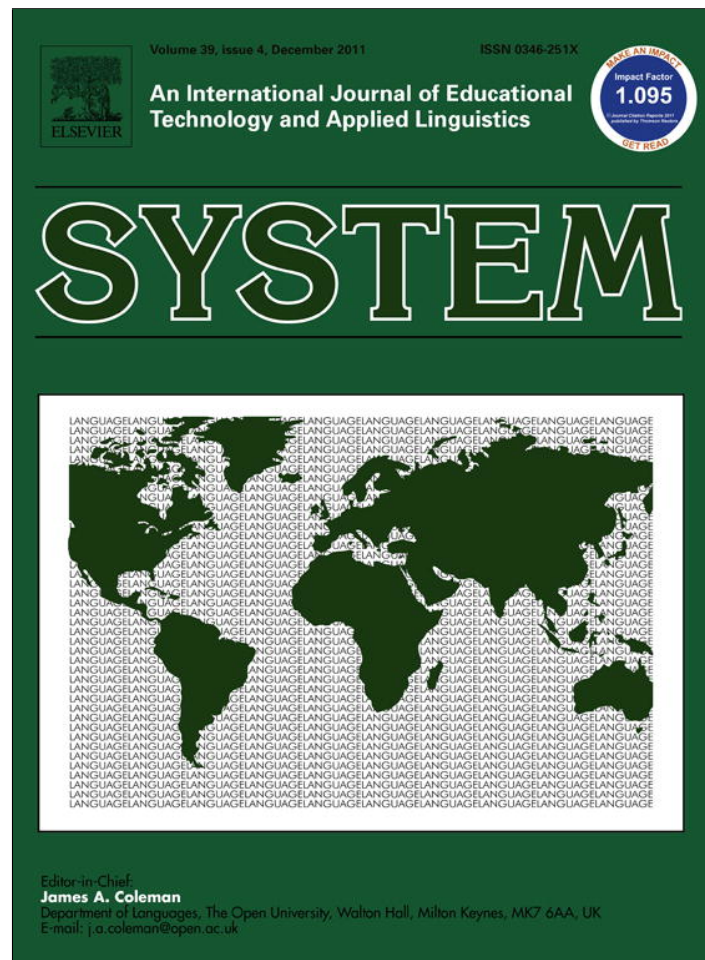


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English learners' knowledge of prepositions: Collocational knowledge or knowledge based on meaning?

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Abstract

Second language (L2) learners' successful performance in an L2 can be partly attributed to their knowledge of collocations. In some cases, this knowledge is accompanied by knowledge of the semantic and/or grammatical patterns that motivate the collocation. At other times, collocational knowledge may serve a compensatory role. To determine the extent to which second language learners' interlanguage relies on collocational knowledge in lieu of precise semantic knowledge, an experiment examined the performance of advanced adult English learners ($N = 90$) from Chinese, Korean, and Spanish L1 backgrounds on a fill-in-the-blanks test in which matched items targeted the same specific sense of a preposition but varied in word co-occurrence frequency, as determined through a corpus analysis. An ANOVA indicated that collocational frequencies of the phrase in which the preposition was embedded had a significant effect ($p < .001$) on the performance of the learners. The study suggests that even fairly advanced NNSs use collocational knowledge when acquiring prepositions' noncentral senses.

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1. Introduction

Research has suggested that both native (NSs) and non-native speakers (NNSs) are sensitive to the frequencies of linguistic forms within input and that this sensitivity affects both linguistic representation and patterns of acquisition (Bybee and Hopper, 2001; Myles et al., 1998). Such findings have sparked interest within the field of second language acquisition (SLA) as researchers seek to clarify the role and scope of frequency-based learning and its relationship to learners' L2 performance. This study attempts to uncover the role of input frequency in the L2 acquisition of prepositions. Specifically, it tests the claim that even fairly advanced adult learners rely quite heavily on collocational¹ knowledge to compensate for deficits in semantic knowledge. English prepositions are a sensible place to look for

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¹ In this paper, the term *collocation* will be used to refer to the storage of multiword units in the mental lexicon. In other words, a *collocation* will be equivalent to Wray's (2002) *formulaic sequence*, which she defines as "a sequence, continuous or discontinuous, of words or other elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar" (p. 9).

frequency-based effects as they occur frequently in the input yet involve complex semantic distinctions that are difficult for L2 learners to master.² The semantic opacity of prepositions' various meanings may constrain L2 learners' ability to acquire all their meanings through explicit learning and may thereby force learners to rely more heavily on implicit learning mechanisms.

