Pathbreaking verbs in an EFL setting

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Abstract

Verb argument constructions (VACs) are categories of semantic meaning that map onto syntactic structures such as verb, object and location, verb and location, and verb, direct object and indirect object, or VOL, VL, and VOO, respectively. Studies of these VACs in naturalistic settings have followed the English language acquisition of children with their parents and the language development of English language learners and their native speaker interlocutors. The studies found that the verbs put, go, and get constitute the most frequent examples of their respective VACs and occur so often that their distribution among other verbs from the same category is predictable. This study aims to extend the scope of studies on VACs in naturalistic settings to include EFL settings. Replicating the methodology of the studies done in naturalistic settings, this study collected output by English language learners over one academic year, from their interactive lessons. Findings suggest that put, give, get do not represent the most frequent verbs for the categories VOL, VL, and VOO in the students' output. Moreover, the verbs that are most frequent are distributed among other verbs in the same category predictably. Limitations include the length and context data collection. Recommendations for further research of this nature is given.

Introduction

Among the most important criteria to developing language proficiency may be verbs along with their combined forms and meanings. This much has been pointed out with the term verb argument constructions (VAC), which describes

semantic mappings on syntactic structures of verbs and their complements. Examples of VAC are verbs of exchange with living and non-living objects in direct and indirect object positions, verbs of movement with locations in indirect object positions, and verbs of movement followed by non-living direct objects and locations in indirect object positions, or VOO, VL, and VOL respectively. The ubiquity of VAC are thought to be important for both first (LA) and second language acquisition (SLA) in that particular verbs have been found to constitute a lion's share of each VAC's occurrence, thereby making their forms and meanings salient. In fact, Zipf argued that the most prototypical verb for a given VAC will occur twice as much as the second most typical verb, three times as much as the third most typical verb, and so on, in an inverse relationship (Edwards and Collins, 2011). Zipf's law is contingent upon substantial input, but it seems to hold up for language studies in a variety of contexts that claim its strength to reporting verbs that break paths with other categorically representative verbs in the acquisition of VAC. Therefore, being linguistics applied to language acquisition, the notion of VAC is concerned with language development and language learning with a focus on the role of verbs to integrate semantic and syntactic knowledge.

Usage based theories of language acquisition and development

Zipf's law is ultimately concerned with learning, or language acquisition and development. The acquisition of VAC and their development can be described with usage based theories of language acquisition, which argue that pairings of language forms and their meanings underlie its substance. Among the theories that have contributed most to this understanding is cognitive linguistics. Cognitive linguistics is most concerned with the mental processes involved in language

processing for the acquisition of forms and their meanings. Starting from the hard science of neural processing, connectionism has argued that language acquisition is data-driven such that neural networks statistically abstract data from masses of input, in which the course of processing particular examples, language exemplars surface and contribute to development (Ellis, 2003). Similarly, constructionist accounts of language acquisition argue that form meaning pairs are abstracted from generalizations about their patterns in masses of input (Goldberg, 2006). Cognitive models of language acquisition stress how non-linear development unfolds due to the quality and frequency and comprehensible input. However, dynamic accounts of language acquisition are starting to reveal patters in the history of a learner's language development that emerge from developmental complexities that may otherwise seem chaotic (Larsen-Freeman & Cameron, 2008). This point has not gone unnoticed by language acquisition studies of a usage-based orientation:

They hold that structural regularities emerge from learners' lifetime analysis of the distributional characteristics of the language input and thus that the knowledge of a speaker/hearer cannot be understood as a grammar, but rather as a statistical ensemble of language experiences. (Ellis, 2002, 2).

While a cognitive model of language acquisition describes internal processes involved in language development, its ultimate concern with the usage of form and meaning pairings attempts to keep aware the socially motivated factors that contribute resources and impose constraints on language learning. A usage based theory then guided this study if not explicitly then implicitly in the nature of

its design.

VACs in naturalistic settings

Formative studies regarding VACs stem from naturalistic settings in which the target language predominates. Research by Goldberg, Casenhiser, and Sethuraman (2004) on child language acquisition from the input of their guardians has been foremost. Goldberg et al. traced the output of 13 boys and 14 girls aged 20 to 28 months in USA among 15-minute mother and infant interactions collected longitudinally in the Bates Corpus. Findings revealed that three verbs: go, get, and put took the lion's share of instances for their respective VAC: VL, VOO, and VOL. Moreover, the distribution of prototypical and less typical verbs among the output of all participants was Zipfian. These findings suggest that language development with regard to VAC by children in USA is seeded by the frequency of verbs that categorically represent particular form and meaning combinations.

Another naturalistic setting for VAC studies has been native speaker and non-native speaker interactions in countries where English is the main language. Ellis and Ferreira-Junior (2009) studied the corpus of the European Science Foundation which compiled recordings of native speaker and non-native speaker interactions across a range of speech events every four to six months over five years. The researchers focused on seven Italian or Punjabi speakers in the corpus and similarly found that go, get, and put represented the most frequent examples of VL, VOO, and VOL in both the native speaker and non-native speakers' output. Moreover, the distributions of go, get, and put were inverse to other verbs representative of their VAC. These findings suggest like language acquisition,

prototypical verbs along the lines of go, get, and put are key to VAC development along the path to successful SLA.

