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LEARNING ENGLISH VOCABULARY  
FROM FILM AUDIO DESCRIPTION:  
A CASE OF POLISH SIGHTED STUDENTS

**Abstract.** Film audio description recounts the visual content of the film and it is primarily intended for the visually impaired audience. However, when used by sighted viewers, it provides an extra channel of communication which is reinforced by the simultaneous picture. Consequently, this combination of the visual input and language may facilitate the process of learning vocabulary in the second language (Paivio's theory of dual-coding, Kress' theory of multimodal teaching and learning). This paper presents the results of a pilot study investigating the effects of film audio description on incidental learning of English in sighted speakers of Polish. The aim of this pilot study was twofold: firstly, to verify if learning vocabulary in English can be enhanced by the use of film audio description and secondly, to test the research method. The study was carried out on a group of 120 learners of English. The participants were divided into four groups (two control groups and two experimental groups). The research instruments included: pre-tests, watching an excerpt of a film with audio description (experimental groups) and without audio description (control groups), repeated post-tests and oral performance (only in Control 2 and Experimental 2). Preliminary observations suggest that audio description may stimulate vocabulary learning in the second language, but there are still certain issues to be considered: the frequency of exposure to the audio described material, the type of the audio described material, the vocabulary type and size, and the number of participants.

**Key words:** audio description; film; the visually impaired; second language learning; incidental learning; vocabulary.

Audio description (AD) was originally intended for entertainment and reserved for people who are blind and partially sighted. I, however, investigate AD from the perspective of sighted viewers and present the results of the study designed to verify whether AD could be used in second language (L2)

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learning. Specifically, I am interested in the role of AD in incidental learning of English by Polish learners at university level.

In order to discuss the potential of AD in L2 vocabulary learning, I will first explain what AD is. Next, I will present the assumptions of the research and describe its design and outcomes. I will also analyse methodological issues related to the research process and will conclude with recommendations for further research.

### 1. DEFINING AD

The twentieth century brought a remarkable development of audiovisual media, such as television, cinema, 3D cinema, VHS tapes, DVD, Blu-ray, the Internet and artistic life performances combining traditional theatre/opera/dance performances with modern audiovisual technology. At the same time, when audiovisual arts reached a wider audience, the awareness of accessibility issues became more widespread. Although audiovisual arts are primarily for those who can see and hear, it has become clear that people with special needs could also join the audiovisual world of media if only certain adjustments were made for them. In the 1980s subtitles for the deaf and hard of hearing were introduced on a larger scale in Europe (Mliczak, 2013; NCI, n.d., History of captioning) and AD for the visually impaired was developed in the USA (Chmiel & Mazur 2014, 32).

AD was first designed for theatre, but soon it permeated other media and arts including film, opera, ballet, galleries, museums, nature trails, history and architecture tours, sport events, books, the press, fashion shows and even fireworks shows (Chalmers 2014; Sadowska, in press; Szymańska & Strzymiński 2010, 8-7). AD is a spoken commentary added to an audiovisual product (e.g. a film) or a visual product (e.g. a sculpture). It provides a description of the visual content of such a product. It helps blind and partially sighted people become full participants of the (audio)visual culture. Depending on the nature of an audio described work, AD may focus on its different aspects. In film, for instance, AD presents the characters, events, the location of events and the time of action (Vercauteren 2007, 142). In theatre and opera, AD describes also the sets, props, costumes and the lighting (York 2007, 221–223). In the case of pieces of art (sculptures, paintings, installations) it provides additional information about their dimensions, material and style (De Coster 2007, 193). AD can be recorded (cinema and museums),

broadcast (television) or read live (theatre); sometimes a combination of these methods is used (opera) (Chong, n.d., para. 2). In any case, what a visually impaired person receives is a verbal description of what is seen on screen, on stage or before him or her.

Linguistically, AD is a very specific narrative (Salway 2007; Arma 2011). According to the existing guidelines (see ADC 2009; ITC 2000; Szymańska et al. 2010; Künstler, Butkiewicz & Więckowski 2012), it should be concise, succinct and vivid; it should be always done in the present tense, in fairly simple sentences that are easy to follow. AD standards introduce certain recommendations on the use of verbs and restrictions on the use of adjectives, adverbs and pronouns (ITC 2000, 20–22). That is why the language of AD is not a natural and spontaneous language of everyday use. Nonetheless, what AD can offer is a unique combination of words and images, that is vocabulary supported by pictures, which may constitute a promising research area for L2 learning.

