Pronunciation, Grammar, and Vocabulary Explanations in Pedagogical Interaction

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ABSTRACT

This article reviews conversation analytic research on explanations in pedagogical interaction, particularly in language learning classrooms. In reviewing this literature, this paper aims to provide a comprehensive account of what is interactionally involved when giving pedagogical explanations so that future research investigating the effectiveness of these kinds of explanations can be appropriately measured. The paper first discusses characteristics of explanation as interactional phenomena, namely that they are sequentially organized, either planned or unplanned, and either monologically or dialogically organized. Then, the paper details how explanations in three particular linguistic domains (i.e., pronunciation, grammar, and vocabulary) are accomplished interactionally. In doing so, this paper highlights similarities and differences across linguistic domains that are frequently found in language learning classrooms. The paper ends by identifying patterns across pedagogical explanations and by suggesting directions for future research.

Keywords: explanations, conversation analysis, pronunciation, vocabulary, grammar

INTRODUCTION

Broadly speaking, research on classroom interaction aims to illuminate how teachers and students communicate with each other, and how this affects learning. One thread of research on classroom interaction is the act of explaining, which is not unsurprising given that classrooms are commonly considered spaces where the main "business" is learning. As a result, understanding how explanations of language unfold in classrooms during pedagogical interaction is vital for anyone interested in language learning. Taking explanations as a focus, I begin this literature review by introducing explanation as an interactional phenomenon. I then discuss three different

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characteristics of explanations in the language classroom. Using a conversation analytic lens, the bulk of the paper is devoted to reviewing how explanations of three different linguistic domains within pedagogical interactions are accomplished: pronunciation, grammar, and vocabulary. The paper ends by discussing the role of explanations within the language learning classroom and identifying gaps in the literature.

EXPLANATION AS INTERACTIONAL PHENOMENA

As Draper (1988) eloquently states, "in everyday life almost anything may, in the right circumstances, count as an explanation" (p. 16) so long as it "makes known in detail" (p. 28) some aspect of interaction (cf. explanation as 'telling you what you don't know;' Dalton-Puffer, 2007, p. 152). Fasel Lauzon (2015) expanded on this notion through a conversation analytic lens by asserting that "any action seems to bear a sort of explanatory value: every turn-at-talk exhibits some understanding of the action(s) performed in the previous turn(s) and thereby at least minimally provides an explanation of what was understood" (p. 98). While explanation inheres in "almost anything" (Draper, 1988, p. 16), the literature has shown that explanations can be further divided into explanations that serve as accounts and those that serve to make talk clearer.

Accounts were first discussed as interactional phenomena in the 1960s (Scott & Lyman, 1968; see also "accountable actions" in Sacks, 1992) and later further defined by conversation analysts in the 1980s and 1990s (Antaki, 1988, 1994, 1996; Buttny, 1993; Heritage, 1988). Heritage (1988), for example, proposes that accounts provide an explanation for non-compliant action (e.g., being late for a meeting, accidentally bumping into someone while walking, etc.). While there is certainly nuance within this line of research on accounts in everyday interaction (e.g., see Buttny & Morris 2001; Robinson, 2016; Waring, 2007), this paper will focus on explanations that make talk clearer, particularly in institutional settings, not on explanations that provide accounts for non-compliant action.

Explanations that make talk clearer in classroom interaction include those that provide exemplifications of a concept (Lee, 2004; Myhill, 2003), demonstrations of how sounds are articulated (Nguyen, 2016) and suprasegmental features produced (Smotrova, 2017), embodied illustrations of the meaning and/or use of particular linguistic concepts, such as new vocabulary or grammatical points like past tense (Lazaraton, 2004; Matsumoto & Dobs, 2017; Tai & Khabbazbashi, 2019; van Compernolle & Smotrova, 2017; Waring et al., 2013), definitions of the form "X is Y that Z" (Dalton-Puffer, 2007; Kääntä, 2021; Kääntä et al., 2018), synonyms or paraphrases (Waring et al., 2013), or translation (Stoewer & Musk, 2019). Clearly, explanations can make talk clearer in a variety of ways, but, as the next section will show, within the language classrooms, there are characteristics that persist across explanations of any type.

CHARACTERISTICS OF EXPLANATIONS IN THE LANGUAGE LEARNING CLASSROOM

Most explanations in language learning classrooms feature three characteristics. First, they are sequentially organized (Fasel Lauzon, 2015; Gosen et al., 2013; Koole, 2010; Merke, 2016; Sert, 2015; Tai & Khabbazbashi, 2019; Waring et al., 2013). The sequential nature of explanations is likely due to the fact that "the relationship between the explainable [i.e., that

which needs clarity] and the explanation [i.e., that which (hopefully) gives clarity] must be established and accepted by both the questioner(s) and explainer(s) in order to be considered an explanation" (Merke, 2016, p. 2). In other words, just as an assessment requires something to be assessed or a complaint needs something to be complained about, an explanation cannot occur independent of an "explainable," or talk that is unclear. While there is variation across researchers' findings about the composition of these explanation sequences, Fasel Lauzon (2015) has identified a basic three-part "interactional architecture" that consists of an opening, a core, and a closing.

An opening is where some talk is problematized (i.e., talk is identified as not being clear enough). For example, one might say "What does X mean" where X is a word whose meaning is not clear to the speaker. A core is the provision of a candidate solution (i.e., additional talk that makes the problematized talk clear). For example, someone else might say "X is Y that Z" where the unknown meaning of X is provided by classifying it with known entities Y and Z. A closing is where the candidate solution to the previously identified problematized talk is accepted. For example, the original speaker of "What does X mean" might now say, after hearing the candidate solution, "Oh I see," and the interactants might then move on to other matters. In sum, explanation sequences are composed of a question-answer adjacency pair (i.e., opening + core) that are followed by a sequence-closing third (SCT; Schegloff, 2007). Of course, each part of an explanation sequence can be expanded upon through pre- and post-expansions, but this three-part interactional architecture acts as a useful starting point.

Second, explanations may be planned or unplanned (Fasel Lauzon, 2015; Morton, 2015; Tai & Khabbazbashi, 2019; van Compernolle & Smotrova, 2017; Waring et al., 2016). A planned explanation requires some sort of preparation beforehand. It might, for example, involve a vocabulary item on a worksheet or a prop brought by students to assist their class presentations. On the other hand, an unplanned explanation does not require any sort of preparation. For example, a teacher or student might give an unplanned explanation of a word's meaning as it emerges spontaneously in interaction. Typically, explanations from students are unplanned because it is the teacher who directs the lesson and prepares materials beforehand, but planned explanations are possible, particularly in situations where students are given more control in the classroom.