NSs' sensitivity to frequency has been confirmed through a wide range of phenomena related to both diachronic linguistic change and the nature of linguistic representation. Bybee (2006) has reviewed research showing that frequency is behind grammaticalization, the resistance of commonly encountered forms to reanalysis, and phonological reductions resulting from a speed-up in neuromotor speech routines, a process that leads to the eventual processing of groups of words as a single unit.

In usage-based accounts of language such as that of Bybee, broad diachronic changes ultimately reflect cognitive processes in individual speakers. To account for individuals' sensitivity to frequency, Bybee (2006) has argued that speakers represent instances of language, including constructions and collocations, as exemplars, which, via repetition of types and tokens, become increasingly entrenched. The representation of exemplars in memory is said to be rich, including information such as implied meaning and context of use. Exemplars that are similar eventually form clusters (i.e., categories), and certain exemplars that are strengthened (i.e., are more frequently encountered) may, in some cases, develop into central members of a category.

In usage-based accounts, category formation is a reflection of a general cognitive ability to represent situations at varying levels of schematicity (Langacker, 1987; Tuggy, 2007). This conception of language suggests that the initial processing of unanalyzed chunks of language may be a necessary first step toward unconsciously deriving the subtle semantic and morphosyntactic regularities that underlie a pattern. This theoretical position has found empirical support in research demonstrating that chunk learning plays an important role in both L1 (Lieven et al., 1997) and L2 acquisition (Myles et al., 1998; Weinert, 1994).

Research on adult L2 acquisition has shown that adult learners are also sensitive to word co-occurrence³ (WCO) frequencies in language (Ellis, 2003), and most researchers, including those who see a relatively minor role for chunk learning in language acquisition (e.g., Pinker, 1999), generally agree that such associative learning is necessary to account for the acquisition of irregular forms and rigidly fixed idioms such as *kick the bucket* and other common speech patterns that defy analysis. Yet some researchers have argued that collocations play a much more extensive role. Wray (2002), for example, has brought together findings from first-language acquisition, early SLA, late SLA, aphasia studies, and neurological research to argue convincingly that language users at any age tend to adopt a conservative strategy of storing frequently occurring sequences as chunks until forced by repeated exposure to engage in analysis.

The effect of frequency on adult L2 learners' interlanguage has received attention within SLA research, particularly in the work of Ellis (2003); yet questions remain regarding the precise role and scope of frequency-based acquisition. Are adult L2 learners, even at a fairly advanced level, using unanalyzed chunks to compensate for a lack of understanding of the more subtle syntactic and semantic features of a target language? When linguistic forms appear frequently in the input, do adult learners immediately engage in analysis of these forms, creating systematic (if at times, faulty) representations in their interlanguage system, or do they tend to rely heavily on collocational knowledge until repeated encounters with similar patterns lead to further semantic or syntactic analysis based on schematization of similar exemplars?

One recent study with direct relevance to this line of inquiry was conducted by Lowie and Verspoor (2004), who examined the role of L1 similarity (a basis for crosslinguistic transfer) and frequency in Dutch learners' acquisition of English prepositions. Four groups of learners, ranging from beginning to advanced, were given a cloze-type test with prepositions that varied both in terms of similarity to L1 counterparts and frequency. The study found an effect for both frequency and similarity for all but the most advanced learners. The finding of a frequency effect for the early learners

² Jiménez Catalán (1996), using a learner corpus of 290 essays by Spanish secondary school students, found that in a tally of students' top ten errors, substitution of a preposition was the most frequent error (11.9%) while the incorrect addition of a preposition was sixth most common (3.2%), and omission of a preposition the seventh most common (3.7%). Munnich (2002), in a study of Korean and Spanish speakers who had arrived in the U.S. at different ages, has shown that the acquisition of L2 spatial language is related to maturation. Both L1 groups had difficulty acquiring certain semantic contrasts after the age of 14.

³ The term *word co-occurrence* will be used throughout the paper as a more neutral term that avoids many of the psycholinguistic assumptions associated with common terms such as *formulaic sequence* or *collocation*. *Word co-occurrence*, as used here, is equivalent to Sinclair's (1991) definition of a collocation as "the occurrence of two or more words within a short space of each other in a text" (p. 170).

was surprising as these were low-proficiency learners in a non-immersion classroom environment where they would presumably receive only limited input. The interaction between frequency and similarity indicated that similarity was only relevant when frequency was low. The overall results suggested that when L2 learners acquire prepositions that occur frequently in the input, (1) frequency significantly affects acquisition and (2) L1 transfer plays a much smaller role than frequency-based learning.