## 2. THEORETICAL BACKGROUND: THE ROLE OF VISUAL SUPPORT IN LEARNING VOCABULARY

Paivio (2006) proposed a theory of dual coding which claims that practical use of imagery can serve as a memory aid. In other words, when lexical items are accompanied by images representing them, they are more meaningful, more memorable and easier retrievable than if they were only presented through writing and pronunciation. He mentions the role of concretization in education, understood as a “direct experience with things”, that is presenting words and their referents at the same time (Paivio 2006, 2). Dual coding theory suggests that cognition “involves the activity of two distinct subsystems, [...], a verbal system specialized for dealing directly with language and a nonverbal (imagery) system specialized for dealing with non-linguistic objects and events” (Paivio 2006, 3). The two systems are independent, but they function in co-operation—one activates the other—which strengthens memorisation. According to research on dual coding the imagery system has a greater additive effect on recall than the verbal code (Paivio 2006, 4). This can be explained by the fact that, unlike abstract materials, concrete materials (e.g. pictures, objects) are “processed more deeply, encoded more distinctively, or have more contextual support” (Paivio 2006, 6). The research reviewed by Paivio shows that memory can be enhanced by pictures of ob-

jects and sounds and that pictures activate different brain areas than words (Paivio 2006, 6–7). That means that in the process of activating memorisation and retrieval of information, different mental faculties work together and intensify their potential.

Paivio (2006, 9) acknowledges that the evidence does not prove definitively that language learning depends solely on the “the richness of a non-verbal base”. However, some research shows that nonverbal support contributes to the development of language skills (see Neuman 2001; Kress 2013). Kress observes that in most cases communication is multimodal, that is, it involves more than just the verbal channel, e.g. the visual stimuli, the body language, facial expressions, touch and actions. If paired with “interested attention” on the part of the learner and a favourable context of learning, these extra modes of communication increase the chances of learning (Kress 2013, 8; Jewitt, Kress, Ogborn, & Tsatsarelis 2001, 5).

The experiments conducted by Jewitt et al. (2001), which involved teaching science to Year 7 pupils in a classroom context, proved that when linguistic communication is supported by visual aids, learning is more successful. Purnell and Solman (1991) investigated the use of illustrations in reading comprehension of difficult texts from the area of technology among high school students (see also Paivio 2006, 11). Their experiment confirmed that illustrations have beneficial effects on comprehension of the text content. Likewise, Mayer and Gallini (1990) discovered that the use of pictures alongside text, supports comprehension and memorisation.

Mayer and Moreno (2002) too investigated the possibilities of enhancing comprehension through the use of words and pictures. Encouraged by the positive results of their research they formulated the recommendations of efficient multimedia learning, which included: (a) accompanying words with pictures, (b) presenting words and pictures simultaneously, (c) minimizing irrelevant details, and (d) presenting words as speech rather than on-screen text in animations (Mayer & Moreno 2002, 116-117). Presmeg (1997) formulated certain conclusions related to the use of visual aids in learning. She investigated advantages and disadvantages of visual processing in pupils and teachers in the area of mathematics. The results of her studies show that abstract thoughts and notions are better understood, learnt and memorised if they are supported by imagery.

Scientific research confirms a beneficial role of images in the processes of understanding, memorising and learning vocabulary or full texts. In a film with AD a viewer is exposed to images with a simultaneous description. This

experience is additionally enhanced by dialogues and background sounds. We will claim that the complex interaction between these multimodal channels of communication may facilitate L2 vocabulary learning.

### 3. THE POTENTIAL OF AD IN L2 VOCABULARY LEARNING

What makes AD a potentially effective tool in L2 learning is the fact that it is always delivered in the presence of a visual channel of information. When a sighted person watches a film with AD, he or she sees an image on screen and listens to the simultaneous description of this picture. Figure 1 presents a screen shot from a vampire film *Nosferatu* (1922) with a sample of AD. The scene shows Count Orlok at night, climbing up the stairs to the heroine's room.