In unplanned explanations, the sequence follows the question-answer-SCT format, but the core of these explanations is often expanded and extended beyond the closing (Fasel Lauzon, 2015). In other words, the teacher may continue explaining even after the student has offered an SCT, such as a change-of-state token (e.g., "oh" from Heritage, 1984). In planned explanations, the closing is typically not a change-of-state token. Instead, the closing includes either continuers or evaluative tokens from the teacher signaling that they expect the core to be expanded upon or that the core was sufficient enough (Fasel Lauzon, 2015). The reason for this change is rooted in the distribution of knowledge between participants and the fact that planned explanations are uniquely designed by the teacher to test students' understanding. For example, the core of unplanned explanations is given by K+ (Heritage, 2013) participants (i.e., those with more knowledge about the topic, typically the teacher), but in planned explanations the core is given by K- (Heritage, 2013) participants (i.e., the students). In sum, closings of planned explanations rely on the teacher's evaluations of the student's core whereas unplanned explanations are closed merely through change-of-state tokens (Fasel Lauzon, 2015).

Third, an explanation can have a discourse unit (i.e., monologic) organization or a dialogic organization (Koole, 2010). An explanation with a discourse unit organization is one

where the teacher is the primary explainer with little to no input from students other than the latter's own displays of understanding. For example, a teacher might explain a task to students by telling them how to proceed through the delivery of instructions. In this kind of explanation, a display of understanding from the student is required (e.g., a student offering "oh" in the course of a teacher's explanation to show receipt of new information) but a claim of understanding is only required when prompted by the teacher (e.g., when the teacher asks "do you understand," the student is prompted to give a claim of understanding, such as "yes, I understand").On the other hand, an explanation with a dialogic organization is one where the teacher asks students questions, typically within Initiation-Reply-Evaluation (IRE) sequences, until the student produces the answer to their original problem and offers a display of knowing, rather than understanding (e.g., a student responding to a teacher's question of "do you know what X is" by saying "Yes, X is a Y"). To juxtapose the monologic and dialogic organizations explanations in another way: monologically-organized explanations are those where talk is made clearer by one interlocutor and dialogically-organized explanations are those where talk is made clearer by at least two interlocutors working together (e.g., a teacher asking questions whose answers lead a student to a more specific or correct answer).

In a nutshell, explanations in the language learning classroom tend to have the following three characteristics: (1) they are sequentially organized, consisting of an opening, a core, and a closing; (2) they are either planned or unplanned; and (3) they are either monologically or dialogically organized.

EXPLANATIONS OF SPECIFIC LANGUAGE DOMAINS

In this section, I review how explanations of pronunciation, grammar, and vocabulary are interactionally accomplished, considering the basic sequential organization for each (i.e., openings, cores, and closings; Fasel Lauzon, 2015).

Pronunciation Explanations in the Language Learning Classroom

Despite fluctuations in the importance that teachers have placed on pronunciation instruction in the language learning classroom (Tarone, 2005), scholars have identified several aspects of pronunciation instruction that are "teachable," including thought groups, prominence, intonation, rhythm, stress, and the precise articulation of consonants and vowels (Celce-Murcia et al., 2010; Goh & Burns, 2012; Goodwin, 2014; Nation & Newton, 2009;). These findings spotlight the "what" of pronunciation instruction and, to a great extent, the "how," but the focus is often on planning to teach and not in the moment-to-moment details of pronunciation instruction. For a more micro-level answer to the "how" of pronunciation instruction, I now turn to the literature on pronunciation explanations in the language learning classroom.

Openings of Pronunciation Explanations

Openings of pronunciation explanations are instances where trouble in understanding via the (mis)pronunciation of a word, or part of a word, is displayed. Brouwer (2005) showed three ways in which trouble in understanding can be displayed between Danes and Dutch speakers of Danish in sequences she called "doing pronunciation." Although this data does not come from a

language learning classroom, this study is included here because these sequences are "specific types of repair sequences, in which a speaker (most often a second language speaker) is corrected by another speaker (most often a first language speaker)" (Brouwer, 2005, p. 93). In other words, they are representative of the kinds of repair typically found in language learning classrooms.

The first way in which trouble in understanding can be displayed is through speech perturbations (e.g., pauses, "uh," and elongation of sounds). These speech perturbations occur just before the speaker utters the trouble source (i.e., the word, or part of the word, that the speaker is having difficulty pronouncing). The second way that trouble in understanding can be displayed is through rising intonation, located just after the trouble source. Typically, speech perturbations are found in conjunction with rising intonation which allows for the trouble source to be identified unambiguously. The third way that trouble in understanding can be displayed is through repetitions of the trouble source. Repeating the trouble source further disambiguates for the other speaker that repair initiation is occurring. In sum, speech perturbations, rising intonation, and repetitions represent three different ways that a speaker can self-initiate repair, thereby constituting the opening of a pronunciation explanation.

Other studies on pronunciation explanations tend to focus more on the core and closing of the explanation, rather than the opening, but there is still some evidence of openings (Nguyen, 2016; Smotrova. 2017). For example, before providing a pronunciation explanation related to syllabification, a teacher noticed that one student group was "experiencing difficulties in identifying the number of syllables in the word specialized" (Smotrova, 2017, p. 68). Upon noticing this, the teacher approached the group and launched into the core of their explanation. Additionally, another teacher opened their pronunciation explanation related to articulation by acknowledging that "the phrase 'it would' is difficult for the[ir] students to pronounce" (Nguyen, 2016, p. 128). Thus, in the few studies available, openings of pronunciation explanations involve displays of trouble in understanding (e.g., speech perturbations, rising intonation, and repetitions) and an orientation to those displays by the explainer.

Cores of Pronunciation Explanations

The core of pronunciation explanations are instances where candidate solutions are given that attempt to resolve the trouble in understanding displayed in the opening. In openings consisting of self-initiated repair, Brouwer (2005) showed that the core consists of other-repair where the correct pronunciation of the trouble source is given. In addition to talk, Nguyen (2016) provided evidence that the use of material artifacts is also relevant to the explanation core. For example, a teacher used a rubber band to aid in their explanation of stressed syllables by overlapping stressed parts of words listed in a textbook with the stretching of a rubber band. Lastly, Smotrova (2017) and Nguyen (2016) have shown that gesture plays an important role in the core of an explanation. While the provision of the correct pronunciation of a word in a pronunciation explanation and the use of material artifacts is fairly straightforward, the use of gesture and material artifacts deserves more unpacking.