Methodology

This study sought to build on those studies of VAC in naturalistic settings with the aim of extending their scope to include VAC that emerge in settings where English is not the main language. The participants were 27 second year university students majoring in English and one other foreign language. Data was collected from pedagogical activities that the participants completed during their regular class meetings. The activities consisted of 10 to 15 minute discussions between three to four students about topics given to them by the teacher or prepared by the students individually beforehand. There were 27 such activities audio recorded and transcribed by research assistants using minimal transcription conventions before being checked by the authors. The recordings were collected at equal intervals of two months. The total count of students' output revealed14,527 words. The teacher was similarly audio recorded during three separate class meetings and the researchers transcribed the recordings. The teacher's total word count was 6,130. The researchers then independently coded and tallied the transcriptions according to Goldberg et al, before working together to agree on any discrepancies. Variations in coding that could be resolved as such were checked with a teacher of English who had not other direct involvement in the project. The design described above was meant to explore the following research questions.

1. Which verbs for the VAC: VOO, VOL, and VL occurred most frequently in

both the teacher and the students' output?

2. How similar are the pathbreaking verbs for the VAC: VOO, VOL, and VL to those of naturalistic settings identified in the studies that this study builds on?

Findings

The range of verbs representing the VAC under study is represented in the tables below. The first table contains a breakdown of the representative verbs that the occurred in the teacher's output. Following the table is another table containing the verbs which occurred in the students' output. An explanation of the tables' contents is before discussing the findings more generally in later sections.

VL		VOL		VOO	
move	1	draw	1	give	29
be	1	bring	13	ask	9
travel	3	hang	1	explain	15
come	3	put	3	add	1
Go	5	Take	3	tell	7
Ride	4	Slip	1	Receive	2
Get	2	Carry	2	Talk	2
Live	2			Let	2
Dwell	1			Accept	2
				Return	1

Emergent VAC in the teacher's output

VL		VOL		VOO	
go	28	raise	3	give	2
come	8	Get	3	collect	1
stay	11	Use	1	tell	1
live	42	Gather	3	Get	6
move	3	bring	1	Import	1
concentrate	1	Put	2		
Be	2	make	1		
Visit	1	see	3		
walk	2	Write	1		
Trip	2				
Take	1				
Enter	1				
Get	1				
Drift	2				
Ride	1				
Join	1				

Emergent verbs in students' output

It can be seen in the table farthest above that the teacher uttered a range of verbs representative of the VOO, VOL, and VL categories. Some verbs took the lion's share of occurrences, or occurred most frequently in the output. The teacher uttered *bring* most frequently for VOL and give most frequently for the VOO construction. Go also occurred slightly more so than other verbs in the VL

category, but the teacher uttered other verbs such as *ride, come*, and *travel* which are representative of this category similarly often. For the students' output, the verbs which took the lion's share of utterances for each VAC were live with regard VL, get for VOO, and somewhat similarly no one verb stood out among the verbs representing the VOL construction. The teacher also uttered a range of different verbs in the categories when compared to those of the students. For example, in each of the VOO, VOL, and VL categories, the teacher uttered nearly ten different verbs, whereas the students used a greater variety of verbs only for the VOL and VL categories. Moreover, the actual verbs that the teacher and the students uttered were varied. These findings are more thoroughly discussed in the following section.

Discussion

The research questions guiding this study were two fold. *The first question asked which verbs for the VAC: VOO, VOL, and VL occurred most frequently in both the teacher and the students' output.* To answer this question, it is important to highlight those verbs from the tables in the findings section. For the VOO category, the teacher stated the verb give most frequently, only uttering get twice among the verbs that represented this category. Interestingly as these findings may seem on their own, their discussion is heightened when seen in light of the verbs used between the teacher and the students for other categories. For example, the teacher uttered bring significantly more often than other verbs in the VOL category, whereas the students uttered no verb more than others for this category and in fact stated very few verbs for the category compared to others. The context of the data may describe the variation observed in the individual verbs used by the

teacher and the students as well as the categories that the verbs represent. The teacher's roles during the data collection period was very much directive, setting up pedagogical activities and preparing for further class meetings. Therefore, there may be more expectation for VOL type verbs, because the teacher arranged pedagogical tasks that involved interdependent learning by the students along with direction as to what the students needed to have for the next class meetings. This thought also may describe why the students uttered fewer verbs representative of the VOL and VOO category than did the teacher. As for the other category, VL, similar explanations can be offered. It can be seen that the students uttered the verb *live* most frequently among verbs representing the VL category, even though the teacher uttered *go* and *ride* while not stating *live* at all. In fact, the recordings reveal that both the teacher and the students were repeating key words in the directions of instructional materials that they were studying with at the time. Therefore, the actual verbs that occurred may be in most part due to the context in which they occurred. The second research questions asked *how similar are the pathbreaking verbs for the VAC: VOO, VOL, and VL to those of naturalistic settings identified in the studies that this study builds on?* Remember that pathbreaking verbs are individual verbs that occur most often among other verbs similarly representing a given VAC. Here, there is significant variation. Recall that in the VAC studies undertaken in naturalistic settings *go, get*, and *put* unanimously represented the categories VL, VOO, and VOL respectively. In this study, though, these verbs did not take the lion's share of occurrences for the categories that they represent. Nevertheless, *go, get*, and *put* did occur in the teacher or the students' output and sometimes from both groups of participants. In fact, what can be seen from both the teacher and the students' output is that no

