and aspects. The study was conducted on a group of 48 native speakers of Spanish university students studying to become EFL teachers. The results of this study revealed that students faced problems in using these two essential components of grammar. The study further showed that the main problem was specifically matching tenses and aspects to different contexts. The study also attempted to give some solutions for this problem and provide a remedial program to help students overcome this problem.

Participle adjectives

The term "participle adjectives" refers to the type of adjectives that describe nouns or pronouns. So, they are descriptive in nature and function. Participle adjectives (present or past) can be used as adjectives to modify a noun or noun phrase. They can be placed before or after a noun. They are called premodifiers (before a noun) and postmodifiers (after a noun), respectively. This type of adjectives can be recognized by their endings, which are either *-ing or -ed.* There are two types of participle adjectives, present participle adjectives and past participle adjectives. The present participle adjectives end in *-ing* whereas the past type ends in *ed.* Grammatically speaking, when a present participle is used as an adjective it usually donates the characteristics of the modified noun rather than its verbal action, and it has the meaning of active voice. A past participle when used as an adjective indicates the state of the modified noun with passive meaning. In the following example, the difference between the present participle adjective and past participle adjective is quite obvious, *"The exploiting class is rich while the exploited class is poor".* In the above example, *the exploiting class* means the class exploits people (active meaning), while the exploited class means the class is exploited by others (passive meaning). As far as transitivity is concerned, the transitive present participle is active, while the transitive past participle is passive in its adjective use, in meaning. They are not concerned with tenses at all, but its time reference may be to the present, to the past or to the future, and must be interpreted according to the context.

In present-time English use, gerund and present participle are formed in the same way, i.e. from one and the same linguistic form – the -ing. Generally speaking, there is nothing strange

about this form being able to perform the same grammatical functions as a noun or an adjective in some of its uses, nor is it surprising that it should be able to fulfill other functions as well (Duffley, 2006). The term – gerund is included in the present participle, so the term – gerund-participle, which is adopted from *The Cambridge Grammar of the English Language* (Huddleston and Pullum, 2002), is also used. An English gerund participle is a stable form, but it does not have a stable meaning (Duffley, 2006). Its meaning can be inferred from the context. *H*owever, with respect to the *-ed* ending participle adjectives, we may find some adjectives which do not end with *-ed* and yet are classified as participle adjectives, for example, the word *understood* and *known*.

Participial adjectives usually function like any other adjective. In other words, their function is to simply describe a noun or pronoun. They might come from a verb form, or they might merely imitate the structure of a verb, but they always work as descriptive adjectives. Participle adjectives form a very large portion of all of the adjectives in the English language. They enable people to be more accurate when describing people, places, things and experiences when speaking or writing. Participial adjectives do not just come in one form. You can modify them to increase or decrease their intensity and use them to compare different nouns. This can be achieved by using intensifiers like so, very, extremely, more and less. It can also be done by forming comparative and superlative forms. Some participial adjectives are created by putting a noun together with a participle to create a compound word that functions as a participial adjective, for example, *drug-induced*, *energy-saving* etc.

Visual grammar

As stated earlier, the word 'grammar' in English is a general word. Batstone (1994) indicated that grammar cannot be restricted to the rules of syntax and the structure of the English sentence. It cannot be separated from vocabulary, for example, and it has an essential influence on reading and writing. Moreover, it may also cover the rules of phonetics and phonology, morphology and even semantics. All these branches of linguistics aim to achieve one goal, the development of learners' communication ability. Similarly, visual grammar aims to achieve the same goal, but by using visuals. The idea of 'visual grammar' arises from the general idea of the "Semiotic Theory". Callow (2013) pointed out that the semiotic theory focused on using signs in language learning; signs include not only written or spoken words but may also have visual images, musical sounds or even gestures. To outline visual text reading based on visual grammar, Moerdisuroso (2014) defined "visual grammar" as the process of communicating different messages through visual elements. Examples of visual elements used to convey meanings are photos, diagrams, maps, etc. This can be done by combining these visual elements in visual statements to communicate meaning.