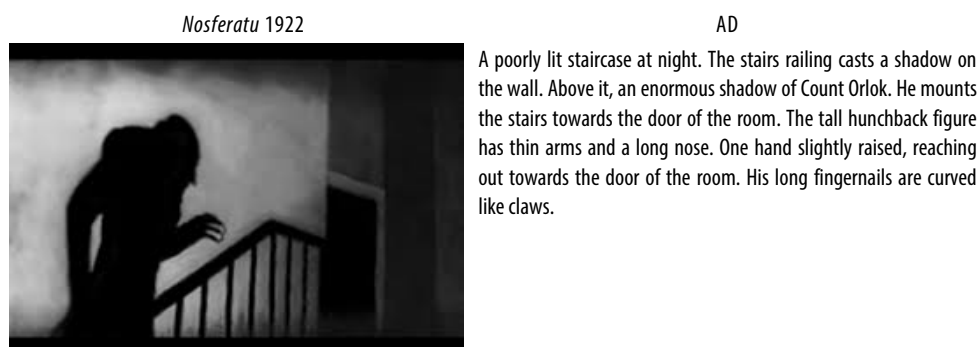


Figure 1. AD of a film scene<sup>1</sup>

In a film with AD two communication channels—visual and verbal—complete and reinforce each other. The visual is present all the time, but at the same time it becomes verbalised and becomes the input of L2. The new vocabulary from AD may have direct referents in the picture (e.g. poorly lit, hunchback, curved, mounts) or familiar words may acquire new meaning (e.g. railing casts a shadow). When a new word is learnt with the help of an image, visualization makes the abstract language concrete, which in turn leads to facilitating and strengthening of the memorisation process (Temel, Gündüz, & Dündar, 2015). The language supported by a visual aid constitutes a natural context for L2 learning and, what is more, learning L2 from

<sup>1</sup> The sample AD has been prepared by the author.

films guarantees low affective filter (for a natural context of L2 acquisition see Krashen & Terrell, 1995; Lightbown & Spada, 1999, pp. 91-94; for a low affective filter see Krashen & Terrell, 1995, p. 58). In other words, watching films, which is naturally an entertaining and relaxing activity, provides the learners with the most comfortable and least stressful conditions for acquiring a new language. Therefore I will claim that AD may support L2 learning, and in particular, vocabulary learning.

#### 4. THE STUDY

A pilot study, conducted between June and September 2014, focused on the application of AD in learning of English and it was carried out on 120 participants.

The main research question was: will the participants of the study learn new words from watching an excerpt of film with AD? This question was posed in a very specific context. First of all, I investigated the effect of AD on incidental learning, that is without any formal teaching or learning situation. Secondly, I was interested in students who represented a university (advanced) level of English, which would allow them participate in the film viewing experience without major difficulty.

Additionally, in the course of investigation I became interested to find the best research method; I wanted to verify which set of tasks designed for participants elicited the correct answers most effectively (which were the most convenient and practical both for the investigator and participants).

##### 4.1 PARTICIPANTS

I used a participant profile questionnaire to gather information about the participants. All of them were students and graduates of the Institute of the English Studies at John Paul II Catholic University of Lublin. They volunteered and signed the agreement to participate in the experiment. They were informed that the research findings would be kept anonymous.

Out of 120 participants 74 were female and 46 male. The distribution of female and male students was uneven across the groups. 118 students were Polish and only two were Spanish (they volunteered for the experiment and followed the same English course at the Catholic University of Lublin). We assumed that all the groups were fairly homogenous in terms of students' knowledge of English, because:

1. they were of similar age—23 years old on average ( $s = 1.56$ );
2. they received similar education—they completed primary school, junior high and high school; all students followed the course of the English Studies at John Paul II Catholic University of Lublin; to be precise, 114 were university students and 6—fresh university graduates;
3. they had studied English for a number of years—12 years on average, although the years span ranged from 2 to 20 ( $s = 0,50$ )<sup>2</sup>;
4. they represented a similar level of English—as assessed by the investigator on the basis of the curriculum the participants followed and their classroom performance, the perceived level of proficiency was between upper intermediate (B2) and advanced (C1); the self-assessed level of proficiency of the participants varied between upper intermediate (10 participants) and proficient (36 participants); however, the majority of them (71 participants) assessed their level of proficiency as advanced (C1).

With regard to the participants' awareness of AD, the majority of them (78) had never heard of AD before. Out of those who were familiar with AD (42) only 2 participants watched films with AD, either in Polish or in English.

#### 4.2 PROCEDURE

The experiment involved exposing participants to AD and after that checking their knowledge of new words in English. There were four groups: two experimental and two control ones verifying two different research methods. Two methods of the experimentation were developed to find out which one would elicit correct answers most effectively. Method 1 included the following steps: (1) pre-test, (2) watching a film with AD (or without it), and (3) repeated post-tests. Method 2 additionally included an oral elicitation from the participants. Apart from that, the tests used in Method 1 contained a different set of exercises than the tests used in Method 2 (this difference will be discussed in detail in section 4.4.3). Each method was tested with an experimental group and a control group which was not exposed to AD. Table 1 presents the arrangement of the experimental procedures.

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<sup>2</sup> It is not clear though if all the participants understood this question. It seems that for some the expression 'years of studying English' referred to the university course only and not all the years of learning English.

Table 1. Experiment procedures as per group.