individual verbs took the lion's share of occurrences in the Zipfian sense. In other words, studies of VAC in naturalistic settings revealed how go, get, and put occurred twice as much as the second most frequent verb and three times as much as the third most frequent verb in its representative category. However, this study revealed no such distribution. Therefore, it can said that with regard to both the teacher and the students' output in this EFL setting, the verbs that emerged to represent the VAC under study differed from the verbs that are most commonly found to represent the VAC in naturalistic settings. As is described above, though, the varying contexts provide some explanation as to why the verbs that emerged from this study may have differed.

Implications

The implications for the findings relate mostly to the teaching and learning. From the data sets, it seems that the students' input may not come from the teacher's output. In some instances, the students' output reflected key words from their instructional materials. Other times, the students seemed to build on the output of their peers during the interactional tasks they were completing in class, during the audio recordings. The teacher's output, though, revealed a wider range of verbs representative of the VAC than did the students' output. Therefore, one implication is that teacher talk could lead to meaningful focus on forms. Another implication relates more to the students' contributions during the interactional activities they complete as formal learning tasks. Since the students seem to pick up so much input from each other, their tasks could be graded and varied for purposes such as accuracy, fluency, and meaning with regard to VAC. The extent to which the students' output reflects that of their peers suggests how there may be a tendency

for the students to develop unique language conventions. It may make sense, then, to build on such language conventions with the aim of language awareness in VAC. However, these implications are only valid insomuch as the limitations of this study are equally considered.

Limitations

The data forming the substance of this study is constrained by several limitations. First of all, the recordings of the teacher and the students were collected over such a limited period of time that is difficult to claim any specific relations between the input and output of the students and the teachers. Moreover, the relatively short data collection period may also contribute to the fact no verbs stood among others as pathbreaking in the Zipfian sense. Secondly, the output of the teacher and the students revealed not only different sets of verbs for the VAC under study but also considerably different frequencies of any such verbs. The limitation here lies in the roles of the teacher and the students during the audio recordings. The students confronted one type of task in which they shared thoughts or research on a given topic. The teacher held up mainly one type of task as well, by directing, monitoring, and modeling the tasks for the students. If there were a wider variety of roles given to the teacher and the students during the data collection period, there may have been a number of other VAC and individual verbs uttered by both the teacher and the students. Nevertheless, the teacher and student output audio recorded during the data collection period provide empirical data from which to begin to see the emergence VAC in this EFL setting.

Conclusion

This study aimed to build on studies of VAC in naturalistic settings with the goal of extending those studies to EFL settings. Therefore, research questions were formulated with those studies in mind and guided the data analysis. Findings suggest that that the students who participated in this study uttered the input of their peers and their instructional materials, rather than the input that came in the form of their teacher's talk. Findings also suggest that whereas the verbs *go, put*, and *get* occur respectively represent the VAC: VL, VOL, and VOO most frequently in settings where English predominates, the same cannot be claimed as yet for EFL contexts. Future studies on VAC in EFL settings could carry on with the findings here by capturing input and output by learners in a greater variety of speech events carried out with a greater diversity of interlocutors. Ultimately, to make claims regarding language acquisition and development, though, data from VAC used by English learners ought to be collected over one academic year, because as this study has shown, a number of verbs representing the three VAC: VL, VOL, and VOO do emerge.

References

Edwards, R. & Collins, L. (2011). Lexical frequency profiles and Zipf's law. *Language Learning, 61*, 1-30.

Ellis, N. C. (2002). Frequency effects in language processing: A review with implications for theories of implicit and explicit language acquisition. *Studies in Second Language Acquisition, 24*, 143-188.

Ellis, N. C. (2003). Constructions, chunking, and connectionism: The emergence of second language structure. In C. Doughty & M. H. Long (Eds.) *Handbook of second language acquisition* (pp. 63-103). Oxford: Blackwell.

Ellis, N. C. & Ferreria-Junior, F. (2009). Construction learning as a function of frequency, frequency distribution, and function. *Modern Language Journal, 93*, 370-385.

Goldberg, A. E. (2006). *Constructions at work: The nature of generalization in language*. Oxford: Oxford University Press.

Goldberg, A. E., Casenhiser, D. M. & Sethuraman, N. (2004). Learning argument constructions. *Cognitive Linguistics, 15*, 289-316.

Larsen-Freeman, D. & Cameron, L. (2008). Complex Systems and *Applied Linguistics*. Oxford University Press.