2. Background of the current study

This study differs in several important respects from previous research in this area by focusing on advanced L2 learners' sensitivity to frequency as they acquire the noncentral meanings of prepositions. Methodologically, research questions involving the type of knowledge underlying NNSs' competence can be difficult to answer. Learners' performance on productive measures can rarely be definitively attributed to chunk learning, or alternatively, to the activation of more abstract meaning based on lexical constituents or grammatical rules. Indeed, the same learner, through the course of L2 acquisition, could presumably begin to use a form accurately as a result of having learned the form as part of a memorized chunk, but then later go on to develop the abstract semantic or syntactic knowledge of the linguistic regularity that governs the form. The two forms of knowledge, therefore, cannot be distinguished through an examination of a learner's correct response to a single item on a test, as both forms of knowledge can underlie accurate performance.

In order to overcome this methodological conundrum, this study used pairs of items which shared the same meaning but differed in terms of frequency. It is assumed that if a learner's interlanguage is based solely on an understanding of the semantics that underlie native use of the target preposition, the patterns of error should reflect this systematicity. In other words, learners should provide inaccurate responses on both members of the pair if they do not know the underlying meaning and should be correct on both members if they know the meaning. If learners are accurate only on the high-frequency member of the pair, their knowledge (and, by extension, the acquisitional process that led to the knowledge) must be sensitive to WCO frequency distributions in the input.

In this study, it is hypothesized that adult language learners, even at advanced levels, rely heavily on collocational knowledge as they acquire prepositions. In typical cases, this knowledge would be derived from learners' sensitivity to the frequency with which a given preposition occurs with certain words (primarily, nouns and verbs). This study thus hypothesizes that frequency, in addition to meaning, will determine, to some extent, learners' ability to supply the correct preposition for a given phrase.

Research on prepositions has tended to adopt one of three general views, analyzing their meaning from a homonymy, monosemy, or polysemy perspective (For a discussion, see Tyler and Evans, 2003). The polysemy perspective holds that the multiple meanings of prepositions reflect different yet related lexical concepts, stored as distinct senses within the mental lexicon. This perspective is adopted here, as it best accounts for the systematic links between senses as well as links between synchronic linguistic representation and diachronic linguistic change.

When acquiring prepositions as children, native speakers may pass through several stages, initially learning the prepositions within collocations, but eventually subjecting the particles to semantic analysis, a process that yields the different senses of the polysemy networks for each preposition. NNSs, on the other hand, may encounter difficulties in working out these subtle shades of meaning for a number of reasons: (1) NNSs have often received less input; moreover, the input that they do receive may be from other NNSs who depart from native norms or who have a limited linguistic repertoire and thereby fail to express the full semantic range of words and expressions; (2) multiple construals of a spatial scene are often possible, and the differences between construals often lack consequences within discourse (e.g., *She's in school* versus *at school*; *I posted it on my blog* versus *in my blog* or *to my blog*.); (3) adults rely on learning mechanisms that differ in certain important ways from those used by children, and these mechanisms are less effective at abstracting nonsalient regularities from the linguistic input (DeKeyser, 2003); (4) in interactions between native and non-native speakers, errors involving preposition use are often not egregious enough to invoke a corrective response, and NNSs may thus be deprived of models, recasts, and feedback resulting from negotiation for meaning (For a discussion of the psycholinguistic importance of feedback and interaction, see Long and Porter, 1985); (5) prepositions tend to occur in unstressed positions in phrases and are sometimes subject to elision (e.g., the oft-heard *piece a cake* in place of *piece of cake*) making them difficult to notice (For a discussion of the importance of noticing in SLA, see Schmidt, 1995); and (6) although languages often have similar semantic categories for the more basic spatial scenes (e.g., containment or support), they tend to extend the basic senses in novel ways; hence L1 semantic patterns serve as an imperfect guide to noncentral spatial senses in the L2.

The main purpose of the study was to test the claim that NNSs use chunk-based representations in addition to knowledge of meaning when using English prepositions. The extent to which NNSs use collocational knowledge could also be affected by L1 transfer. To partially account for this possibility, the study included learners from Chinese, Korean, and Spanish L1 backgrounds (hereafter referred to as the CL1, KL1, and SL1 groups). These three L1 groups were selected because their L1s treat spatial scenes and extensions of these scenes differently; hence, similar findings for all three groups would improve the study's generalizability.

The experiment tested the following hypothesis:

H1: Even fairly advanced NNSs, having failed to acquire some of the semantic motivations for various preposition senses, will often rely on collocational knowledge when selecting the appropriate preposition for a specific context. As a result, they will display significantly better performance on a preposition meaning when it is embedded within a frequently occurring WCO relative to that same preposition (with the same meaning) when it occurs in a lower-frequency WCO.