To start, Smotrova (2017) found that gesture can be used by the teacher in the form of "catchments," or repetitive gestures, in the core of their pronunciation explanations related to syllabification, stress, and rhythm. The catchment for explaining syllabification can be in the form of a repeated chin gesture where the teacher nods their head to mark each syllable in the trouble word. This catchment is done in overlap with a slowed, emphatic pronunciation of the trouble word. Smotrova (2017) concluded that this catchment facilitates "the students'

identification of syllables by making them visible and directing the students' attention to the place of their articulation" (p. 82). Smotrova (2017) also identified a catchment for explaining stress, which involves upward movement on the body on each stressed syllable. The last catchment identified by Smotrova (2017) is in an explanation of rhythm in a proverb, where the teacher moves her hands alternately upward and downward in a rotating motion with slight body movement. Nguyen (2016) found a similar catchment employed in an explanation of stress where a teacher shifts the orientation of their body from left to right while simultaneously snapping their fingers on stressed words. Lastly, Nguyen (2016) showed how a teacher used a complex coordination of gestures to explain the phrase "it would." Some of these gestures included an iconic gesture for cutting in overlap with "it" to indicate that the /t/ sound is unreleased and a deictic gesture to highlight the roundedness of her lips in making the /w/ sound.

Closings of Pronunciation Explanations

Closings of pronunciation explanations are instances where the candidate solution provided in the core is accepted. In self-initiated repair, closings consist of a repetition of the candidate solution from the core provided by the interlocutor who had initiated repair (Brouwer, 2005). In explanations from teachers that included catchments, closings consisted of students' repetitions of the catchment, often in conjunction with some talk (Smotrova, 2017). For example, after a teacher used a chin gesture in the core of their explanation of where stress is placed in a word, students displayed their acceptance of this candidate solution by using the same chin gesture. Nguyen (2016) also showed that closings can be expanded upon by the teacher, despite receiving acceptance of the candidate solution from students, through the provision of a summary or reiteration of what students should have learned from the explanation.

In summary, pronunciation explanation sequences are quite complex interactional phenomena. Openings include three different ways of indicating trouble in understanding (e.g., speech perturbations, rising intonation, and repetitions), cores include various kinds of gestures, oftentimes in the form of a catchment, and closings typically consisted of student repetitions of the candidate solution provided by the teacher in the core. While the sequential nature of pronunciation explanations is well-documented, research seems to be limited to explanations from a teacher to a student. Additionally, research has disproportionately focused on pronunciation explanations of suprasegmental features, especially stress (but see Nguyen, 2016 for an exception).

Grammar Explanations in the Language Learning Classroom

Grammar instruction in the language learning classroom continues to be a topic of interest for teachers and applied linguists alike. Detailing the aspects of grammar that have been identified as "teachable" is beyond the scope of this paper. However, as with pronunciation instruction, research has not focused as much on how grammar is taught moment-to-moment. Interestingly, conversation analytic research on grammar instruction has focused on the use of embodied resources more than the talk itself. Specifically, research has shown how gesture, particularly metaphoric gesture has been used to teach grammatical concepts such as the progressive (Matsumoto & Dobs, 2017; Smotrova, 2014), simple present tense (Hudson, 2011; Matsumoto & Dobs, 2017), locative prepositions (Hudson, 2011; Nakatsukasa, 2013), simple past tense (Hudson, 2011; Nakatsukasa, 2013), superlatives (Rosborough, 2011; Smotrova,

2014), and degrees of comparison and demonstrative pronouns (Smotrova, 2014). To take a closer look at these studies, I turn to the openings, cores, and closings of grammar explanations.

Openings of Grammar Explanations

Openings of grammar explanations are mostly instances where some grammatical construction was identified as problematic by the teacher because a student has demonstrated trouble in understanding its meaning or use (Majlesi, 2018; Matsumoto & Dobs, 2017; Nakatsukasa, 2013; Rosborough, 2011). For example, Rosborough (2011) showed that the opening of grammatical explanations of superlatives consists of a student incorrectly using "the fewest" and "the least" when trying to identify which shape has the least number of sides from a collection of rhombuses, trapezoids, pentagons, and hexagons. Interestingly, there is only one instance where explicitly displayed misunderstanding occur (Smotrova, 2014). Here, the opening of a grammar explanation of the superlative consists of talk from a student who asks whether or not "best" and "better" are synonyms. Other researchers (Hudson, 2011; Matusmoto & Dobs, 2017) did not include transcripts with openings; however, there is some evidence that may point to a different kind of opening (i.e., not accomplished via displays of trouble in understanding). For example, Matusmoto and Dobs (2017) provide a few examples where the teacher initiates their explanation even though a correct grammatical construction has been given by a student. Though it would intuitively make sense that grammar explanation openings can occur without a student displaying or demonstrating trouble, more research is needed before expanding the notion of openings or creating a new category.

While most of the aforementioned researchers of grammatical explanations have focused on how grammar explanations are accomplished through talk and other embodied actions, Majlesi (2018) stands out for their focus on the use of gesture and other artifacts in the openings of grammar explanations. Majlesi (2018) provided numerous examples of how one teacher identified students' demonstrations of understanding as problematic through a practice called "landmarking." Landmarking occurs when the teacher identifies a particular grammatical construction as problematic through talk and embodied actions. For example, the teacher writes out and slowly pronounces a problematic grammatical construction on a projector. In another instance, the teacher explicitly states that there is a problematic grammatical construction while writing the construction out on the projector. In all instances, the teacher uses landmarking to help isolate problematic talk from students' utterances so that an explanation of the correct grammatical form can be given. While other researchers do not explicitly reference "landmarking," many address how teachers use artifacts and gestures in their openings to help draw students' attention to problematic grammatical constructions and connect it to their forthcoming explanation core (Hudson, 2011; Matsumoto & Dobs, 2017; Rosborough, 2011).

