

Mobile Learning in Foreign Language Learning: Podcasts and Lexicon Acquisition in the Elementary Instruction of Italian

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Abstract. This paper illustrates the research design (including the pilot study) of a work-in-progress study aimed at examining the potential of bilingual podcasts for the vocabulary acquisition in Italian as an L3 in the Austrian school context for beginning learners. The longitudinal study tries to link findings of the Lexical Approach (Lewis, 1993, 1997) and the Mental Lexicon (Aitchison, 2005) by taking into account lexical learning and the importance of spoken language for acquisition and by connecting them to the opportunities offered by podcasts as a means of mobile (micro) learning (cf. Hug, 2007a, 2007b, 2010a, 2010b; Hug & Friesen, 2007). In order to investigate the effects of podcasts on the lexical acquisition of Italian as an L3 two groups of participants will be analysed: (a) an experimental group (students use self-made, bilingual podcasts – German-Italian – to learn the lexical items), and (b) a control group (students are presented with lexical input without using podcasts). During the study, classroom teaching of the two groups will be observed in order to conduct a third-party-observation (cf. Bortz & Döring, 2009) of the participants and to compare and contrast their lexical input. A pre- and a post-test of lexical acquisition will be carried out at the beginning and the end of the observation period. As the use of podcasts as a tool of mobile learning might considerably change the vocabulary learning strategies of the participants in the experimental group, a questionnaire at the beginning and the end of the study will be applied in addition. It is assumed that, due to the Lexical Approach and the Mental Lexicon and enhanced by the mobile nature of the podcasts, the experimental group will achieve a higher increase of Italian lexicon than the control group. However, the executed pilot study has revealed weaknesses in the research design, which have to be adapted for the final case study.

Keywords: lexicon, mobile learning, Italian.

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1. Introduction

Digital media play an increasingly important part in our lives; the property and accordingly the use of digital media increase constantly. This case study aims at trying to take advantage of the students' use of media such as mobile phones and iPod/MP3 players in their leisure time for the learning of languages. Specifically, students will learn the lexicon in their first year of learning Italian as a foreign language at school by using self-created audio podcasts; as Lewis (1993) has already suggested with his "lexical approach", the focus lies on listening: "[...] a well-balanced learning programme will, in the early stages, place great emphasis on receptive skills, in particular, listening" (p. 8). Previous research has tended to focus on reading (cf. Read, 2000, p. 47) and there is little research and knowledge of how vocabulary is learned from listening (cf. Schmitt, 2010, p. 38). Furthermore, "[o]ne of the main shortcomings of ...[some vocabulary research] is that it has focused attention on the acquisition of vocabulary divorced from use [...]. Many of the subjects tested in the methodological comparisons were not real language learners, the time-scale studied was short [...], and the vocabularies learned were actually quite small [...]" (Meara, 1999, p. 565, cited in Schmitt, 2010, p. 43). Therefore, this case study aims at bridging this research gap and in addition at including the concept of mobile learning.

2. Mobile (micro) learning in the language classroom

The term "microlearning" as such is relatively young; Hug and Friesen (2007) state that the term has been in use for only about ten years, even though the underlying concept partially goes back far into the past (p. 16). Microlearning contains various forms of learning: informal learning activities in the context of social software applications, incidental learning with digital media, etc. (cf. Hug, 2010a, p. 202; Hug, 2010b, p. 200), but it is not simply equated with informal and lifelong learning (cf. Hug & Friesen, 2007, p. 18). Microlearning in the broadest sense can be viewed rather as "learning with micro-content" (*ibid.*), that is, learning with small individual units; in summary, microlearning can be understood as "special moments or episodes of learning while dealing with specific tasks or content, but engaging in small but conscious steps. These moments, episodes and processes may vary depending on the pedagogies and media involved, but the measures of scale of the amount of time and content involved can be made fairly constant" (Hug & Friesen, 2007, p. 18).

This leads us to a possible combination of microlearning and mobile learning. The term "mobile learning" is frequently used to refer to the use of handheld technologies enabling the learner to be 'on the move', providing anytime, anywhere access for learning" (Price, 2007, p. 33). Hug (2010a) calls this a narrow sense of mobile learning, in which mobile devices and software applications are at the centre. More broadly, mobile learning is not only about the transfer of content using mobile devices, it

rather means “die Befähigung zur Aneignung und Entwicklung jenes Wissens, das für erfolgreiches Handeln in veränderlichen Lagen und Kontexten [...] erforderlich ist”* (*ibid.*, p. 200). Therefore, mobile microlearning can emphasise vocabulary learning instead of teaching; the latter is too focused nowadays (cf. *Nation, 2011*).

3. Research design

The present paper is intended to investigate the effect of the use of podcasts on the lexical acquisition of Italian as an L3. The following two groups of test subjects will participate in the case study:

- Experimental group: students who learn the vocabulary with the help of self-made (German – Italian) audio podcasts;
- Control group: students who learn the vocabulary without audio podcasts.

