ONE-TIME TREATMENT FOR INCIDENTAL VOCABULARY LEARNING: CALL FOR DISCONTINUATION

A commentary on Ali Karakaş and Arif Sariçoban's "The impact of watching subtitled animated cartoons on incidental vocabulary learning of ELT students".

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Abstract

Incidental vocabulary learning has attracted a great deal of attention in ELT research. However, it is important that teacher and researcher exploitation of vocabulary developments be guided by more than replication of previous research designs. For conclusions based on empirical research to be valid, it is important to be clear about exactly what any data being gathered pertains to. While Karakaş & Sariçoban (2012) claim to have presented a solid piece of research on the effects of subtitled cartoons on incidental vocabulary learning, in practice it is not so. It is argued that the research design validity resulted in questionable results having little relevance to genuine incidental vocabulary learning.

There has been a line of investigation in the recent years that replicates dominating faulty research designs and which leads to reports of little or no significant results on incidental vocabulary learning. In this commentary I will offer my criticism of the research stand that is taken by Karakaş & Sariçoban (2012), arguing that a) a one-time treatment is a discrepancy to the understanding of incidental vocabulary learning processes and b) findings are to be attributed to another area of research; these two considerations arise mainly from concept misinterpretation. Further in this commentary I will also elaborate on inaccurately reported data.

The aim of the research carried out by Karakaş & Sariçoban (2012) was to find out whether watching subtitled cartoons influenced incidental vocabulary learning. Particularly, the research aims to answer the question "How would a language learning material (i.e, animated

cartoons) with or without English language subtitles affect the students' vocabulary development" (p.4).

In the literature review, Karakaş & Sariçoban (2012) rightfully discuss incidental vocabulary learning, thus:

> Vocabulary, the core of the language, is not acquired at one shot. It necessitates a long process. Throughout this process, learners become familiarized with the encountered words. What makes them familiar with words for acquisition is the frequency of their usage and the number of encounters in different forms and contexts (Nation, 1990; Schmidt, 2001).
>
> Karakaş & Sariçoban (2012, pp.5-6)

This idea is repeated in the introduction, voiced as follows: "the view that vocabulary acquisition is a continuum of development" (p.4) and in the conclusion "Vocabulary development is a long lasting process …" (p.12). However, Karakaş and Sariçoban seem to assume that such incidental picking-up of vocabulary will occur only after one exposure to the items being tested, as evident by the research design of the study.

Critique 1: One-time exposure

To reiterate, incidental vocabulary learning/acquisition is the learning of new words as a *by-product* of a meaning-focused *communicative activity*, such as reading, listening, and interaction. It occurs through "multiple exposures to a word in different contexts" (Huckin & Coady, 1999, p. 185). Waring and Takaki (2003) have also made the same point. Again, Waring and Nation (2004, p.16) conclude that "incidental learning of vocabulary is best considered as a cumulative process where learners build up knowledge of a word through *repeated encounters over a reasonable period of time*" (my emphasis).

"Effective incidental vocabulary learning is a conscious learning process" (Laufer & Hill, 2000) in that it requires attention on the part of the learner on word features while attempting to infer the word meaning from the context. This involves deep processing of information; yet deep processing during the first encounter is unlikely to induce long-term retention. Laufer and Hill (2000) point at evidence surveyed by Nation (1990) that "repeated exposures to a new word in language input reinforce learning, though it is unclear how many repetitions are necessary for this. Sailing (1959) suggests that the number is 5, Kachroo (1962), Crothes and Suppes (1967) suggest it is 7, Saragi, Nation, and Meister (1978), 16". Since incidental vocabulary acquisition

takes place incrementally over a period of time, and there is no agreement as to how many and what kinds of exposures are needed for successful acquisition, the research measuring one exposure to the target words represents an extremely narrow understanding of the notion of incidental vocabulary acquisition, if at all correct. Therefore, I argue that a single exposure to the target words cannot be a reliable measure to conclude about effectiveness in incidental vocabulary learning.