3. Method

3.1. Participants

The participants consisted of 30 Chinese native (CL1) speakers, 30 Korean native (KL1) speakers, and 30 Spanish (SL1) native speakers, who were recruited at a large state university in the U.S. None had spent more than three months living in an English-speaking country prior to the age of 18. Their proficiency was assessed indirectly, based on their scores on Nation's (1990) Vocabulary Levels Test. Those who failed to attain criterion (16 of 18 items correct) on the 2000 Word Level items were likely to have impaired performance on the experimental measures due to weak lexical knowledge and low overall proficiency; hence such participants were excluded. NNS participants received \$15 in compensation for their participation. Participant background information is provided in Table 1.

3.2. Materials

The key instrument in the experiment was a 36-item prepositions test that consisted of fill-in-the-blank items (see Appendix A). In addition to 18 distractor items that also targeted prepositions, the 18 experimental items targeted nine preposition senses. These target items consisted of pairs, with one member of the pair occurring in a high-frequency (HF) WCO and one in a low-frequency (LF) WCO. The division between the two frequency bands was set at five tokens per million words. Each pair was placed in pseudo-random order, with one member of the pair appearing on the first half and the other on the second half of the test. The nine pairs are shown in Table 2 with their two target WCOs (one high- and one low-frequency item) and their frequency counts per million in the two corpora.

The token frequencies of these WCOs, which all involved specific noncentral senses of prepositions, were determined using the American National Corpus (Reppen et al., 2005).⁴ The relative frequencies were then checked using the British National Corpus (BNC) accessed via the BNCweb portal (Hoffmann and Evert, 1996–2008) to determine whether items showed large discrepancies that would suggest that the frequency was an artifact of the particular texts used in the American National Corpus (ANC) or peculiarities of American English usage. Only WCOs that received the same frequency band assignment (i.e., above or below five tokens per million) based on both corpora were included as target items. All concordance results were checked to confirm that each token returned in response to the query was an actual instance of the targeted WCO (i.e., had the target meaning within its sentence context). False positives were omitted from the count.

Based on the number of tokens per million words in the two corpora, the high-frequency band ranged from 6.7 to 33.9 ($M = 14.96$, $SD = 8.53$) in the ANC and from 6.9 to 35.9 ($M = 17.16$, $SD = 9.98$) in the BNC. The low-frequency band ranged from 0.4 to 1.8 ($M = 0.91$, $SD = 0.52$) in the ANC and from 0.2 to 3.3 ($M = 1.24$, $SD = 1.10$) in the BNC. Because the study examined collocational knowledge, the frequency counts only included contexts in which the preposition and collocating item (a verb or a noun) were adjacent or were separated by only an article, determiner, or

⁴ The ANC contains 23,122,240 running words (tokens) and 209,307 types. Approximately 17% of the texts are from spoken texts and the rest from written text. The BNC has 96,986,707 tokens with 10% from spoken texts and 90% from written texts. The ANC counts were calculated using Oxford Wordsmith Tools 4.0 (Scott, 1999). The BNC counts were obtained through the BNCweb accessed via <http://bncweb.lancs.ac.uk/>.

Table 1
Participant background.

	L1 groups						All participants	
	Chinese		Korean		Spanish		Mdn	Range
	Mdn	Range	Mdn	Range	Mdn	Range		
Age	25.5	19–38	26.0	19–46	37	18–57	29.3	18–57
LOR ^a (mo.)	16.0	3–118	19.5	1–180	20.5	4–312	22.5	1–312

^a Length of residence.

possessive pronoun. Verb-based phrases included phrases with different morphological endings (e.g., *—s*, *—ed*, and *—ing*) on the verb, and noun-based phrases included plural forms when applicable.

When calculating token frequencies of the target WCOs and creating items, several criteria were used to ensure that the items in each pair were comparable: (1) The preposition had to occur on the same side of the collocating word in each pair; and (2) only collocations in which the target sense of the preposition was the same were included (e.g., the *in writing* phrase count would not include the count for *in writings* because the meaning of *in* is different in both phrases). Items involving both the target collocating phrase and an additional collocation were avoided (e.g., an item targeting the *rely on* collocation would not be followed by the word *time* because *on time* also occurs frequently as a collocation).

Above each item on the test was a box containing 15 choices. Participants were asked to select one choice and write it in the blank. Choices were the same for items targeting the same sense and were similar for all test items. The forced-choice format was used to prevent participants from using alternative prepositions for items that allowed for more than one construal (e.g., “I wrote it *with* a pencil” in place of “I wrote it *in* pencil.”) Distractors were included to prevent participants from noticing the relationships between test items and to encourage participants to consider the 15 choices in the box above each item as plausible responses. The distractors all targeted spatial meanings that were distinct (i.e., differed from all other items on the test). Test items were created using simple vocabulary that the participants were likely to understand.