	Control 1	Experimental 1	Control 2	Experimental 2
pre-test	+	+	+	+
treatment	–	+	–	+
post-test 1	+	+	+	+
oral elicitation	–	–	+	+
post-test 2	+	+	+	+
post-test 3	+	+	+	+
post-test 4	+	+	+	+

First, all the groups did a pre-test. Then two experimental groups underwent treatment, that is they watched an excerpt of a film with AD. Two control groups watched the same excerpt without AD. Next, all four groups did post-test 1. Control 2 and Experimental 2 followed an additional procedure which consisted in recording their oral performance—they were supposed to describe what they saw in the film. All the groups also did repeated post-tests: a week, a month and three months after the treatment.

#### 4.3 GROUP ARRANGEMENT

In total, 120 participants took part in the study. Each group comprised an equal number of 30 participants. They were allocated to the groups in the following way: several dates were chosen for the experiment and on Date 1 I planned to investigate Control 1, on Date 2—Experimental 1, on Date 3—Control 2 and on Date 4—Experimental 2. The students were informed about the available dates and whoever turned up on a particular day was automatically allocated to a given group. Several extra meetings were foreseen in case some students could not be present for the experiment on the appointed dates. Although the allocation of participants was not perfectly random, still the investigators' potential bias was reduced to a large extent by leaving the choice in the hands of participants, who had been informed about the general nature of the experiment but they did not know which group was supposed to be investigated on which date; they based their choice on the availability for a given date.



#### 4.4 MATERIALS

The arrangement of all the study procedures is presented in Table 2 and the explanation of the experiment is provided in subsequent subsections.

Table 2. Experiment procedures.

Time	Type of treatment	Delivery method
Day 1	<ul style="list-style-type: none"> <li>- participant profile questionnaire</li> <li>- pre-test</li> <li>- watching a film with or without AD</li> <li>- post-test1</li> <li>- oral elicitation (only in Control 2 and Experimental 2)</li> </ul>	in a classroom where the researcher was present, participants filled in paper questionnaires by hand
1 week after	post-test 2	by e-mail
1 month after	post-test 3	by e-mail
3 months after	post-test 4	by e-mail

##### 4.4.1 *Participant profile questionnaire*

Before the actual experiment the participants filled in a profile questionnaire. The main purpose of administering it was to establish a group characteristics, as well as to make some predictions about the group future performance. The questionnaire was divided into four parts. Part 1 gathered information about participants' ID (gender, age, nationality). Part 2 focused on gathering information on participants' education and command of English (first language, level of education, years of studying English, self-assessment of their command of English).

Part 3 investigated participants habits regarding watching films in English (Do you watch films in English? How many hours a day/week/month? Do you watch them in the original version/ with the English subtitles/ with the Polish subtitles/ with the Polish lector? From your experience, do you think that watching films in English supports learning English? To what extent?— participants had the following options to choose from: 1) It is a major source of English for me and it gives me a lot of opportunity to learn vocabulary, accent and structures. 2) It is one of the most useful tools to learn English, but it is not the only one that I use. 3) It can be helpful in building up the command of English and I use it from time to time, but only complementary to other forms of learning English. 4) It is useful only to some extent, but I don't learn much from English films. 5) It is not helpful in learning English at all.

Part 4 checked participants' awareness of AD (Do you know what Audio Description is? If your answer is YES, write what Audio Description is according to you. Do you watch films with Audio Description? If your answer is YES, do you watch films with Audio Description in which language?).

#### 4.4.2 *Treatment*

For the experiment I used a sample of AD. It was a short excerpt (1 min 48 sec) from an English film called *Confetti* (2006, dir. Debbie Isitt). The film tells a story of three couples who participate in a television show which is a competition for the most original wedding. In the scene chosen for the research the three couples are taken by the organisers to a bridal show. One of the girls is chosen for a make-over. As she appears on the stage, she looks stunning and her boyfriend is overwhelmed with emotion. Another girl is jealous and her fiancé arranges for another make-over. She comes on stage beaming with satisfaction.

This scene was chosen for the treatment because the dialogue is scarce and most of the action takes place only with the background sounds and music which gives sufficient space for AD; in this short amount of time participants are provided with a large sample of AD (184 words of AD as compared to 152 words of dialogue and background song lyrics). From the AD 21 words selected and expressions were selected, the ones which could be potentially new to the participants. The vocabulary was chosen taking into consideration the following factors: (1) the participants were at the advanced level of English, (2) most of them were my own students and to some extent I could foresee what new vocabulary could be new for them, (3) I tried to look for words which—according to Krashen's hypothesis of comprehensible input—would be "slightly beyond the learner's present linguistic competence" or in other words, the language which is one step ahead of what learners already know (Krashen 1982, p. 25; Ellis, 1997, p. 47).