In the introduction of their book, Kress and van Leeuwen (2021, p. 4) defined visual grammar as "a quite general grammar of contemporary visual design in "Western" cultures, an account of the explicit and implicit knowledge and practices around a resource, consisting of the elements and rules underlying a culture-specific form of visual communication". It has been demonstrated that the visual grammar theory looks at images and other visual modes as a means that can be used in forming texts, delivering a certain concept, communicating a particular idea and drawing relations between the three elements: the producer, the viewer and the represented object (Friedman and Ron, 2017). Three main structures of this theory can be identified: representational structures, narrative structures and conceptual structures. Representational structures are concerned with the possible ways of expressing meanings; narrative structures tackle the description of an event or a job done by a particular person; conceptual structures deal with how to classify different concepts and how to draw relations between them (Latham, 2021; Ping, 2018).

Despite the similarity between linguistic grammar and visual grammar, visual grammar still has some distinctive features. Cavanagh (2021) reported that visual images have four important features: productivity, which refers to the creation of unbounded and new

combinations and descriptions of images; arbitrariness, which represents the absence of connection between the form of the symbol and its meaning; displacement, which reflects the ability of visual images to describe even past events; recursion, which tells us about the possibility of describing one component in the form of another of the same kind in one visual image. In the first chapter of his book, Callow (2013) claims that visual images have a very important role in our life; they provide enjoyment to the viewers; they can be integrated into different fields of knowledge; they are used in different forms, such as advertisements, textbooks, games, multimedia videos, etc.

In the previous two decades, a considerable amount of literature has been published on the effect of integrating visual images into grammar learning. Novawan (2011) showed that visuals had a positive effect in developing the various methods of teaching grammar, including inductive, consciousness raising and communicative methods. Besides, using visuals increases the learners' interest in grammar learning, helps learners understand certain grammatical rules and facilitates complex ones, and allows them to keep these rules in their minds for a longer time. In their investigation of the best techniques of teaching English grammar, Antonova *et al.* (2019) adopted the presentation of grammatical rules in the form of electronic versions with visuals; they justify this by saying that such visuals help learners to construct relationships between the fragments of the grammatical rules. In another major study, Wilson and Kam (2013) attempted to investigate whether the structure of the English phrase can be acquired in a nonlinguistic system, rather than being only transferred in linguistic systems. They assured that the property of phrase relatedness in visual grammar made it preferable to the traditional way of phrase structure acquisition. Considering visual grammar, participants were able to use "phrase-relevant pairs" or the relationships between the categories of objects in their acquisition of the English phrase.

Numerous studies have used the concept of 'visual grammar' for distinct purposes. Forrest (2017) investigated the use of visual grammar to analyze images in a wordless picture book. She concluded that the grammar of visual design forms a good aid that guides learners to the best way to read images. Latham (2021) utilized the visual grammar theory to examine '*Speak: The Graphic Novel*', one of Anderson & Carroll's works in which they mixed words with pictures, talking about a tragic story of a girl in high school. The study revealed that the visual grammar of the book was successful in conveying meanings that cannot be conveyed by words. Wang (2020) and Winny Gunarti (2018) analyzed advertisements from the perspective of visual grammar; the former focused on mobile ads and the latter on a stop smoking television ad which was a part of the stop smoking public service announcement of the Indonesian Ministry of Health. Furthermore, analysis of the social media political advertising messages in the 2016 US election and analysis of the advertisements of the 2014 Brazil World Cup, both based on the visual grammar theory, were carried out by Friedman and Ron (2017) and Guo and Feng (2017), respectively. Collectively, these four studies outline a crucial role of the visual grammar theory in making these advertisements effective, convincing and attractive.

Noticing hypothesis
In language learning, several sources can be used to enhance learning the target language. These sources are referred to as input. In order to learn, language learners need to notice the input. One of the prominent theories that explain this notion is the noticing hypothesis proposed by Schmidt. Schmidt's (1990, 1995) noticing hypothesis stated that learners need to attend to, and consciously notice some particular form in the input. According to Schmidt, attention controls access to awareness, and it is responsible for conscious noticing, which is the necessary condition for the conversion of input to intake (Schmidt, 1993, p. 209). In other words, only input that has been noticed can become intake. Noticing maintains that learners must first notice grammatical features of language in order to learn those (Schmidt, 2010).