Cores of Grammar Explanations

Grammar explanation cores involve giving candidate solutions to either resolve students' displays of trouble in understanding or address their demonstrations of misunderstanding. For example, when a student displays trouble understanding the difference between the use of "best" and "better," the teacher details the meaning of three different degrees of comparison (e.g., "good," "better," and "best") through exemplification and catchment use (i.e., the repeated use of her right hand, palm up, fingers outstretched as if holding a small object). In doing so, the

teacher is able to "generate a three-part spatial model of degrees of comparison" (Smotrova, 2014, p. 277) with "good" represented at the bottom of the model and "best" at the top.

The use of catchments is not unique to grammar explanation cores that attempt to resolve students' trouble in understanding; they are found throughout a variety of other grammar explanation cores. Smotrova (2014) showed how the same teacher in the previous example uses a variety of other catchments to aid other grammar explanations. For example, the teacher uses a catchment for plurality (i.e., rotating her hands several times) to differentiate between "this" and "these," and the teacher uses a catchment for simultaneity and progressivity (i.e., alternately moving her hands forward and backward while index fingers are extended and pointing slightly upward) to illustrate the use of "while" as a subordinating conjunction (Smotrova, 2014). Additionally, Matsumoto and Dobs (2017) showed how a teacher uses a catchment for past time (i.e., pointing backwards over left shoulder) to illustrate the past perfect (for similar uses of this catchment, see Gullberg, 1998; Hudson, 2011; Nakatsukasa, 2013). Matsumoto and Dobs (2017) also show how the same teacher uses a catchment for progressive aspect (i.e., repeatedly moving her hand in a circular motion with index finger pointing down) to illustrate that the present progressive indicates a state of continuous action along with the immediate present time. Lastly, Nakatsukasa (2013) reported on the use of a variety of catchments for spatial representations (e.g., pointing with her left index finger inside a metaphoric container or holding both hands, palm forward and then raising the right one above the left) to help illustrate different locative prepositions (e.g., "in" and "above," respectively).

Whereas the catchments used by teachers in grammar explanation cores are easily identifiable, particularly through their repeated use, the kind and amount of talk are quite varied. Some involve the establishment of contrasts between correct and incorrect grammatical constructions (Majlesi, 2018; Matsumoto & Dobs, 2017; Smotrova, 2014), some only say a few key words and rely heavily on gesture to illustrate meaning and use (e.g., "least" and "most" in Rosborough, 2011 or "this" and "these" in Smotrova, 2014), some are dialogically organized, mostly involving questions to students (Majlesi, 2018; Matsumoto & Dobs, 2017), only one is monologically organized, requiring students to follow instructions in order to understand the difference between different superlatives (Rosborough, 2011), and some include exemplification of the grammatical construction (Mastumoto & Dobs, 2017; Nakatsukasa, 2013; Smotrova, 2014). Most include multiple expansions that occur over several lines of transcript (but see Nakatsukasa, 2013 for an exception). All are united in that they attempt to make clear whatever grammatical construction has been identified as problematic in the opening.

Closings of Grammar Explanations

Closings of grammar explanations are instances where the candidate solution provided in the core is accepted. Closings typically consist of talk from students that repeat part of the candidate solution provided by the teacher (Matsumoto & Dobs, 2017; Rosborough, 2011; Smotrova, 2014). In other words, students do not repeat the entire grammar explanation core from the teacher (e.g., the examples or reasoning provided by the teacher); instead, they only repeat a small part (e.g., a key word from the explanation or the corrected version of the problematized grammatical construction). For example, after a teacher explains how to use "best" by contrasting it with "good" and "better," the closing consists of a student simply repeating "best" (Smotrova, 2014). There are also many examples of a change-of-state token (e.g., "aha" or "uh-huh") given as a closing (Majlesi, 2018; Matsumoto & Dobs, 2017;

Smotrova, 2014). Lastly, it is important to note that some closings are expanded by teachers who would either briefly summarize the core of their grammar explanation, even after receiving an acceptance of the candidate solution from students, and/or praise students for displaying or demonstrating their understanding (Majlesi, 2018; Matsumoto & Dobs, 2017; Rosborough, 2011).

Many closings consist of embodied actions as well as talk. First, in addition to repeating a small part of the teacher's grammar explanation cores, students appropriate the gestures used by the teacher to illustrate a grammatical construction (Matsumoto & Dobs, 2017; Rosborough, 2011; Smotrova, 2014). For example, Matsumoto and Dobs (2017) showed how a student appropriates the teacher's use of hand rotations when indicating their acceptance of the core grammar explanation of how the present tense can be used with habits or routines. Second, some teachers who expand closings through a brief summary of their grammar explanation core repeat the gestures that they used in the core (Matsumoto & Dobs, 2017). Lastly, some closings do not include any talk from anyone; instead, students indicate acceptance of the candidate solution through embodied actions such as nodding and following the teacher's multimodal explanation with their gaze (Smotrova, 2014).

Overall, grammar explanations, like pronunciation ones, are evidently complex interactional phenomena. Openings are mostly instances where the teacher notices a student having trouble understanding the meaning or use of a particular grammatical concept. Furthermore, several openings consist of the use of multimodal resources in landmarking particular problematic understandings, thereby priming the subsequent explanation core. Cores typically occur over several lines of talk and, like pronunciation explanations, involve the use of catchments. Like pronunciation explanations, closings also consist of students' use of catchments provided by the teacher. Grammar explanation closings are unique because students give change-of-state tokens and because of the amount of work involved in formulating a partial repetition of the candidate solution. In other words, students cannot simply repeat the problematized item with correct pronunciation; they have to demonstrate their understanding by repeating a specific part of the candidate solution. Lastly, more research is still needed on explanations of different target grammatical structures (e.g., articles, relative clauses, conditionals, etc.) and on how these explanations unfold between students.

Vocabulary Explanations in the Language Learning Classroom

Research on second language vocabulary learning and instruction has led to insights into what it means to "know" a word, the conditions that facilitate vocabulary acquisition, and the various ways that vocabulary instruction can be incorporated into language learning curricula and materials (Nation, 2013; Schmitt, 2000, 2008; Webb, 2019; Zimmerman, 2013), amongst other dimensions. These findings spotlight the "what" of vocabulary instruction (Tai & Khabbazbashi, 2019; Waring et al., 2013). The "how" of vocabulary instruction is addressed in this research only insofar as guiding principles, approaches, and recommendations were given for how to facilitate vocabulary acquisition in the classroom. While useful, this is a more macro-level answer that leaves the "how" of vocabulary instruction unspecified in terms of the moment-to-moment details of interaction. For a micro-level answer to the "how" of vocabulary instruction, I first turn to early research on vocabulary explanations in applied linguistics and conversation analysis.