Table 2
Target word co-occurrences with token frequencies per million words.

Target preposition and sense	WCO ^a	ANC ^b	BNC ^c
Pair #1 AT: Search for contiguity extended via metaphor (Navarro i Ferrando, 1998, p. 160)	Laugh at	10.8	12.1
	Wink at	0.5	1.5
Pair #2 IN: State sense with notion of constraint (Tyler and Evans, 2003, pp. 187, 188)	In love	21.1	24.0
	In fear	1.8	2.5
Pair #3 ON: Support sense extended via metaphor (Navarro i Ferrando, 1998, p. 188)	Rely on	33.9	35.9
	Survive on	1.4	1.5
Pair #4 ON: Temporal sense of coincidence with part of an event (Navarro i Ferrando, 1998, p. 210)	On time	7.5	7.2
	On schedule	1.1	1.3
Pair #5 ON: Visual feature with resemblance to simple contact (Goddard, 2002; Herskovits, 1986)	On ... screen	14.8	9.9
	On ... leg	0.4	0.2
Pair #6 OVER: Control sense (Tyler and Evans, 2003, pp. 101–103)	Control over	11.7	20.1
	Influence over	0.9	3.3
Pair #7 TO: Attachment sense (Tyler and Evans, 2003, p. 151)	Attach to	18.1	26.2
	Tape to	0.4	0.3
Pair #8 UNDER: Control sense (Tyler and Evans, 2003, p. 125)	Under ... control	6.7	6.9
	Under ... management	0.4	0.3
Pair #9 WITH: Psychological sense with stimulus entering domain of experiencer	Happy with	10.0	12.1
	Upset with	1.3	0.3

^a Word co-occurrence.

^b American National Corpus.

^c British National Corpus.

Table 3
Descriptive statistics for three L1 groups: prepositions and vocabulary measures.

	L1 group						All	
	Chinese		Korean		Spanish		<i>M</i>	<i>SD</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
FPT(36) ^a	28.13	4.75	20.67	4.44	24.40	8.02	24.40	6.64
FPT(18) ^b	14.57	2.14	12.07	2.18	13.3	3.93	13.32	3.02
HF items ^c	8.37	0.89	7.43	1.30	7.53	1.76	7.78	1.41
LF items ^d	6.20	1.56	4.63	1.33	5.80	2.47	5.54	1.95
VLT ^e	76.73	10.01	77.63	7.25	76.53	10.97	76.97	9.45

^a All items of the preposition test, including the 18 target items and 18 distractors.

^b The 18 target items of the preposition test comprised of nine HF and nine LF items.

^c The nine high-frequency target items of the preposition test.

^d The nine low-frequency target items of the preposition test.

^e Vocabulary levels test (Nation, 1990).

3.3. Procedure

The 90 NNS participants were given the 36-item fill-in-the-blank preposition test (FPT). Upon completing the test, they took Nation's (1990) VLT. They then completed a questionnaire translated into their own language, asking about language background, age, gender, educational level, and period of residence in English-speaking countries.

4. Results

The means and standard deviation for the three groups' performance on the FPT (all items including distractors), the 18 FPT target items, and the HF and LF target items are shown in Table 3 along with the VLT scores. As can be seen, the 90 participants scored higher on the nine HF items (86.4% correct) relative to the nine LF items (61.6% correct). Differences in group scores for the 36-items (the entire FPT test with distractors) were similar to differences in group scores for the 18 target items (the HF and LF items combined). The three groups had virtually identical scores on the vocabulary measure.

Cronbach's alpha, a measure of internal consistency among items, was 0.913 for the 90-item VLT, 0.875 for the 36-item FPT, and 0.734 for the 18 target items on the FPT. The reliability was thus high for both the VLT and the FPT viewed in their entirety. The lower alpha for the 18 target items (the nine HF and nine LF items) was adequate, the lower figure reflecting the smaller numbers of items.

The analysis sought to determine whether collocational frequency significantly affected scores on target items, and if so, whether it did so for each of the three L1 groups. To test for these effects, a repeated measures ANOVA was conducted. The FPT target item scores served as the dependent variable. The WCO frequency band of the items served as a within-subjects factor observed at two levels (high and low).

In the test of within-subject effects, WCO frequency was found to have a significant effect at $p < .05$ on the FPT target item scores: $F(1,89) = 181.818$, $p < .001$, $\eta_p^2 = .671$, with the mean difference of 2.22, 95% CI [1.895, 2.550]. Thus scores on the HF items were significantly higher than those for the LF items. The effect size, as measured by partial eta squared, was large. A post hoc analysis was performed using a t -test for each group's scores (Table 4). The results showed that all three L1 groups scored significantly higher on the nine HF items relative to the nine LF items.