Attention to input is an essential variable for language learning. Many studies in second language acquisition have provided empirical evidence for its role in second language development (e.g. Mackey, 2006; Rosa and Leow, 2004). In addition, Gass (1997) pointed out that careful attention is at the core of the acquisition process.

Using technology can help students notice the input clearly. Technology can enhance and facilitate the provision of rich, comprehensible L2 input. It can also increase the possibility of that input being processed and integrated more effectively (Zhao, 2003). There are some studies that were conducted to examine the effect of using technology to boost noticing. These studies covered different areas of language learning such as error correction (Cowan et al., 2003) and corrective feedback with the help of recasts (Gurzynski-Weiss and Baralt, 2014; Lai et al., 2009). Also, these studies examined the influence on learners' vocabulary development (Yanguas, 2012), listening comprehension (Levak and Son, 2016), oral intelligibility and pronunciation development (Lee, 2007). The scope of these studies was about vocabulary learning and writing. Using technology to enhance noticing of grammar rules is not fully examined. Therefore, this study is an attempt to address this issue by examining the impact of using technology to foster noticing for learning adjective participles.

In view of all that has been mentioned so far, one may suppose that visual grammar has a positive effect on teaching English grammar. Therefore, the research question for the current study can be stated as follows:

Is there any significant difference between the learners who learned using visual grammar and the learners who used the traditional approach in learning adjective participles?

Method
Research design
The study follows an experimental design of research. The participants in the experimental group were taught using 3D Prezi presentation software. The participants in the control group were taught in a traditional way. The study utilized pre- and post-tests to measure the participants' performance before and after the treatment.

Participants
The experiment was conducted at the University of XX, where the students learn English as a foreign language. The level of the participants was considered as an intermediate based on the documents of the department which stated that students in Level 4 can be equal to (A2) compared to the Common European Framework of Reference (CEFR) for languages (Council of Europe, 2001). The participants of this study were two classes of Level 4. Their average age was 22, and their mother tongue was Arabic. They were randomly assigned into two different groups. The first group was composed of 36 students, including 16 males and 20 females. This group was assigned to be the experimental group. The second group was composed of 36 students, including 18 males and 18 females. This group was assigned to be the control group.

Procedures
The study was conducted for four sessions, as shown in Figure 1. In the first session, all the participants took the pretest to check their knowledge about the topic and to explore the homogeneity in their level. In the second session, the participants in the experimental group were taught the participle adjectives ending with -ed using 3D Prezi presentation software. The same topic was taught in a traditional way to the participants in the control group. In the third session, the participants in the experimental group were taught the participle adjectives ending with -ing using 3D Prezi presentation software. The same topic was taught in a

traditional way to the participants in the control group. In the fourth session, the participants in both groups were asked to do the posttest.

Study tool
The study utilized visual grammar as a tool for teaching participle adjectives for the experimental group. The visual grammar in this study was 3D Prezi presentation software. Prezi is a web-based tool for creating presentations. It is similar to other presentation software like Microsoft PowerPoint, but it offers some unique features that make it a good alternative. In this study, the participle adjective endings -ed or -ing were presented as in a 3D environment.

The test
The test was developed by the authors. The test consisted of 40 multiple choice items about participle adjectives (See Appendix). The items of the test varied from easy to challenging, just to keep the participants' minds alert for the whole test. In each item of the test, the participants should fill in the blank with either the past or the present participle adjective. The perfect score of the test was 40. Each correct answer scored 1 point.

Data analysis
To analyze the data, Statistical Package for the Social Sciences (SPSS) version 22 was used. First descriptive statistics including mean and standard deviation were calculated for each group. Then an independent-samples *t*-test was employed for comparing the two groups' performance. To examine improvements in the participants' performance from pretest to posttest, a paired-samples *t*-test was used.