Early research on vocabulary explanations has most often been traced back to the 1980s and 1990s (Chaudron, 1982; Flowerdew, 1992; Yee & Wenger, 1984). These authors focused on how the teacher provided vocabulary explanations almost exclusively through talk. For example, Chaudron (1982) noted that teachers use a variety of linguistic methods in their explanations, including slowing down their pronunciation of the target vocabulary item, repeating the vocabulary item multiple times, and paraphrasing the vocabulary item to make it more understandable to students. Flowerdew (1992) then focused exclusively on vocabulary explanations where a definition is given, and developed a framework for understanding definitions (e.g., definitions were syntactically signaled through the use of a copula, lexically signaled through words like "means" and "called," classified as either synonyms or derivations, etc.). These early endeavors towards an understanding of vocabulary explanations laid the groundwork for future research, but it was the conversation analytic researchers who provided more concrete answers to the "how" of vocabulary explanation, particularly through the inclusion of embodied actions and integral parts of giving a vocabulary explanation.

Openings of Vocabulary Explanations

Openings of vocabulary explanations are instances where vocabulary items are problematized (Belhiah, 2013; Eunho, 2015; Kääntä, 2021; Lazaraton, 2004; Lee, 2004; Lo, 2016; Mortensen, 2011; Morton, 2015; Sert, 2015; Stoewer, 2018; Stoewer & Musk, 2019; Tai & Khabbazbashi, 2019; Taşkın, 2017; van Compernolle & Smotrova, 2017; Waring et al., 2013, 2016). Waring et al. (2016) differentiated the kinds of problematizing that could occur as either "unilateral," where a vocabulary item is problematized despite no observable difficulty in understanding in prior talk, or "bilateral," where a vocabulary item is problematized because of some observable difficulty. To elaborate on the distinction between unilateral and bilateral problematization, I will highlight how they are unique.

Unilateral problematization includes questioning the meaning of a lexical form or the lexical form for a particular meaning. This can either occur immediately after the target vocabulary item is uttered or later in the conversation, or through implicit means, such as prosodic emphasis. Numerous other studies included examples of unilateral problematization (Fasel Lauzon, 2015; Lee, 2004; Mortensen, 2011; Morton, 2015; Stoewer, 2018; Stoewer & Musk, 2019; Taşkın, 2017; van Compernolle & Smotrova, 2017), but other ways in which it can be accomplished are still being discovered (Belhiah, 2013; Stoewer & Musk, 2019). For example, Belhiah (2013) showed a teacher unilaterally problematizing "constituent" by asking a student to decide between two exemplifications of the concept. Additionally, Stoewer and Musk (2019) showed a teacher unilaterally problematizing a vocabulary item by asking for a translation of an L1 word (shared by the teacher and students) into English, the target language.

Bilateral problematizations involve teacher responses to learner troubles which may be phonetic, syntactic, semantic, or pragmatic (Waring et al., 2016). Again, numerous other studies have provided examples of bilateral problematization (Kääntä, 2021; Markee, 1995; Sert, 2015; Stoewer, 2018; Stoewer & Musk, 2019; Tai & Khabbazbashi, 2019; van Compernolle & Smotrova, 2017; Waring et al., 2013). Furthermore, van Compernolle and Smotrova (2017) have shown how students' embodied actions contribute to bilateral problematization. For example, they showed that a teacher addresses a learner's incorrect embodiment of the meaning of "roll over," as a trigger for an explanation that verbally and gesturally provides the meaning of "roll over."

In sum, openings of vocabulary explanations are consistently found to be either unilateral or bilateral problematizations. The major difference between unilateral and bilateral problematization is that the latter is borne out of observable learnable trouble whereas the former is not. As Waring et al. (2016) note, both unilateral and bilateral problematizations are united in that they involve the following steps: (1) drawing attention to a vocabulary item; (2) retrieving its original context; (3) spotlighting it (e.g., by writing it on the board, verbal repetition); and (4) soliciting understandings related to the item. Essentially, they isolate the vocabulary item from prior talk and turn it into an object of learning (cf. "landmarking" in Majlesi, 2018), thereby paving the way for the subsequent vocabulary explanation core.

Cores of Vocabulary Explanations

Vocabulary explanation cores are instances where a candidate solution is provided that attempts to resolve the problematization that occurred in the opening. The literature shows examples of teachers providing candidate solutions (Kääntä, 2021; Lazaraton, 2004; Sert, 2015; Taşkın, 2017; Tai & Khabbazbashi, 2019; van Compernolle & Smotrova, 2017; Waring et al., 2013, 2016), as well as examples of students providing a candidate solution, particularly in unilateral openings (Belhiah, 2013; Lee, 2004; Lo, 2016; Mortensen, 2011; Stoewer, 2018; Stoewer & Musk, 2019; Tai & Khabbazbashi, 2019;). Of course, when a student provides a candidate solution that is not accepted by the teacher (e.g., the candidate solution may be incorrect or only partially correct), the teacher typically evaluates the students' candidate solution and then offers their own, thereby extending the sequence. Researchers have focused much of their attention on the interlocutors involved in vocabulary explanation cores because of the power dynamics involved in classroom interaction, but the talk and multimodal resources involved in these cores have also received a great amount of attention.

While various researchers have focused on how teachers use multimodal resources in addition to talk when giving vocabulary explanations (see Lazaraton, 2004 and Flowerdew, 1992 for early examples), it was Waring et al. (2013) who proposed a distinction between "analytic" vocabulary explanations (i.e., those that relied heavily on talk) and "animated" vocabulary explanations (i.e. those that made use of multimodal resources to make their explanation more engaging). In Waring et al.'s (2013) data, analytic vocabulary explanation cores are mostly accomplished through a synonym or paraphrase, such as "meaning X." Other studies provide examples that fit this categorization (Fasel Lauzon, 2015; Stoewer, 2018; Taşkın, 2017) but most are animated vocabulary explanation cores (Belhiah, 2013; Kääntä, 2021; Lazaraton, 2004; Lo, 2016; Sert, 2015; Tai & Khabbazbashi, 2019; van Compernolle & Smotrova, 2017).