Table 4
Paired samples t -tests of L1 group scores on high–low-frequency items.

Group	Mean difference	t	df	Sig. (2-tailed)
CL1	2.167	8.683	29	$p < .001^*$
KL1	2.800	10.422	29	$p < .001^*$
SL1	1.733	5.583	29	$p < .001^*$

* $p < .017$, the acceptable alpha value of .05 subjected to a Bonferroni correction for three pairwise comparisons.

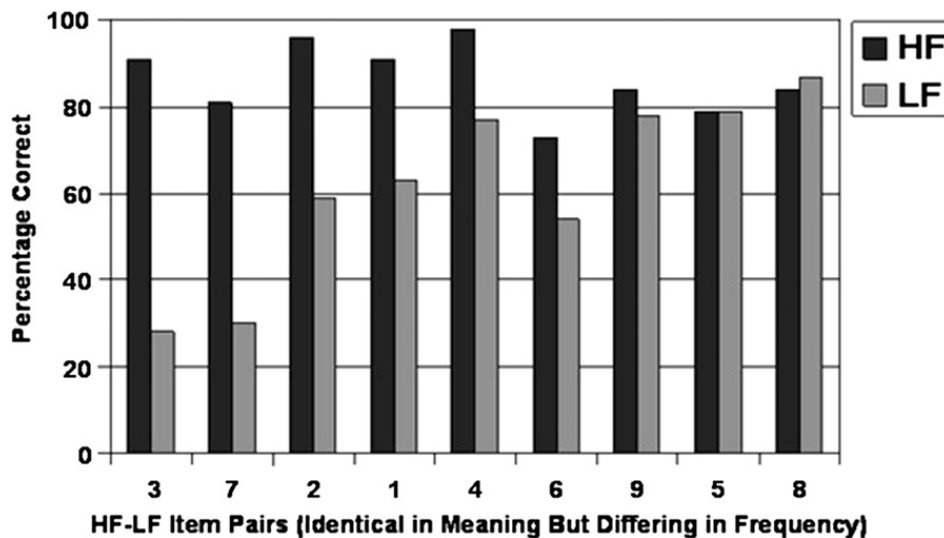


Fig. 1. Percentage correct on the nine target pairs of the FPT, arranged from items with largest positive difference in percentage correct between HF and LF pairs to items with smallest or negative difference.

Fig. 1 shows scores on low and high-frequency item pairs. For purposes of explication, the pairs with the highest discrepancy in scores are shown on the left, whereas pairs with less discrepancy or with higher scores on the low-frequency item are shown on the right. The *x*-axis plots pairs and the *y*-axis plots percentage correct.

As can be seen, scores on the HF items tended to be above 80%. The LF items show much greater fluctuation. It is important to note that the pair members that converge do so at the top of the chart, an indication that the lack of variance between high and low frequencies on some pairs is due to higher performance on some of the LF items versus lower performance on HF items.

5. Discussion and conclusions

A significantly higher score for the HF category compared to the LF category across the three L1 groups demonstrates that learners' ability to provide the appropriate preposition is sensitive to the WCO frequencies of the phrases in which the preposition is embedded; thus the study's hypothesis has been confirmed. An additional post hoc analysis of each participant's results showed that among the 40.5% of the pairs for which individual participants made an error on only one member of the pair, 35.2% involved errors on the LF item and only 5.3% involved errors on the HF item. In other words, participants' performance can be almost entirely explained in terms of their knowledge of the preposition's meaning (resulting in correct responses for both members of the pair), ignorance of the preposition's meaning (resulting in incorrect responses for both members of the pair), or knowledge of the HF collocation (resulting in correct responses solely for the HF member of the pair).

The study's results are highly consistent with usage-based accounts of language acquisition and representation such as those put forth by Bybee (2006) or Tuggy (2007), and they support Ellis's (2003) and Wray's (2002) contention that word co-occurrence frequencies (which they discuss, respectively, using the terms "chunks" and "formulaic sequences") play an important role in SLA. Previous research in this area has tended to emphasize the role of collocations in promoting fluency (Pawley and Syder, 1983) and in providing a database for the induction of morphosyntax (Bolander, 1989). The current study suggests that frequency-based learning from exemplars may also play a key role in the acquisition of semantically opaque polysemous forms such as English prepositions.

The study has focused on an arbitrarily chosen set of preposition senses and therefore cannot make any claims regarding learners' overall command of English prepositions. It could be that a different group of target items would show slightly smaller or greater differences between the L1 groups and would result in different score ranges for participants with equivalent proficiency levels and LORs.

