

A Review of L2 Collocation Acquisition in Academic Lectures from the Perspective of Multimedia and Elaboration

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ABSTRACT

This article reviews the acquisition of collocations by second language (L2) learners, with a particular emphasis on the role of multimodal input and elaboration in academic lectures. Academic lectures are identified as a significant approach for collocation acquisition in second language acquisition (SLA). Nonetheless, the impact of academic lectures is influenced by modalities of multimedia input and elaboration strategies, with evidence suggesting that while these factors can enhance learning, the risk of cognitive overload may also lead to diminished educational outcomes. The review concludes by emphasizing the need for further research to clarify the pedagogical benefits and limitations of different instructional modalities in academic lectures for L2 collocation acquisition.

Keywords: *Collocation acquisition, Academic lectures, Multimedia, Elaboration, Second language acquisition.*

1. INTRODUCTION

This article aims to investigate collocation acquisition by second language (L2) learners through academic lectures from the angle of multimodal input and elaboration by reviewing previous literature. Collocations as a type of formulaic language are ubiquitous, as well as significant in second language acquisition (SLA) (Erman & Warren, 2000; Nation, 2013; Pellicer-Sánchez, 2017). Based on difficulties in learning collocations by L2 learners (e.g., Nguyen & Webb, 2017; Vu & Peters, 2022), incidental learning has become important in collocation learning (Dang et al, 2022a). In particular, multimedia can facilitate L2 collocation acquisition from academic lectures (Dang et al, 2022a), according to multimedia learning theory (Mayer, 2014) and Chaudron's (1982) concept of elaboration. Therefore, learning outcomes of collocations by means of academic lectures is worthy studying to provide insight into the role of academic lectures in SLA research.

There are two research questions guiding this article: 1) What kind of modes of input can

contribute to L2 collocation acquisition? 2) To what extent do academic lectures affect collocation learning? The findings reveal that reading while listening can make significant contributions in L2 incidental learning among reading modes, while multimodal modes tend to be significant in collocation acquisition. Also, the influence of academic lectures on the acquisition of collocations among second language learners is significant. However, the extent of this influence is subject to the modalities of multimedia input and the strategies of elaboration, with research findings indicating both positive outcomes and potential negative effects due to cognitive overload.

This article is structured into three sections. First, L2 collocation acquisition is discussed by reviewing previous literature. Second, different modes of input are studied and compared in L2 collocation acquisition outcomes. Third, current research on collocation acquisition in academic lectures are reviewed based on Chaudron's (1982) concept of elaboration and multimedia learning theory (Mayer, 2014), with the purpose of shedding

light on the role of academic lectures in collocation acquisition.

2. INCIDENTAL LEARNING OF COLLOCATIONS AND SLA

Collocations have been considered as a significant part of incidental learning for L2 learners rather than deliberate learning (Nation, 2013; Webb & Nation, 2017). Also, collocation as a significant type of formulaic language can be constantly encountered in written and spoken communications (Erman & Warren, 2000), which makes contributions to second language acquisition (Pellicer-Sánchez, 2017). Due to the limited teaching of collocations for L2 learners in the class (Puimège & Peters, 2020; Webb & Nation, 2017), incidental learning has become important in gains of collocations (Dang et al, 2022a). However, the difficulties of learning collocations have been mentioned from the perspective of L2 learners (Nguyen & Webb, 2017), such as the low usage, inappropriate use (Laufer & Waldman, 2011) and incongruency (Peters, 2016; Vu & Peters, 2022; Wolter & Gyllstad, 2011).

3. DIFFERENT INPUT MODES OF COLLOCATION ACQUISITION

Outcomes of vocabulary acquisition have been investigated through different input modes of reading. First, only-listening is superior to reading only in the gains of incidental single-word items as well as collocation knowledge learning in academic lectures for L2 learners (Vidal, 2011; Dang et al, 2022a). Second, previous research shows the larger gains of reading while listening than only reading for L2 learning, which is attributed to the audio-assisted reading. This is because the auditory input has more significant effect on facilitating memory and processing texts into chunks with less transparent for L2 learners (Bybee, 2002; Conklin et al., 2020; Webb & Chang, 2022), while written texts contribute to the formal recognition of collocations through visual input for L2 learners (Bird & Williams, 2002; Vu, & Peters, E., 2022; Webb & Chang, 2020). Thus, compared with only reading, reading-while-listening mode can develop L2 multiword items learning (Webb & Chang, 2020), which indicates the significance of aural and visual input in improving L2 incidental collocation knowledge.

However, little research has investigated collocations acquired by L2 learners with different

modes of input besides reading modes, especially multimodal modes. For example, Montero Perez (2020) points out that multimodal modes can lead to more encounters of collocations for L2 learners. Webb and Chang (2022) propose that collocations are likely to be more salient in multimodal input compared with monomodal input. Also, Dang, Lu and Webb (2022b) illustrate that the value of multimodal input is worthy studying to provide insight in terms of modes of input in incidental vocabulary learning. Therefore, research on multimedia is essential in the outcomes of L2 learning of collocations.