The case study tries to answer the following question: What differences in a) vocabulary and b) used vocabulary learning strategies arise between students who learn the Italian vocabulary with audio files, and those who learn these without audio files?

To answer this question – as part of the 4-month-pilot study** – written surveys on vocabulary learning strategies and a vocabulary test have been used, as will be presented in the following.

3.1. Written survey on vocabulary learning strategies

As an instrument of written survey the questionnaire was chosen (cf. *Bortz & Döring, 2009*, p. 236) to investigate the applied vocabulary learning strategies of the students. It mostly follows the questionnaire designed by *Neveling (2004)* as part of her dissertation. However, the questionnaire was adapted for this study and the scale was changed from a dichotomous to an ordinal scale. At the beginning of the school year a detailed version was used, at the end of the first semester the questionnaire was reduced and new aspects were included.

3.2. Vocabulary test

To state differences in terms of vocabulary between the experimental and control group the “Vocabulary Knowledge Scale” (VKS) by *Paribakht and Wesche (1997)* was chosen. Students can thereby assess a word presented in written form on a scale from I to V, where I stands for full unfamiliarity of the given word, and V for the ability to correctly use the word grammatically and semantically in a sentence. For the analysis, this means that students are given a point for ticking Category I. If a semantically

* Translation: “the ability to acquire and develop the knowledge which is necessary for successful behavior in varying situations and contexts, and in changing learning spaces”.

** The real case study will be carried out in the following school year (September 2012 – July 2013).

appropriate and grammatically correct sentence was offered for the tested word, the maximum of five points would be given. For the present study with 30 Italian words, this means that students can achieve a minimum of 30 points and a maximum of 150 points.

Basically the VKS assesses the development of vocabulary in the context of experiments and seems to be a reliable and valid “measure of incidental vocabulary acquisition [...]” (Read, 2000, p. 135). The following chapters provide insights into the pilot study and draw first conclusions for the “real” case study.

4. Insights into the pilot study

The pilot study involved a total of 36 students, but only 30 students were present at the time of the two data collections and therefore only their data was used.

Regarding the learning strategies, some differences, which have been proven by SPSS using the Mann-Whitney U-test*, will be presented (cf. Unterrainer, 2012). At the beginning of the school year the following differences between the two groups were found:

- Speaking out loudly helps the experimental group significantly more ($p = .029$) to learn collocations (e.g., *lavarsi i denti*);
- The students of the experimental group significantly more often call ($p = .011$) the corresponding Italian words to mind when they observe their environment;
- The control group speaks significantly ($p = .018$) more often with Italian-speaking people on vacation.

At the end of the pilot study the following differences emerged:

- The students of the experimental group write two-column lists more frequently ($p = .015$) than those of the control group;
- The students in the experimental group write significantly more often ($p = .019$) a sample sentence with the word;
- The copying of Italian words from the textbook is significantly more common ($p = .041$) in the control group than in the experimental group.

According to the reliability analysis with SPSS 18.0, the used VKS shows $\alpha = .96$ and is therefore located at the upper end of the scale, since in language tests values ranging from .70 to .90 are accepted as reliable (cf. McNamara, 2008, p. 58). Before the study**, the control group reached an average of 92.63 points, whereas the experimental group

* The Mann-Whitney U Test can – in analogy to the T-test – be used to elicit differences between two groups. Unlike the T-test this is a non-parametric test that can be used from ordinal scale up and in the absence of a normal distribution (cf. Raab-Steiner & Benesch, 2008, pp. 122-124), as it is the case with the small sample size of the study.

** In early October 2011.

scored 60.77. The control group performed significantly ($p = .001$) better than the experimental group. After the pilot study*, the control group has still a higher average value (111.63), however, the gap between the two groups has reduced from an average of 31.86 to 21.45.

5. Discussion and conclusion

First it has to be said that the majority of the students of the experimental group did not create the audio podcasts. The reasons therefore are manifold, but mainly lie in the lack of time of the students and the subjectively low liability because the students received no grade for the project. Hence the results of the VKS have to be considered critically. Furthermore, due to the difficulty of finding teachers of Italian who are willing to participate together in this project with their pupils, the study could not be carried out as planned. Therefore, two teachers took part, which meant that different teaching styles and schools came into play. These are additional intervening variables that could not be prevented. Another weakness of the study is the difference between the groups when it comes to vocabulary. As already mentioned, the students of the control group achieved better results in the VKS at the beginning of the semester, but at the end of the semester the experimental group was able to compensate because the results of the two groups were closer together; however, the reasons for this could be manifold. For the full study to be carried out another vocabulary test will be used as well as more tests each time (cf. Nation & Webb, 2011) and different types of podcasts (e.g., videopodcasts). Furthermore, the subjective learning progress of the students will be focused using qualitative research methods.

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