Results
To answer the first research question, descriptive statistics and *t*-test were performed. The first research question of the study attempted to explore whether using visual grammar had any significant impact on learning participle adjectives. The results are shown in Table 1 (*Descriptive statistics of the students' performance of the pretest*).

t-test analysis of the pretest was used to check whether there was a significant difference between the two groups before the experiment. This analysis indicated that there was no significant difference in the level of the two groups ($p = 0.548$). The magnitude of the differences in the means (mean difference = 0.277) was small.

To answer the research question of whether the participants' learning participle adjective was improved because of the intervention of using visual grammar; the mean and standard
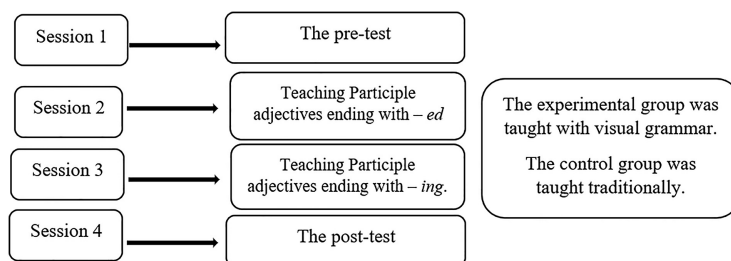

Figure 1.
The study procedure

deviation across posttest showed variation in the participants' performance. Results are presented in Table 2 (*Descriptive statistics of the students' performance of the posttest*).

The results in Table 2 showed that the experimental group outscored the control group. The mean was 32.80 for the experimental group, and 25.27 for the control group. The p-value was 0 which indicated that there was a significant difference between the two groups. The effect size (η^2) was 0.66 which indicated that the effect was large in favor of the experimental group. According to Cohen (1988), effect sizes are small ($\eta^2 = 0.01$), medium ($\eta^2 = 0.06$) and large ($\eta^2 = 0.14$). Therefore, the effect size in this study is large. Overall, the results indicated that using visual grammar in teaching participle adjectives was more effective than teaching them using traditional ways.

Discussion

The aim of this study is to examine the effect of using visual grammar in teaching and learning participle adjectives. A 3D Prezi software is used to present the participle adjective. The results indicate that there is a significant difference in the achievement of the learners who were taught by using the 3D Prezi software compared to the learners who were taught using traditional ways. This may be attributed to the nature of the 3D element that could foster the learners' motivation and interest in learning new items. The results of this study can be applied based on the theory of noticing hypothesis proposed by Schmidt (1990). This theory states that learners need to consciously notice the input to learn better. In this study, the learner noticed how participle adjectives were used by presenting them using a 3D application.

The results of this study can also be explained in terms of the visual grammar theory proposed by Kress and van Leeuwen (2021). The 3D application used in the experiment of this study used a lot of visual images that helped learners draw relationships between the components of the grammatical rule of adjective participles. The findings of the current study support the findings obtained by the previous studies (e.g. Antonova *et al.*, 2019; Latham, 2021; Novawan, 2011; Wilson and Kam, 2013). The results of these studies revealed a beneficial use of visual presentation to learn new items. These findings support the idea that visual grammar can increase the performance of learning participle adjectives better than using traditional methods.

Conclusion

The present study was designed to explore the effect of using visual grammar in teaching participle adjectives. The most significant finding to emerge from this study is that the

		N	Mean	Standard deviation	Standard error	Mean difference	t	Significance
Table 1. Descriptive statistics of the students' performance of the pretest	Experimental group	36	13.88	1.304	0.217	0.277	0.604	0.548
	Control group	36	13.61	2.429	0.404			

		N	Mean	Standard deviation	Standard error	Mean difference	t	Significance	η^2
Table 2. Descriptive statistics of the students' performance of the posttest	Experimental group	36	25.27	5.82	0.971	−7.52	−5.72	0.000	0.668
	Control group	36	32.80	5.32	0.887				

learners of the experimental group performed better than those in the control group. The experimental group learners were taught participle adjectives with the help of 3D Prezi software whereas the control group learners were taught using the traditional way. The visual images in the 3D Prezi software played an important role in increasing the learners' noticing abilities and improving their performance. They also promoted the learners' motivation in a way that led them to achieve appropriateness. Therefore, it can be demonstrated that using visual grammar was an effective tool to facilitate learning participle adjectives. This study enhances the learners' ability to use visual images in the field of English grammar. Several limitations to this study need to be acknowledged. First, it was only limited to the effect of visual images on a particular grammatical issue; its effect on other issues needs to be investigated. Second, the study does not include the sex variable; there may be variation in the results between boys and girls.