Appendix 1 shows the full list of all the words used in AD; the 21 words and expressions chosen for the research are in italics. They constituted 6.25% of the whole spoken language of the film scene, which is close to the requirements of the theory related to vocabulary learning from reading which claims that a text should contain between 95% to 98% of known words to make a learner able guess a new word from context (Schmitt, Jiang & Grabe 2011, pp. 26-28; see also Carver, 1994; Waring & Nation, 2004; Hu & Nation, 2000).

The purpose of the treatment was to expose the participants to new vocabulary and to observe if and to what extent these new words are acquired after a single exposure to audio description. By analogy with the research on incidental vocabulary learning from reading and listening (Waring & Nation 2004; Brown, Waring, & Donkaewbua 2008; Waring & Takaki 2003) I did not expect spectacular results. However, I assumed that with the support of visual clues the vocabulary acquisition would be slightly enhanced. The treatment thus involved the participants watching an excerpt of a film with audio description which described the film scene, the actions of the characters, their looks, behaviour and feelings. I assumed that the participants would pick up a few new words from the description.

#### 4.4.3 *Tests*

As one of the goals of this study was to find the most reliable research method, two different sets of tests were developed: Method 1 and Method 2. Each method comprised a pre-test and four post-tests. All the tests were designed to check participants' knowledge of the 21 selected words; therefore, they contained the 21 words from AD and also some distracters. The aim of pre-tests was to verify participants' knowledge of the 21 words from AD, whereas the aim of post-tests was to establish if learning of the new vocabulary took place immediately after the treatment and on a long-term basis.

The major difference was that Method 1 (administered to Experimental 1 and Control 1) checked both receptive and productive knowledge of vocabulary, whereas Method 2 (used in Experimental 2 and Control 2) tested only productive knowledge of vocabulary. To know a word receptively (passively) means to be able to recognize and understand it in its spoken and written form. Productive (active) knowledge of vocabulary implies being able to use a word correctly in a free spoken or written production (Pignot-Shahov 2012, 43; Laufer & Goldstein 2004, 400–401).

Method 1 aimed to validate a complex word knowledge through a variety of exercises testing both passive and active knowledge of words. Each test from this set comprised six exercises: three of them validated passive word knowledge (a multiple choice exercise, choosing the antonym out of a group of four words, spotting the odd one out) and three validated active word knowledge (gap filling with some letters of the missing words provided, completing a crossword, answering questions with the number of letters of the missing words provided). However, a problem with exercises testing passive vocabulary is that they provide prompts and participants' correct an-

swers may be the result of a random choice or guess. To avoid this situation Method 2 was developed and it contained four exercises testing active vocabulary knowledge (providing a synonym, completing a crossword, gap filling with some letters of the missing words provided, gap filling with the first and last letter of the missing words provided).

In each method, the pre-tests had the same content as post-tests, only the layout and order of exercises was altered in order to avoid a situation in which students get used to the test format and provide answers automatically by analogy to a previous test. The pre-tests were administered before the treatment on the day of the treatment. Post-tests 1 were administered after the treatment on the day of the treatment. Post-tests 2 were e-mailed to the participants one week after the treatment. Post-tests 3 were e-mailed to them one month after the treatment and post-tests 4—three months after the treatment. On the day of treatment, pre-tests and post-tests 1 were administered in controlled conditions in a classroom where the investigator was present. Post-tests 2, 3 and 4 were sent to the participants by e-mail, due to summer holidays, which meant that the participants were not available in person.

#### 4.4.4 *Oral elicitation*

Oral elicitation was administered in Experimental 2 and Control 2 after the post-test 1, that is on the day of the treatment. The investigator met each participant individually and asked him or her to describe what he or she had seen in the film. The participants' performance was recorded on a Dictaphone. The aim of the oral elicitation was to complement written tests and elicit the learned words in their oral form. The assumption was that, since the language input was oral, I could expect that in some cases the participants might be able to repeat a new word which they heard, but they might not be able to write it or recognise its spelling. After that I listened to each recording and counted how many of the 21 selected words each participant used in their oral performance.

### 4.5 RESULTS AND ANALYSIS

The major goal of this research was to find out if the Polish learners of English could learn new vocabulary from watching a film with AD. An additional subgoal was to compare research methods and see which one was the most practical and reliable.

First of all, in order to establish whether AD may lead to vocabulary learning, I analysed the results of the written tests from each group. Tables 3-6 report the average number of correct answers per test in a given group.