There is a need to replicate these findings with different L1 groups and with learners with different educational profiles. The learners in this study tended to be much more highly educated than members of the general population, and this profile may coincide with greater language aptitude as well as with different attitudes toward learning in

general. There is also a need for examination of the same variables using real-time tasks and psycholinguistic measures that more directly tap into learners' underlying competence.

The study indicates that frequency-based mechanisms play an important role in certain areas of acquisition. At a practical level, it suggests that learners rapidly gain accuracy in semantically complex areas of the L2 due to implicit learning based on large amounts of input. In order to facilitate and accelerate this process, instructors may need to encourage students to read and listen more, and may need to expose them to English in a wider range of contexts. Learners in non-intensive EFL courses, on the other hand, may require instruction that explicitly targets semantically opaque forms. While the subtle semantic distinctions targeted in the study proved to be difficult for L2 learners, the near-perfect scores by some of the participants with more advanced proficiency shows that there is, at least, a glimmer of hope at the end of the L2 acquisition process for semantically complex forms such as prepositions.

Appendix A. Preposition test with intended responses

*Fill in the blank using the best choice from the possible answers that are listed above each sentence. Use only **one** word in each blank. If more than one answer is possible, choose the best possible response based on the meaning of the sentence.*

Example

ABOVE, ACROSS, ALONG, AMONG, AT, BELOW, BENEATH, BETWEEN, FOR, FROM, IN, OVER, TO, UP, WITH

The boy climbed up the tree.

Although other answers might be possible, up is the most natural choice and is therefore the best answer.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, INTO, OFF, ONTO, OVER, THROUGH, TO, TOWARD, WITH

1. The research will look at alcohol use among teenagers.

AMONG, AROUND, BELOW, BETWEEN, FROM, FOR, INTO, OF, OFF, ON, ONTO, THROUGH, TO, UNDER, WITH

2. My sister's saving money for college.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, IN, INTO, OF, OFF, ON, ONTO, OVER, TO

3. Men sometimes have a difficult time expressing their true feelings in words, whereas women often tend to be more open and honest regarding their feelings and emotions.

AMONG, AT, BELOW, FOR, FROM, INTO, OF, OFF, ON, ONTO, OVER, THROUGH, TO, UNDER, WITH

4. He gave away everything he owned and then disappeared into the Alaskan wilderness.

AMONG, AROUND, AT, BELOW, FOR, FROM, IN, INTO, OF, OFF, OVER, THROUGH, TO, UNDER, WITH

5. If you don't like using the mouse that's attached to your computer, you can remove it and use the mouse that's in my backpack.

AMONG, AROUND, AT, BELOW, FOR, FROM, IN, INTO, OF, OFF, OVER, THROUGH, TO, UNDER, WITH

6. On the last night of our camping trip, we sat in a circle and listened to my grandfather tell stories.

AMONG, AT, BELOW, FOR, FROM, INTO, OF, OFF, ON, ONTO, OVER, THROUGH, TO, UNDER, WITH

7. The hotel was recently sold. It is now under the management of a new company president.

AMONG, AROUND, AT, BELOW, FOR, FROM, IN, INTO, OF, OFF, OVER, THROUGH, TO, UNDER, WITH

8. The house is protected from the wind by a stone wall.

AMONG, AROUND, BELOW, BETWEEN, FROM, FOR, INTO, OF, OFF, ON, ONTO, THROUGH, TO, UNDER, WITH

9. David just saw his daughter's report card. She got all 'D's and 'F's. I don't think he's very happy with her grades.

AMONG, AROUND, AT, BETWEEN, FOR, FROM, IN, INTO, OF, OFF, ON, ONTO, OVER, THROUGH, TO

10. Because they cannot pay hospital costs, many of the world's poor people live their lives in fear of getting sick.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, INTO, OF, OFF, ON, OVER, THROUGH, TO, UNDER

11. When you get a new job, it's very important that you arrive on time.

AMONG, AROUND, BELOW, FOR, IN, INTO, OF, OFF, ON, OVER, THROUGH, TO, TOWARD, UNDER, WITH

12. My 5-year-old son fell off his bed last night. Luckily, he didn't get hurt.

AMONG, AROUND, BELOW, FOR, IN, INTO, OF, OFF, ON, OVER, THROUGH, TO, TOWARD, UNDER, WITH

13. When I leaned over to tie my shoe, I saw a hole in my sock.

AMONG, AROUND, AT, BETWEEN, FOR, FROM, IN, INTO, OF, OFF, ON, ONTO, OVER, THROUGH, WITH

14. She fell down while playing baseball yesterday. She now has a small black and blue bruise on her leg.

AMONG, AT, BELOW, FOR, FROM, IN, INTO, OF, OFF, ON, OVER, THROUGH, TO, UNDER, WITH

15. I think she likes me. When we were at the party last night, she winked at me.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, IN, INTO, OFF, OVER, THROUGH, TO, TOWARD, WITH

16. A father's control over his children should continue even after they leave home.

AMONG, AROUND, AT, BELOW, BETWEEN, FROM, INTO, OF, OFF, ON, OVER, THROUGH, TO, TOWARD, UNDER

17. I was so tired that I slept through the entire movie.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, INTO, OF, OFF, ON, OVER, THROUGH, TO, UNDER

18. Nowadays, American students rely on computers when writing papers for class. As a result, most students have lost the ability to spell without the help of a computer.