Pedagogical implications
The findings of this study can provide language instructors with some guidelines for effective classroom teaching. They may incorporate visual grammar applications in teaching grammar aspects. These findings also provide learners with further support by encouraging them to have a better understanding of English grammar. Learners' minds will be more open when they think of the connotations of the visual images. Another issue that emerges from these findings is related to syllabus designers in the Ministry of Education. In the current syllabuses, it can be noticed that grammar is presented without visual images. These findings will open horizons for new and creative ideas in which syllabuses can be provided with such images.

Suggestions for future studies
The findings of the current study form an important step in the integration of visual images to teach one important issue of English grammar. However, more research on the integration of visual grammar with teaching other issues of English grammar needs to be undertaken. Besides, further research can be done to investigate the impact of the visual grammar theory on teaching the other language aspects, such as phonemes, morphemes and lexemes.

References

Antonova, L.A., Bakhmetieva, I.A. and Anisimova, O.N. (2019), "Techniques for teaching English grammar to clip thinking students. Scientific Journal", *Modern Linguistic and Methodical-and-Didactic Researches*, Vol. 27 No. 4, pp. 53-62.

Abumathkour, H. (2004), "Jordanian Difficulties in Using English Prepositions", Unpublished.

Batstone, R. (1994), *Grammar*, Oxford University Press, Oxford.

Bin Khayyal, S. (2014), "Problems of English prepositions of time encountered by Libyan secondary stage students", *Journal of Alasmarya University*, Vol. 23, pp. 449-478.

Callow, J. (2013), *The Shape of Text to Come: How Image and Text work*, Primary English Teaching Association Australia (PEETA), Newtown, NSW.

Canale, M. and Swain, M. (1980), "Theoretical bases of communicative approaches to second language teaching and testing", *Applied Linguistics*, Vol. 1 No. 1, pp. 1-47, doi: 10.1093/applin/I.1.1.

Cavanagh, P. (2021), "The language of vision", *Perception*, Vol. 50 No. 3, pp. 195-215, doi: 10.1177/0301006621991491.

Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*, Routledge, New York, NY.

Council of Europe (2001), *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*, Cambridge University Press, Cambridge.

Cowan, R., Choi, H.E. and Kim, D.H. (2003), "Four questions for error diagnosis and correction in Call", *CALICO Journal*, Vol. 20 No. 3, pp. 451-463.

Duffley, P.J. (2006), *The English Gerund-Participle: A Comparison with the Infinitive*, Peter Lang, New York.

Ferreira, F. and Engelhardt, P.E. (2006), "Syntax and production", in Traxler, M.J. and Gernsbacher, M.A. (Eds), *Handbook of Psycholinguistics*, Elsevier, pp. 61-91.

Forrest, S. (2017), "How does it make me feel? Using visual grammar to interact with picture books", *Literacy Learning: The Middle Years*, Vol. 25 No. 1, pp. 41-52.

Friedman, A. and Ron, S. (2017), "Unlocking the power of visual grammar theory: analyzing social media political advertising messages in the 2016 US election", *Journal of Visual Literacy*, Vol. 36 No. 2, pp. 90-103, doi: 10.1080/1051144X.2017.1379758.

Garrido, C.G. and Rosado Romero, C. (2012), "Errors in the use of English tenses", *Íkala, Revista de Lenguaje y Cultura*, Vol. 17 No. 3, pp. 285-296.

Gass, S. (1997), *Input, Interaction and the Second Language Learner*, Lawrence Erlbaum Associates, NJ.