Another point I would like to make in support of my critique is the procedure. Karakaş and Sariçoban decided upon the procedure of following similar studies with 1 or 2-week spans. Here the researchers simply replicated previous research frameworks without a critical consideration and without doubts that such frameworks may be faulty. The pre-test / post-test approach may bring about maturation issues, as Karakaş and Sariçoban themselves acknowledge: "the interval between the two tests was too short, which might have caused bias in the interpretation of the results" (p.13)

The treatment was done during class time and the participants did not know they would be tested. This may be considered both an asset and a disadvantage at the same time. Incidental vocabulary learning, being "picking up" words as a by-product of a communicative activity, is a matter of the learner's individual choice whether to remember a word or not. Not knowing they were to be tested, the participants might have made the choice to only 'do the task' focusing on the effort to infer the meaning rather than attempt to remember or learn a word. On the other hand, the very fact that a word is a target word in the pre-test may have had learners choose to 'remember' a word during the pre-test and later retrieve that word during the post-test only recognizing the graphemic representation.

On the whole, incidental vocabulary acquisition may not always occur and there is no control over what is to be learned, though it may seem too bold a statement on my part.

The next point I will bring into discussion is word choice and word frequency. The authors offer no justification for the choice of words (verbs in this case) – why verbs, why both concrete and abstract verbs?

Concerning word frequency, the reader could not find a justification for the researchers' choice. There's evidence from research that word frequency affects incidental vocabulary learning and retention. For instance, Anne Ferrell Tekmen and Daloglu (2006) examined the relationship between learners' incidental vocabulary acquisition and word frequency in a text and

reported that word frequency was a significant factor in vocabulary acquisition ($p < .05$), with 29% of the variance in acquisition being accounted for by frequency. The aforementioned may well have played a factor in the treatment in Karakaş and Sariçoban's study.

Further on, the data collection tool used in the study is Wesche and Paribakht's Vocabulary Knowledge Scales (VKS). Karakaş and Sariçoban's justification for their choice of research tool is as follows: "… the main aim was to identify the initial stages or levels in vocabulary in vocabulary developments by students' self-reports and demonstrations" (p. 12). These words, in the first place, are a quotation of Wesche and Paribakht in Meara's discussion paper, thus "[the aim of the Scales is] to capture the initial stages of levels in word learning which are subject to self-report or efficient demonstration, and which are precise enough to be used to reflect gains during a relatively brief instructional periods…" (Meara, 1996, p.6). Secondly, the words are interpreted by Karakaş and Sariçoban out of the wider context of Meara's overall discussion. Meara claims that both Richards' (1976) word knowledge framework and Wesche and Paribakht's Vocabulary Knowledge Scales approach vocabulary from the perspective of individual words. Instead, he argues that researchers should not deal with individual words but whole lexicons, and proposes a multistate model which Meara and Rodríguez Sánchez (1993) have used to successfully "predict long term distribution of words in a large target vocabulary across four states of word knowledge" (Meara, 1996, p.8) - long term for them meant 46 months.

Karakaş and Sariçoban's investigation deals with individual words and the VKS seem appropriate for such a purpose. There is a discrepancy, however, in the understanding that, as Meara points out, the VKS represent a progression from 1 to 5 and "there is no reason to believe that the VKS descriptors reflect a succession of stages" (Meara, 1996, p. 6). I fully support this statement, because it is perfectly possible for learners to reproduce a sentence with a fixed expression which contains a target word (Level Five on the VKS) while at the same time not knowing the meaning of the word (Level One on the VKS). That is to say the "levels" can coexist simultaneously suggesting a flat structure of the Scales rather than a hierarchical one, where knowing a word at a higher level is thought to be more fully integrated into the learner's language. Further on, Meara (1996, p.7) suggests the five levels be interpreted as stages and that words can be in any of the five states at different times while words are being integrated into the lexicon of the learner. Karakaş and Sariçoban's understanding of word knowledge integration

seems to be reflected in the following statement: "[the VKS] allows to specify the stages of vocabulary acquisition from first exposure to production and enables the researcher to determine how well the participants know these vocabulary items" (p.8). The researchers seem to assume that one exposure leads to either not knowing the word (Level One – "I don't remember having seen this word before") or knowing a word in one of the other four states without accounting for the simultaneous coexistence of the levels/stages.

The other problematic aspect concerns the rater's downgrading the learners wrong choices on the scales by one level, which also reflects the researchers' misconception that words cannot coexist and/or words at higher levels are better integrated than words at lower levels.