AMONG, AT, BESIDE, BETWEEN, FOR, FROM, IN, INTO, OF, OFF, THROUGH, UNDERNEATH, UNTIL, UPON, WITH

19. After the plane crash, some people decided to stay and help the survivors, but the pilot and another man headed for a nearby hill where they used a handheld radio to send a message.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, INTO, OF, OFF, ON, OVER, THROUGH, TO, UNDER

20. My grandfather has two dogs. Every evening, he really enjoys watching the two dogs at play as he sits in his chair in front of the house.

AMONG, AT, BELOW, FOR, FROM, IN, INTO, OF, OFF, ON, OVER, THROUGH, TO, UNDER, WITH

21. Mary dreams of going to college someday.

AMONG, AROUND, AT, BETWEEN, FOR, FROM, IN, INTO, OF, OFF, ON, ONTO, OVER, THROUGH, WITH

22. I bought a used computer, but I don't like it because the screen is too small. Even when I'm wearing my glasses, I can't read the small words on the screen.

AMONG, AROUND, AT, BELOW, FOR, FROM, IN, INTO, OF, OFF, ON, OVER, THROUGH, TO, WITH

23. Apartments can sometimes be difficult places to live. The person who lives directly below me plays his music so loud that my floor shakes.

AMONG, AROUND, AT, BELOW, FOR, FROM, IN, INTO, OF, OFF, OVER, THROUGH, TO, UNDER, WITH

24. Did you read the small note that I taped to your office door?

AMONG, AROUND, AT, BETWEEN, FOR, FROM, IN, INTO, OF, OFF, ON, ONTO, OVER, THROUGH, TO

25. The twins look so much alike that I can't tell the difference between them.

AMONG, AROUND, AT, BETWEEN, FOR, FROM, IN, INTO, OF, OFF, ON, ONTO, OVER, THROUGH, TO

26. You can tell that Jane is in love. Whenever I see her, all that she can talk about is her new boyfriend.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, INTO, OF, OFF, ON, OVER, THROUGH, TO, UNDER

27. I'm happy to tell you that the construction of the new bridge is currently on schedule. If everything continues to go well, the bridge should be completed by November.

AMONG, AROUND, BELOW, BETWEEN, FROM, FOR, INTO, OF, OFF, ON, ONTO, THROUGH, TO, UNDER, WITH

28. My brother's upset with his girlfriend. They were going to go see a movie, but she never showed up.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, IN, INTO, OFF, OVER, THROUGH, TO, TOWARD, WITH

29. Some people think that big countries have too much influence over small countries' decisions.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, IN, INTO, OF, OFF, ON, ONTO, THROUGH, WITH

30. The TV wasn't working so we climbed onto the roof to see if there was something wrong with the antenna.

AMONG, AT, BELOW, FOR, FROM, IN, INTO, OF, OFF, ON, OVER, THROUGH, TO, UNDER, WITH

31. It's okay to joke, but I don't like it when the other students laugh at me.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, INTO, OFF, ONTO, OVER, THROUGH, TO, TOWARD, WITH

32. The man who sold me the car wanted \$1000, but I told him that I would only give him \$900 for it.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, INTO, OF, OFF, ON, OVER, THROUGH, TO, UNDER

33. Some trees can survive on very little water. These trees, which live in deserts and other dry areas, store water during wet years and then use this water during dry periods.

AMONG, AROUND, AT, BETWEEN, FOR, FROM, IN, INTO, OF, OFF, ON, ONTO, OVER, THROUGH, WITH

34. When you buy a house, it is important that you don't accept spoken promises but instead get everything in writing.

AMONG, AROUND, AT, BELOW, BETWEEN, FOR, FROM, OF, OFF, ON, ONTO, OVER, TO, UNDER, WITH

35. After we moved into our new house, we walked around the neighborhood and met our new neighbors.

AMONG, AT, BELOW, FOR, FROM, INTO, OF, OFF, ON, ONTO, OVER, THROUGH, TO, UNDER, WITH

36. National decisions should never be under the control of a single individual.

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