Animated vocabulary explanation cores can be further sub-categorized as one of the following types: (1) talk + gesture; (2) talk + environmentally coupled gesture; and (3) talk + scene enactment (Waring et al., 2013). Type 1 could include, for example, the teacher explaining the different parts of a parasail by using gestures to depict different parts, such as the parachute and straps (Waring et al., 2013). Type 2 includes using surrounding materials (e.g., something drawn on the whiteboard or the conduct of someone else in the class) in addition to talk to illustrate the meaning of a vocabulary item. Lastly, Type 3 involves the teacher enacting a scene with gestures and talk that will help illustrate the meaning of a particular vocabulary item, such as physically trading papers with a student to illustrate the meaning of "trade" (Waring et al., 2013). Type 1 vocabulary explanation cores were most common in the literature (Belhiah, 2013; Kääntä, 2021; Lazaraton, 2004; Lo, 2016; Morton, 2015; Sert, 2015; Tai & Khabbazbashi, 2019

van Compernolle & Smotrova, 2017) with Type 2 (Belhiah, 2013; Kääntä, 2021; Lazaraton, 2004; Lo, 2016; Morton, 2015) and Type 3 (Lazaraton, 2004; Kääntä, 2021; Morton, 2015; Tai & Khabbazbashi, 2019) about equally represented. While the analytic and animated categorization (and its subcategorization into three types) is useful for differentiating vocabulary explanation cores, more research is needed before determining the effects of these on learning.

Closings of Vocabulary Explanations

Vocabulary explanation closings are instances where the candidate solution from the core is accepted. Students' acceptances of candidate solutions are overwhelmingly found in their claims of understanding (Belhiah, 2013; Kääntä, 2021; Sert, 2015; Stoewer & Musk, 2019; Tai & Khabbazbashi, 2019; van Compernolle & Smotrova, 2017; Waring et al., 2013). These claims of understanding can be accomplished in a number of ways including: (1) using change-of-state (e.g., "oh" and "ah") or acknowledgement (e.g., "okay" and "yeah") tokens (Belhiah, 2013; Fasel Lauzon, 2015; Kääntä, 2021; Lee, 2004; Stoewer, 2018; Stoewer & Musk, 2019; Tai & Khabbazbashi, 2019; van Compernolle & Smotrova, 2017; Waring et al., 2013), (2) imitating the teacher's use of multimodal resources given during the core (Sert, 2015; Tai & Khabbazbashi, 2019; van Compernolle & Smotrova, 2017), (3) using acknowledgement gestures, such as nodding or maintaining gaze (Kääntä, 2021), (4) using synonyms for the problematized vocabulary item (Belhiah, 2013; Waring et al., 2013), and (5) exemplifying the correct use of the problematized vocabulary item (Belhiah, 2013; Tai & Khabbazbashi, 2019; van Compernolle & Smotrova, 2017; Waring et al., 2013). Oftentimes, there is a combination of these practices, particularly with the use of change-of-state or acknowledgment tokens. Despite these acceptances of the candidate solutions, vocabulary explanation closings are often expanded by teachers through repetitions of their previously provided candidate solution (Belhiah, 2013; Waring et al., 2013), evaluations of a students' claim of understanding (Sert, 2015; van Compernolle & Smotrova, 2017), and additional examples of how the target vocabulary item can be used in related contexts (Belhiah, 2013; Stoewer, 2018; Stoewer & Musk, 2019).

In addition to how students accept candidate solutions, there is also literature on how teachers accept candidate solutions from students. The ways that teachers accept candidate solutions from students include: positively evaluating their response (Morton, 2015; Stoewer, 2018), repeating the candidate solution (Fasel Lauzon, 2015; Morton, 2015; Stoewer, 2018; Taşkın, 2017), asking a follow-up question to elicit more information about the target vocabulary item target (Fasel Lauzon, 2015; Lee, 2004; Morton, 2015), giving additional information about the context of using the target vocabulary item (Stoewer, 2018; Taşkın, 2017), and using multimodal resources to illustrate the meaning of the target vocabulary item (Stoewer, 2018). Like the closings initiated by students, these closings typically have a combination of the practices listed above, particularly with regards to giving positive evaluations of a student's candidate solution. Additionally, these closings are also expanded upon numerous times as different aspects of knowing the target vocabulary item became relevant.

In sum, vocabulary explanations are clearly just as complex as pronunciation and grammar ones. Openings, whether unilateral or bilateral, involve drawing attention to the vocabulary item, contextualizing and spotlighting it (possibly for future manipulation), and soliciting understanding from students. Cores are either analytic or animated, and those that are animated can be broken down further into three types (i.e., talk + gesture, talk + environmentally coupled gesture, or talk + scene enactment). Closings can be accomplished in a variety of ways

(though most often through a change-of-state token), and they are typically expanded by the teacher to give more information related to the vocabulary item. While vocabulary explanations have certainly received the most attention in the literature, more research is still needed on how different aspects of word knowledge, besides meaning-based ones (e.g., collocations, register, syntactic requirements of specific verbs, etc.), are explained.

DISCUSSION AND CONCLUSION

From this review, important patterns have emerged regarding the nature of explanations in the language learning classroom. First, explanations are complex interactional phenomena that tend to be sequentially organized, unplanned or planned, and either monologically or dialogically organized. Second, while explanations of particular linguistic domains have their own unique features, many overlap (e.g., how items are problematized in openings, the use of catchments in cores, how students display understanding through change-of-state tokens and repetitions in closings, that many cores and closings are expanded, etc.). Third, explanations are accomplished through a variety of multimodal resources.

The question of the effectiveness of explanations on students' linguistic abilities remains open (e.g., does a change-of-state token truly indicate understanding, and, if so, for how long?), but being able to give an explanation is clearly important to language teaching. For example, unplanned explanations represent one way that teachers operate under the principle of contingency (van Lier, 1996; Waring, 2016) to be responsive (Koole & Elbers, 2014) to the moment to moment demands of students in the classroom. Furthermore, being able to give an explanation is part of a teacher's classroom interactional competence (Walsh, 2012) because the teacher uses discourse appropriate for the pedagogical goal of the moment (i.e., resolving misunderstandings from students).