Guo, F. and Feng, X. (2017), "A Multimodal discourse analysis of advertisements-based on visual grammar", *Journal of Arts and Humanities*, Vol. 6 No. 3, pp. 59-69, doi: 10.18533/journal.v6i3.1132.

Gurzynski-Weiss, L. and Baralt, M. (2014), "Exploring learner perception and use of task-based interactional feedback in FTF and CMC modes", *Studies in Second Language Acquisition*, Vol. 36 No. 1, pp. 1-37, doi: 10.1017/S0272263113000363.

Huddleston, R. and Pullum, G. (2002), "The Cambridge grammar of the English language", *Zeitschrift fur Anglistik und Amerikanistik*, Vol. 53 No. 2.

Kress, G. and van Leeuwen, T. (2021), *Reading Images: the Grammar of Visual Design*, 3rd ed., Routledge, Oxon.

Lai, C., Fei, F. and Roots, R. (2009), "The contingency of recasts and noticing", *CALICO Journal*, Vol. 26 No. 1, pp. 70-90, doi: 10.1558/cj.v26i1.70-90.

Latham, D. (2021), *Picturing Silence: the Visual Grammar of Speak: the Graphic Novel*, Children's Literature in Education, Vol. 53, pp. 169-181.

Lee, L. (2007), "Fostering second language oral communication through constructivist interaction in desktop videoconferencing", *Foreign Language Annals*, Vol. 40, pp. 635-649, doi: 10.1111/j.1944-9720.2007.tb02885.x.

Levak, N. and Son, J.B. (2016), "Facilitating second language learners' listening comprehension with Second Life and Skype", *ReCALL*, Vol. 29, pp. 200-218, doi: 10.1017/S0958344016000215.

Mackey, A. (2006), "Feedback, noticing and instructed second language learning", *Applied Linguistics*, Vol. 27, pp. 405-430, doi: 10.1093/applin/ami051.

Moerdisuroso, I. (2014), "Social semiotics and visual grammar: a contemporary approach to visual text research", *International Journal of Creative and Arts Studies*, Vol. 1 No. 1, pp. 80-91, doi: 10.24821/ijcas.v1i1.1574.

Novawan, A. (2011), "Visually based grammar teaching", in Widodo, H.P. and Cirocki (Eds), *Innovation and Creativity in ELT Methodology*, Nova Science Publisher, New York, pp. 161-172.

Ping, K. (2018), "A visual grammar analysis of Lesaffre's Website", *Advances in Language and Literacy Studies*, Vol. 9 No. 6, pp. 38-41, doi: 10.7575/aiac.alls.v.9n.6p.38.

Rosa, E. and Leow, R. (2004), "Awareness, different learning conditions, and L2 development", *Applied Psycholinguistics*, Vol. 25, pp. 269-292, doi: 10.1017/S0142716404001134.

Schmidt, R.W. (1990), "The role of consciousness in second language learning", *Applied Linguistics*, Vol. 11, pp. 17-46, doi: 10.1093/applin/11.2.129.

Schmidt, R.W. (1993), "Awareness and second language acquisition", *Annual Review of Applied Linguistics*, Vol. 13, pp. 26-206.

Schmidt, R.W. (1995), *Attention and Awareness in Foreign Language Learning*, University of Hawaii, Second Language Teaching and Curriculum Center, Honolulu, HI.

Schmidt, R. (2010), "Attention, awareness, and individual differences in language learning", in Chan, W.M., Chi, S., Cin, K.N., Istanto, J., Nagami, M., Sew, J.W., Suthiwan, T. and Walker, I. (Eds), *Proceedings of CLaSIC 2010, Singapore*, December 2-4, National University of Singapore, Centre for Language Studies, Singapore, pp. 721-737, doi: 10.1515/9781614510932.27.

Wang, Y.X. (2020), "A comparative analysis of mobile advertising from the perspective of visual grammar", *Open Access Library Journal*, Vol. 7, pp. 1-11, doi I: 10.4236/oalib.1106468.

Williams, J.D. (2006), *The Teacher's Grammar Book*, Routledge, New York.