4. ACQUISITION OF L2 COLLOCATION IN ACADEMIC LECTURES

It is clear that multimedia can facilitate vocabulary learning for L2 learners such as motivation, while collocations can be learned by elaboration in the lecture (Dang et al., 2022a, 2022b). Therefore, elaboration and multimedia can have implications on L2 learning outcomes of collocations from academic lectures, which is in accordance with multimedia learning theory (Mayer, 2014) and concept of elaboration (Chaudron, 1982).

4.1 Elaboration and Multimedia Learning Theory

First, there are some variables of affecting incidental collocation learning through academic lectures, such as elaboration (Dang et al., 2022b). In particular, Chaudron (1982) has classified elaboration into verbal and nonverbal channel. The former refers to explicit and implicit elaboration, which are presented in the explanation of words through definitions, questions, and explanations with examples, paraphrase or synonymy respectively. The latter refers to explanations of words with gesture, images and symbols (Dang et al., 2022b; Yang & Sun, 2013).

Second, from multimedia learning theory (Mayer, 2014), two channels would be used in processing information by learners, characterized in the presentation-mode approach (nonverbal and verbal channel) and sensory-modality approach (audio and visual channel). And learning with two channels is superior to only one channel in processing information.

4.2 Literature on L2 Learning Outcomes of Collocations Through Academic Lectures

Academic lectures have been increasingly concerned with collocation learning incidentally from previous literature. Collocations are likely to be learned by elaboration in the lecture (Dang et al., 2022a), in which learners can decode and process information easily and deeply from lecturers' explanations (Dang et al., 2017; Lynch, 2011). The input mode of "viewing" (audiovisual input) and "viewing with captions, lectures, or subtitles" (audiovisual input accompanied with written input) results in fostering L2 learning (Dang et al., 2021, 2022a; Peters, 2019).

However, previous studies have inconsistent findings on the function of academic lectures on incidental learning of vocabulary by means of multimodal input. On the one hand, some research reveals the contribution of multimedia input on significant positive outcomes of learning (Mayer, 2014), especially second language acquisition (Peters, 2019; Pellicer-Sánchez et al. 2020). Also, collocations can be learnt from academic lectures through viewing rather than viewing with captions (Dang et al., 2021). Differently, academic lectures result in similar gains as reading while listening in collocation acquisition (Webb & Chang, 2020). On the other hand, some conflicting research reveal that multimedia input results in negative effect on learning, based on Ayres & Sweller's (2014) split-attention principle. Learners' attention possibly can be split by multimedia, in which multiple loads in cognition and processing information can lead to inhibiting learning (Kalyuga & Sweller, 2014).

Arguably, the reasons for conflicting results on multimedia affecting learning is that nonacademic texts are used in research of supporting multimedia hindering learning, which lead to lower complexities for learners (Peters 2019; Pellicer-Sánchez et al., 2020). Differently, Dang, Lu and Webb (2022b) found that learning gains in academic lectures are not affected by verbal and nonverbal elaboration, which is in contrast with previous studies (e.g., Vidal, 2011; Yang & Sun, 2013). Therefore, academic input is necessarily to be investigated from the angle of multimedia and elaboration, with the purpose of facilitating the approach for L2 learners to acquire vocabulary knowledge especially collocations.

5. CONCLUSION

By reviewing literature on L2 collocation acquisition through academic lectures, two research questions can be answered: 1) What kind of modes of input can contribute to L2 collocation acquisition? 2) To what extent do academic lectures affect collocation learning?

First, most studies have examined different modes of reading, which shows that reading while listening mode makes contributions on L2 collocation acquisition compared with reading mode and listening mode (Vu, & Peters, E., 2022; Webb & Chang, 2022). However, few research on incidental collocation learning has studied and compared with different modes of input besides reading modes, especially multimodal modes (e.g., Dang et al., 2022b). Therefore, the evaluation of multimodal input is worth investigating for shedding light on outcomes of incidental vocabulary learning by L2 learners (Dang et al., 2022b), based on contributions on more encounters of collocations for L2 learners (Montero Perez, 2020) and more salient features (Webb & Chang, 2022).

Second, elaboration can reflect the outcomes of L2 learning especially in academic input. Different modes of input can be applied in academic lectures such as multimodal input in incidental learning of collocations, since nonverbal and verbal channel can make significant contributions to processing information than single channel. However, from conflicting findings of previous research, multimedia input can make significant positive outcomes of learning (Mayer, 2014), especially second language acquisition (Peters, 2019; Pellicer-Sánchez et al., 2020). Conversely, multimedia can hinder learning by splitting learners' attentions and over cognitive loads (Ayres & Sweller, 2014). Differently, learning gains are not affected by verbal and nonverbal elaboration (Dang et al., 2022b).

In conclusion, this article addresses the research questions by examining the impact of various input modalities and the role of elaboration in academic lectures, providing a comprehensive view of the facilitative and potentially inhibitive factors in L2 collocation learning. And academic lectures need further research for more implications on teaching and learning in acquisition of collocations, employing meta-analytic techniques to quantify the effects of different instructional modalities.

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