To conclude this review, I now propose a few areas for future research, based on gaps in the literature. First, settings where research on explanation have taken place often focus on in-person K-12 settings, particularly in Content-and-Language-Integrated-Learning contexts, so it would be helpful to have additional settings beyond K-12 and in remote learning situations. Second, research has focused mostly on vocabulary explanations while more attention is needed on grammar and pronunciation explanations. Third, most research has focused on teacher-student classroom interaction, so more research is needed on explanations that occur in student-student interaction (e.g., Blum-Kulka et al., 2010; Lo, 2016,). Lastly, it would be beneficial to have more research on explanations of different linguistic structures to see the effect that the target explainable has on the explanation itself. By expanding the research agenda in these ways, a more nuanced understanding of explanations in the language learning classroom across contexts and linguistic domains may be possible.

REFERENCES

Antaki, C. (1988). Explanations, communication and social cognition. In C. Antaki (Ed.), *Analysing everyday explanation: A casebook of methods* (pp. 1-14). Sage.
Antaki, C. (1994). Explaining and arguing: The social organization of accounts. Sage.

Antaki, C. (1996). Explanation slots as resources in interaction. *British Journal of Social Psychology, 35*, 415-432. https://doi.org/10.1111/j.2044-8309.1996.tb01105.x

Belhiah, H. (2013). Using the hand to choreograph instruction: On the functional role of gesture in definition talk. *The Modern Language Journal, 97*(2), 417-434. https://doi.org/10.1111/j.1540-4781.2013.12012.x

Blum-Kulka, S., Hamo, M., & Habib, T. (2010). Explanation in naturally occurring peer talk: Conversational emergence and function, thematic scope, and contribution to the development of discursive skills. *First Language 30*(3-4), 440-460. https://doi.org/10.1177/0142723710370528

Brouwer, C. E. (2005). Doing pronunciation: A specific type of repair sequence. In R. Gardner, & J. Wagner, (Eds.), *Second language conversations: Studies of communication in everyday setting* (pp. 93-113). Bloomsbury Publishing.

Buttny, R. (1993). *Social accountability in communication*. Sage Publications.

Buttny, R., & Morris, G. H. (2001). Accounting. In W. P. Robinson & H. Giles (Eds.), *The new handbook of language and social psychology* (p. 285-301). John Wiley and Sons.

Celce-Murcia, M., Brinton, D., & Goodwin, J. (2010). *Teaching pronunciation: A reference for teachers of English to speakers of other languages*. Cambridge University Press.

Chaudron, C. (1982). Vocabulary elaborations in teachers' speech to L2 learners. *Studies in Second Language Acquisition, 4*, 170-180. https://doi.org/10.1017/S027226310000440X

Dalton-Puffer, C. (2007). *Discourse in content and language integrated learning (CLIL) classrooms*. John Benjamins.

Draper, S. (1988). What's going on in everyday explanation? In C. Antaki (Ed.), *Analysing everyday explanation: A casebook of methods* (pp. 15-31). Sage.

Eunho, K. (2015). Vocabulary negotiations in the KFL classroom: Language learning opportunities through interaction. *Acta Koreana 18*(2), 619-648.

Fasel Lauzon, V. (2015). The interactional architecture of explanations in the second language classroom. *Bulletin VALS-ASLA, 101*, 97-116.

Flowerdew, J. (1992). Definitions in science lectures. *Applied Linguistics, 13*, 202-221. https://doi.org/10.1093/applin/13.2.202

Goh, C. M. C, & Burns, A. (2012). *Teaching speaking: A holistic approach*. Cambridge University Press.

Goodwin, J. (2014). Teaching pronunciation. In M. Celce-Murcia, D. M. Britton, & M. A. Snow (Eds.), *Teaching English as a Second or Foreign Language* (pp. 136-152). National Geographic Learning.

Gosen, M. N., Berenst, J., & de Glopper, K. (2013). The interactional structure of explanations during shared reading at kindergarten. *International Journal of Educational Research, 62*, 62-74. https://doi.org/10.1016/j.ijer.2013.06.006

Gullberg, M. (1998). *Gesture as a communication strategy in second language discourse*. Lund University Press.

Heritage, J. (1984). A change of state token and aspects of its sequential placement. In J. M. Atkinson & J. Heritage (eds.), *Structure of social action: Studies in conversation analysis* (pp. 299-345). Cambridge University Press.

Heritage, J. (1988). Explanations as accounts: A conversation analytic perspective. In C. Antaki (Ed.), *Analysing everyday explanation: A casebook of methods* (pp. 127-144). Sage.

Heritage, J. (2013). Action formation and its epistemic (and other) backgrounds. *Discourse Studies, 15*(5), 551-578. https://doi.org/10.1177/1461445613501449

Hudson, A. (2011). *Teacher gesture in a post-secondary English as a second language classroom: A socio-cultural approach*. Unpublished doctoral dissertation, University of Nevada, Las Vegas.

Kääntä, L. (2021). Multimodal perspectives into teachers' definitional practices: Comparing subject-specific language in Physics and History Lessons. In S. Kunitz, N. Markee, & O.

Sert (Eds.), *Classroom-based conversation analytic research: Theoretical and applied perspectives on pedagogy* (pp. 197-223). Springer International Publishing.

Kääntä, L., Kasper, G., & Piirainen-Marsh, A. (2018). Explaining Hooke's Law: Definitional practices in a CLIL physics classroom. *Applied Linguistics, 39*(5), 694-717. https://doi.org/10.1093/applin/amw025

Koole, T. (2010). Displays of epistemic access: Student responses to teacher explanations. *Research on Language and Social Interaction, 43*(2), 183-209. https://doi.org/10.1080/08351811003737846

Koole, T., & Elbers, E. (2014). Responsiveness in teacher explanations: A conversation analytical perspective on scaffolding. *Linguistics and Education, 26,* 57-69. https://doi.org/10.1016/j.linged.2014.02.001

Lazaraton, A. (2004). Gesture and speech in the vocabulary explanations of one ESL teacher: A microanalytic inquiry. *Language Learning 54(1)*, 79-117. https://doi.org/10.1111/j.1467-9922.2004.00249.x

Lee, Y. (2004). The work of examples in classroom instruction. *Linguistics and Education, 15*, 99-120. https://doi.org/10.1016/j.linged.2004.10.003

Lo, C. H. Y. (2016). Embodied vocabulary explanation in ESL group interaction: A preliminary account. *Studies in Applied Linguistics and TESOL, 16*(2), 29-34. https://doi.org/10.7916/D8FT9XZG

Majlesi, A. R. (2018). Instructed vision: Navigating grammatical rules by using landmarks for linguistics structures in corrective feedback sequences. *The Modern Language Journal, 102*(S1), 11-29. https://doi.org/10.1111/modl.12452