Wilson, S. and Kam, C.H. (2013), "Acquisition of phrase structure in an artificial visual grammar", *Proceedings of the 35th Annual Meeting of the Cognitive Science Society*, Vol. 35 No. 35, pp. 1611-1616.

Winny Gunarti, W.W. (2018), "Understanding visual grammar on the stop smoking public service announcement: analysis of television ad 'Vocal Cords Loss Due to Smoke'", *The 2nd International Conference on Vocational Higher Education (ICVHE) 2017 "The Importance on Advancing Vocational Education to Meet Contemporary Labor Demands"*, KnE Social Sciences, pp. 117-129, doi: 10.18502/kss.v3i11.2755.

Yanguas, I. (2012), "Task-based oral computer communication and L2 vocabulary acquisition", *CALICO Journal*, Vol. 29, pp. 507-531, available at: https://www.jstor.org/stable/calicojournal.29.3.507.

Zhao, Y. (2003), "Recent developments in technology and language learning: a literature review and meta-analysis", *CALICO Journal*, Vol. 21 No. 1, pp. 7-27, available at: https://www.jstor.org/stable/24149478.

Appendix
The test

Choose the correct adjective:

(1) My nephew was (amusing/amused) by the clown

(2) It's so (frustrating/frustrated)! No matter how much I study I can't seem to remember this vocabulary.

(3) This lesson is so (boring/bored)!

(4) I'm feeling (depressed/depressing), so I'm going to go home, eat some chocolate, and go to bed early with a good book.

(5) I thought her new idea was absolutely (fascinated/fascinating).

(6) This math problem is so (confusing/confused). Can you help me?

(7) The teacher was really (amusing/amused) so the lesson passed quickly.

(8) The journey was (exhausting/exhausted)! Twelve hours by bus.

(9) The plane began to move in a rather (alarming/alarmed) way.

(10) He was (frightening/frightened) when he saw the spider.

(11) I was really (embarrassing/embarrassed) when I fell over in the street.

(12) That film was so (depressing/depressed)! There was no happy ending for any of the characters.

(13) I'm sorry, I can't come tonight. I'm completely (exhausting/exhausted).

(14) We are going in a helicopter. How (exciting/excited)!

(15) Don't show my baby photos to people, Mum! It's so (embarrassing/embarrassed)!

(16) It's okay, it's only me. Don't be (alarming/alarmed).

(17) My sister is so (exciting/excited) because she is going on holiday tomorrow.

(18) I hate long flights, I'm always really (boring/bored).

(19) She looked very (confusing/confused) when I told her we had to change the plan.

(20) John was (fascinated/fascinating) by Mandarin when he first started learning languages. He decided to study more and now he can speak it fluently.

(21) I am so (relaxing/relaxed) I don't want to move.

(22) I find horror films really (frightening/frightened) and not at all fun to watch.

(23) Sometimes I get really (frustrating/frustrated) when I can't express myself well in English.

(24) We were stopped by a man with a knife who took our money. It was (terrifying/terrified).

(25) The programme was really (interesting/interested).

(26) She was (overwhelming/overwhelmed) when everyone cheered and we gave her presents.

(27) If I feel stressed, I find taking a bath is often (relaxing/relaxed).

(28) I am really (tiring/tired); I think I'll go to bed.

(29) He's very (interesting/interested) in history.

(30) The trip was (overwhelming/overwhelmed), with so many things to do and it was all so new.

(31) She is never (satisfying/satisfied) with her work.

(32) Cleaning is so (tiring/tired)! I think I'll have a rest!

(33) She thought the ride on the rollercoaster was (thrilled/thrilling).

(34) I was really (surprising/surprised) when I saw you. I had thought you were on holiday.

(35) My grandmother was (shocking/shocked) by the man's bad language.

(36) My niece is (terrifying/terrified) of dogs.

(37) Thank you so much for the prize! I'm (thrilled/thrilling)!

(38) My job is very (satisfying/satisfied), I love helping people.

(39) The news was so (shocking/shocked) that she burst into tears.

(40) My exam results were great! It's really (surprising/surprised) but good, of course

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