Table 3. Control 1

Variable	Control 1					
	Number of participants	Mean	Median	Minimum	Maximum	Standard Deviation
Pre-test	30	7.86667	7.00000	0.000000	19.00000	4.400104
Post-test 1	30	9.86667	10.00000	2.000000	19.00000	3.775907
Post-test 2	14	10.78571	10.00000	3.000000	19.00000	4.317738
Post-test 3	12	11.91667	12.00000	4.000000	20.00000	5.534328
Post-test 4	9	12.77778	13.00000	4.000000	20.00000	4.944132

In Control 1 30 participants completed the pre-test and the number of correct answers averaged (M) 7,86 (Mdn = 7,00). 30 participants completed post-test 1 and the number of their correct answers averaged (M) 9,86 (Mdn = 10,00). From post-test 2 to post-test 4 the number of correct answers increased on average by one, but at the same time the number of participants dropped to 14 at post-test 2 and reached only 9 in post-test 4.

Table 4. Experimental 1

Variable	Experimental 1					
	Number of participants	Mean	Median	Minimum	Maximum	Standard Deviation
Pre-test	30	9.23333	8.50000	3.00000	19.00000	4.328600
Post-test 1	30	13.20000	13.50000	5.00000	21.00000	4.780708
Post-test 2	18	15.77778	16.00000	6.00000	21.00000	4.373121
Post-test 3	10	15.80000	16.50000	10.00000	21.00000	4.104198
Post-test 4	1	13.00000	13.00000	13.00000	13.00000	

In Experimental 1 30 participants completed the pre-test and the number of correct answers averaged (M) 9,23 (Mdn = 8,50). 30 participants completed post-test 1 and the number of their correct answers averaged (M) 13,20 (Mdn = 13,50). From post-test 2 to post-test 3 there was a slight increase in the number of correct answers (in post-test 2 M = 15,77 and in post-test 3 M = 15,80). However, only one participant completed post-test 4 (M = 13,00; Mdn = 13,00).

Table 5. Control 2

Variable	Control 2					
	Number of participants	Mean	Median	Minimum	Maximum	Standard Deviation
Pre-test	30	5.66667	5.50000	1.000000	14.00000	2.617360
Post-test 1	30	7.23333	7.00000	3.000000	13.00000	2.500804
Post-test 2	20	8.50000	9.00000	3.000000	13.00000	2.373095
Post-test 3	16	9.87500	10.00000	5.000000	15.00000	2.825479
Post-test 4	9	10.66667	11.00000	8.000000	13.00000	1.732051
Oral elicitation	30	0.66667	1.00000	0.000000	3.00000	0.758098

In Control 2 30 participants completed the pre-test and the number of correct answers averaged (M) 5,66 (Mdn = 5,50). 30 participants completed post-test 1 and the number of their correct answers averaged (M) 7,23 (Mdn = 7,00). From post-test 2 to post-test 4 the number of correct answers increased on average by one, but at the same time the number of participants dropped to 16 at post-test 3 and reached only 9 in post-test 4. 30 participants took part in the oral elicitation; the number of correct answers averaged (M) 0,66 (Mdn = 1,00).

Table 6. Experimental 2

Variable	Experimental 2					
	Number of participants	Mean	Median	Minimum	Maximum	Standard Deviation
Pre-test	30	6.73333	6.00000	1.000000	14.00000	3.268801
Post-test 1	30	10.16667	10.50000	1.000000	17.00000	4.060604
Post-test 2	25	11.12000	11.00000	6.000000	18.00000	3.358075
Post-test 3	18	12.38889	12.50000	6.000000	18.00000	3.632191
Post-test 4	14	13.00000	12.00000	7.000000	18.00000	3.374110
Oral elicitation	29	0.44828	0.00000	0.000000	4.00000	0.827484

In Experimental 2 30 participants completed the pre-test and the number of correct answers averaged (M) 6,73 (Mdn = 6,00). 30 participants completed post-test 1 and the number of their correct answers averaged (M) 10,16 (Mdn = 10,50). From post-test 2 to post-test 4 the number of correct answers increased on average by one, but at the same time the number of participants dropped to 18 at post-test 3 and reached only 14 in post-test 4.

29 participants took part in the oral elicitation; the number of correct answers averaged (M) 0,44 (Mdn = 0,00).

In order to compare the two different research method I compared the mean and median values of the following pairs: Control 1 and Control 2 (Tables 3 and 5), as well as Experimental 1 and Experimental 2 (Tables 4 and 6). I took into consideration only the results for the pre-test and the post-test 1 as they were the most reliable due to the representative number of participants. It can be noticed that the participants from Control 1 scored on average two correct answers more than the participants in Control 2. In the case of experimental groups, the participants from Experimental 1 scored on average three correct answers more than the participants in Experimental 2.

Then I used Kruskal-Wallis test to see if there was a statistical significance between the group pairs for the pre-test or post-test 1. The results showed that a statistical significance holds only between Control 1 and Control 2 ( $p = 0,034746$ ) for the post-test 1.

Finally, I also compared the total results of Control 1 and Experimental 1 with the total results of Control 2 and Experimental 2 (at the level of the pre-test and the post-test 1), as presented in Figure 1.