Markee, N. (1995). Teachers' answers to students' questions: problematizing the issue of making meaning. *Issues in Applied Linguistics, 6*(2), 63-92. https://doi.org/10.5070/L462005218

Matsumoto, Y., & Dobs, A. M. (2017). Pedagogical gestures as interactional resources for teaching and learning tense and aspect in the ESL grammar classroom. *Language Learning, 67*(1), 7-42. https://doi.org/10.1111/lang.12181

Merke, S. (2016). Establishing the explainable in Finnish-as-a-foreign-language classroom Interaction: Student-initiated explanation sequences. *Learning, Culture and Social Interaction, 9*, 1-15. https://doi.org/10.1016/j.lcsi.2016.03.002

Mortensen, K. (2011). Doing word explanations in interaction. In G. Palloti, J. Wagner, & G. Kasper (Eds.), *L2 learning as social practice: Conversation analytic perspectives* (pp. 135-162). University of Hawaii Press.

Morton, T. (2015). Vocabulary explanations in CLIL classrooms: a conversation analysis perspective. *The Language Learning Journal, 43*(3), 256-270. https://doi.org/10.1080/09571736.2015.1053283

Myhill, D. (2003). Principled understanding? Teaching the active and passive voice. *Language and Education, 17*(5), 355-370. https://doi.org/10.1080/09500780308666856

Nakatsukasa, K. (2013). *Efficacy of gestures and recasts on the acquisition of L2 grammar.* Unpublished doctoral dissertation, Michigan State University, East Lansing.

Nation, I. S. P. (2013). *Teaching vocabulary: Strategies and techniques*. Heinle Cengage Learning.

Nation, I. S. P., & Newton, J. (2009). *Teaching ESL/EFL Listening and Speaking*. Routledge.

Nguyen, M. (2016). A micro-analysis of embodiments and speech in the pronunciation instruction of one ESL teacher. *Issues in Applied Linguistics, 20*(1), 111-134. https://doi.org/10.5070/L4200024274

Robinson, J. D. (2016). *Accountability in social interaction*. Oxford Scholarship Online.

Rosborough, A. A. (2011). *Gesture as an act of meaning-making: An ecosocial perspective of a sheltered-English second grade classroom.* Unpublished doctoral dissertation, University of Nevada, Las Vegas.

Sacks, H. (1992). *Lectures on conversation (Volume I)*. Blackwell.

Schegloff, E. A. (2007). *Sequence organization in interaction. A primer in conversation analysis, vol. 1*. Cambridge University Press.

Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge University Press.

Schmitt, N. (2008) Instructed second language vocabulary learning. *Language Teaching Research, 12*(3), 329-363. https://doi.org/10.1177/1362168808089921

Scott, M. B., & Lyman, S. M. (1968). Accounts. *American Sociological Review*, 33, 46-62. https://doi.org/10.2307/2092239

Sert, O. (2015). *Social interaction and L2 classroom discourse*. Edinburgh University Press.

Smotrova, T. (2014). *Instructional functions of speech and gesture in the L2 classroom.* Unpublished doctoral dissertation, Pennsylvania State University, University Park.

Smotrova, T. (2017). Making pronunciation visible: Gesture in teaching pronunciation. *TESOL Quarterly, 51*(1), 59-89. https://doi.org/10.1002/tesq.276

Stoewer, K. (2018). What is it in Swedish? Translation requests as a resource for vocabulary explanation in English mother tongue instruction. In A. Filipi, & N. Markee (Eds.), *Conversation analysis and language alternation: Capturing transitions in the classroom* (p. 83-106). John Benjamins Publishing Company.

Stoewer, K., & Musk, N. (2019). Impromptu vocabulary work in English mother tongue instruction. *Classroom Discourse, 10*(2), 123-150. https://doi.org/10.1080/19463014.2018.1516152

Tai, K. W. H., & Khabbazbashi, N. (2019). Vocabulary explanations in beginning-level adult ESOL classroom interactions: A conversation analysis perspective. *Linguistics and Education, 52*, 61-77. https://doi.org/10.1016/j.linged.2019.06.006

Tarone, E. (2005). Speaking in a second language. In E. Hinkel's (Ed.), *Handbook of research in second language teaching and learning* (pp. 485-502). Lawrence Erlbaum Associates.

Taşkın, E. (2017). Interactional unfolding of vocabulary explanations in meaning and fluency contexts. *International Online Journal of Education and Teaching, 4*(4), 562-575. http://iojet.org/index.php/IOJET/article/view/244/191

van Compernolle, R., & Smotrova, T. (2017). Gesture, meaning, and thinking-for-teaching in unplanned vocabulary explanations. *Classroom Discourse, 8*(3), 194-213. https://doi.org/10.1080/19463014.2016.1275028

van Lier, L. (1996). *Interaction in the language curriculum*. Longman Group.

Walsh, S. (2012). Conceptualising classroom interactional competence. *Novitas-ROYAL (Research on Youth and Language) 6*(1), 1-14.

Waring, H. Z. (2007). The multi-functionality of accounts in advice giving. *Journal of Sociolinguistics 11*(3), 367-391. https://doi.org/10.1111/j.1467-9841.2007.00328.x

Waring, H. Z. (2016). *Theorizing pedagogical interaction: Insights from conversation analysi*s. Routledge.

Waring, H. Z., Creider, S. C., & Box, C. D. (2013). Explaining vocabulary in the second language classroom: A conversation analytic account. *Language, Culture, and Social Interaction, 2*(4), 249-264. https://doi.org/10.1016/j.lcsi.2013.08.001

Waring, H. Z., Box, C. D., & Creider, S. C. (2016). Problematizing vocabulary in the second language classroom: Unilateral and bilateral approaches. *Journal of Applied Linguistics and Professional Practice, 10*(1), 87-108. https://doi.org/10.1558/japl.17144

Webb, S. (Ed.). (2019). *The Routledge handbook of vocabulary studie*s. Routledge.

Yee, V., & Wenger, M. (1984). *Teacher talk: The structure of vocabulary and grammar explanations*. Department of ESL scholarly paper. University of Hawaii.

Zimmerman, C. B. (2013). Teaching and learning vocabulary for second language learners. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow. (Eds.), *Teaching English as a second or foreign language* (pp. 288-302). Heinle and Heinle.