Critique 2: Misinterpretation of results

The second major point of discussion in this commentary relates to the interpretation of the results. I argue that the results should not be interpreted in the light of incidental vocabulary learning. Viewing comprehension is greatly aided by non-verbal cues in while-watching learning activities. Therefore, the results should be attributed to the research on inferring meaning from context rather than incidental vocabulary learning. The reported significant improvement in the pre-test / post-test results confirms, in reality, short-term vocabulary gains. The process was attributed to contextualization, i.e. inference of meaning from context. Karakaş and Sariçoban themselves claim "the incidental learning of the vocabulary items occurred due to the incorporation of target words into the cartoons that functioned as a context…" (pp.11-12). Their statement that "[t]he actions, signals of hands and arms, as well as facial expressions might facilitate the understanding of the target verbs […]" (p.12) can only confirm my position in this commentary that the findings could better illustrate short-term vocabulary gains.

Critique 3: Inaccurately reported data

Trying to replicate the study I was confronted with the impossibility of doing so. I was interested in finding out the word frequency of the eighteen items tested by Karakaş and Sariçoban and got hold of the cartoons from Season 3 with their English language subtitles, namely Episode 3 - *Mr. Griffin goes to Washington* and Episode 6 - *Death Lives*. I used a simple search functionality to determine the word frequency in the episodes. I present the results in the table below. If anyone is interested in the verification of the results I gathered, the two subtitle files which I examined

are accessible online in .srt format on http://ewbooks.info/critique/Season3_Episode03.srt and http://ewbooks.info/critique/Season3_Episode06.srt.

Table 1. Target word frequency in Episodes 3 and 6, Season 3, *Family Guy*

	Target word	**N° of occurrences plus + forms in Episode 3**	**N° of occurrences + word forms in Episode 6**
1	mop	-	2x **mop** 3x **mop**ping
2	hug	-	1x hug
3	hail	-	-
4	sigh	-	-
5	fart	-	-
6	gasp	-	-
7	swab	-	1x swab "Swab means to mop"
8	dump	-	2x dump
9	rely	1x rely "In which we used to rely?"	1x rely "In which we used to rely?"
10	ditch	-	1x 'm **ditch**ing
11	growl	-	-
12	vomit	-	-
13	roast	1x **roast**ed coffee (adj.)	-
14	murmur	-	-
15	chuckle	-	-
16	applaud	1x applaud	-
17	negotiate	1x negotiate	-
18	terminate	1x **terminate**d	-

Strikingly, eight of the target words do not appear in the subtitles in the two episodes. While these actions are performed by the characters in the cartoons (words 3, 4, 5, 6, 11, 12, 14, 15), the eight words are neither spoken in the voiceovers nor present in the subtitles. It is only natural to posit the question "How are then learners in the subtitles Group A tested on words they had not seen written or heard while watching the cartoons with the English subtitles?" It seems the students are required to understand and learn English words without seeing the written form and without hearing the spoken form; the meanings of these words are to be understood relying on extra linguistic features.

Table 1 also illustrates that seven other words occur only once in both subtitle files, which brings back the researchers' assumption that one-time occurrence will be enough for a word to be learned and that a single exposure to the target word will yield reliable results to

conclude about incidental vocabulary learning, which I reiterate, is understood by Karakaş & Sariçoban as "[v]ocabulary, the core of the language, is not acquired at one shot.." (2012, p.5).

Moreover, some of the words in the subtitles do not occur in the form of the target words (words 1, 10, 13, 18). Knowing a word and its forms requires deeper processing on the part of the learner. If for instance the word to test is "roast" (as the researchers say they test only verbs), the word that is presented in the subtitles and spoken in the cartoon is an adjective. In my view this is ill-designed test administration. The results that Karakaş and Sariçoban report are unreliable, not to say that this might be downright fabrication. To me all the above renders the whole research and all the findings invalid.

Conclusion

In conclusion, incidental vocabulary learning is defined as multiple representations in different contexts over a significant amount of time and research designs that measure single exposure to target vocabulary cannot yield reliable data. Therefore I call for the discontinuation of such a line of investigation.

The research paper in focus by Karakaş and Sariçoban defines incidental vocabulary learning as "multiple representations of a word in different contexts" but their research design is based on one-time exposure.

Secondly, the results obtained by Karakaş and Sariçoban are attributed to incidental vocabulary learning, while the researchers contradict themselves by claiming the target words were learned by the students from the context, not by the treatment. The results, I argue, should be attributed to short-term vocabulary gains.

Thirdly and most importantly, Karakaş and Sariçoban reported eighteen target words while only ten of them are present in their spoken and written forms in the subtitles.

On the whole, however solid Karakaş and Sariçoban's investigation seems on the surface, the findings are questionable and unreliable. Reporting false data is to say the least misleading and unethical.

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