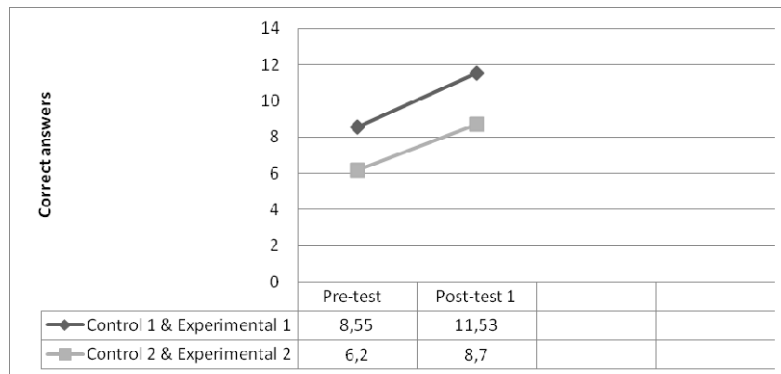


Figure 2. The number of correct answers in accumulative arrangement

The Mann-Whitney U-test was applied to establish if there a statistical significance is displayed between these pairs of groups. It showed that there is a statistical significance between these two pairs of groups at the level of the pre-test ( $p = 0,002010$ , where  $p < 0,05000$ ) and the post-test ( $p = 0,000697$ , where  $p < 0,05000$ ).

The oral elicitation was administered in Control 2 and Experimental 2 and it yielded the following results: 30 participants underwent oral elicitation in

Control 2. The number of correct answers averaged (M) 0,66 (Mdn = 1,0). 29 participants completed oral elicitation in Experimental 2 and the average number of correct answers (M) was 0,44 (Mdn = 0,00). The detailed results are presented in Table 12.

Table 12. The number of correct answers during the oral elicitation.

Variable	Number of participants	Mean	Median	Minimum	Maximum	Standard Deviation
Control 2	30	0.66667	1.00000	0.000000	3.00000	0.758098
Experimental 2	30	0.44828	0.00000	0.000000	4.00000	0.827484

#### 4.6 DISCUSSION

The goal of this pilot research was twofold: first, to find out how many new words a participant can learn from watching a film excerpt with AD, and second, to compare two research methods.

In order to establish if AD has any impact on incidental learning of learning English vocabulary, I compared the number of words used by the participants before the treatment and after treatment in experimental groups, as well as in control groups. As it can be seen from the data in Tables 3-6 (the mean and median values), a steady, although not spectacular, increase in the number of correct answers was recorded in all groups. In other words, from test to test, the participants used more words from AD.

However, two factors must be considered. Firstly, from post-test 2 to post-test 4, a high dropout rate of participants can be observed in each group, with the most dramatic example being Experimental 1 in which the number of participants dropped from 30 at pre-test and post-test 1 to 18 at post-test 2 and leaving only 1 participant at post-test 4. It can be concluded that at the stage of post-test 2, 3 and 4 the participants are no longer a representative sample and the test results are not reliable. Secondly, post-tests 2, 3 and 4 were administered by e-mail. The increasing number of correct answers in these tests may be due to the fact that some participants did the tests with some extra help as it is unlikely that this change could be attributed to the exposure to AD. Consequently, the only reliable values are those related to pre-test and post-test 1 which was administered immediately after the experiment.



On the basis of the figures in Tables 3-6, it can be inferred that indeed there is an increase in the number of correct answers from pre-test to post-test 1 in all groups. On average the number of correct answers in control groups rises by two, while in experimental groups it rises by four. It is surprising that the number of correct answers increased also in control groups. It may be argued that the higher scores in Control 1 and Control 2 are either a matter of chance or that memory became more activated when the same test was done for the second time. Still, bearing this in mind, the higher results scored in experimental groups show that a single exposure to a very short AD helped the participants to pick up, on average, up to four new words.

In order to establish the difference between the two different methods of testing the participants I compared the results of the tests between Control 1 and Control 2, as well as Experimental 1 and Experimental 2. The mean and median values of each group show that Control 1 scored more correct answers than Control 2 (by two words on average in both the pre-test and the post-test 1). By analogy, Experimental 1 scored more correct answers than Experimental 2 (by three words on average in the pre-test and the post-test 1). Since the four groups were homogenous, the difference in the results can be attributed to the application of two different types of tests. According to the participants, the tests administered in Control 1 and Experimental 1 were easier and it seems that this opinion is also supported by the test results. These tests contained exercises checking passive and active vocabulary knowledge. On the other hand, it seems that the tests administered in Control 2 and Experimental 2, which checked only active knowledge of vocabulary, proved to pose more problems to the participants. This is quite in the line with the assumption on L2 learning that production is more difficult than reception (Ma 2009, p. 38).

The oral elicitation did not provide any reliable results as the average number of correct answers was below one word. Surprisingly, in Control 2 an average participant used a little more words from AD than the participants from Experimental 2 who were exposed to AD. The major reason of the failure of the oral elicitation could be attributed to the fact that it was unguided. The investigator only asked the participants to describe what they had seen in the film. As a result they sometimes wandered off the main topic and their story was unrelated to what they had watched. They did not know what to focus on and what to describe in particular. Apart from that, participants were very stressed by the fact of being recorded. They spoke on average for a minute or two, trying to describe the film scene very quickly and finish

the task as soon as possible. In some cases the stage fright was so strong that their English was poorer than during a usual classroom performance.

#### 5. LIMITATIONS OF THE STUDY AND RECOMMENDATIONS FOR THE FUTURE

A serious weakness of this study was a high dropout rate of the participants in each successive test, which reduced the reliability of the results. The study took place, partially, during summer holidays. Sending post-tests by e-mail was the only way to access the participants. This, however, meant that the investigator had no control over the number of returned tests, as well as the conditions in which they were done. Although at the beginning of the study we had 120 participants, at the end only 33 of them remained. This obviously must have affected the final results of the research, in particular the study of the long-term retention of the new words from AD.

The oral elicitation needs improvement in the future. It turned out that unguided oral performance did not yield any predictable results. The participants were only asked to describe what they had seen in the film. It became clear, though, that the participants needed direction in order to stay focused on the language of AD. In this way the observed words could be elicited more easily. Moreover, it seems that guidance could reduce the stress level that most participants experienced during recording.

Another important question to be asked is: even though the results show a visible increase in vocabulary immediately after the experiment, does it mean that the new words are really learned? This could be checked by a more controlled way of administering repeated post-tests. Also, perhaps a question of a frequency of exposure to AD could be addressed in the future. In this study participants were subject to a single viewing of a short excerpt of a film with AD. It may be assumed that repeated viewings could reinforce the memorisation process and also affect the long-term word retention.

Additionally, a new question that appeared after the treatment was related to the vocabulary size and type. It seems that 21 new words provided in a two-minute excerpt of a film might have been too challenging for the participants to grasp. Also, some of them were more difficult (e.g. 'wistful') than others (e.g. 'a make-over'). That is why in the future a more careful consideration should be made regarding the number of new words provided from AD, the length of AD and the type of words.

## 6. SUMMARY

The object of this study was to verify if AD used in films for the visually impaired could be a useful tool in incidental learning of English in Polish sighted students. Inspired by the dual coding theory, I assumed that AD—as an extra channel of verbal communication always accompanied by the visual referents—may enhance vocabulary learning. That is because learning through AD takes place by means of two independent channels which cooperate with each other. They stimulate different information stores in the brain more deeply and therefore the acquired words are remembered and retrieved more effectively (Sorden 2013, 155).

The research presented in this paper was a pilot study conducted on a group of 120 Polish academic learners of English. Two methods of testing were tried out on two control groups and two experimental groups. The aim of the study was to check both immediate and long-term effects of AD. The results of the immediate effects showed that AD may be an aid in vocabulary learning: after the exposure to a two-minute video, learners learnt, on average, up to four new words. However, we cannot formulate any reliable conclusions of the effects of AD on the repeated long-term post-tests because of the unfavourable conditions in which these tests were done.

Although it may be said that preliminary observations suggest that AD may stimulate vocabulary learning in L2, there are still certain issues to be considered: the frequency of exposure to the audio described material, an invariable number of participants and the improvement of some testing methods.

## APPENDIX 1

List of words used in AD<sup>3</sup>

a, and, are, as, arrogant, away  
 back, be, both, but  
 call, cheeks, *civil word*, *clench*, confetti, confident, *contempt*, couples,  
*crystal ball*  
 disappointment, down, dress, *dull*  
 emotion, expectation, expressions, eyes  
 faces, fitted, *flash*, *flashback*, for, front

<sup>3</sup> The 21 words and expressions chosen for the treatment are italicised.

*gaze*, *get*, *glum*, *good*, *gown*, *gulp*  
*hair*, *hand*, *he*, *her*, *his*  
*in*, *Isabelle*  
*jaw drops*, *Joanna*, *Joseph*  
*leave*, *led*, *looks*, *lovingly*  
*make-over*, *make-up*, *Matt*  
*nervous*  
*on*, *over*, *overcome*  
*po-faced*, *presenter*, *puff*, *put*  
*radiant*, *reappears*, *row*  
*Sam*, *she*, *showered*, *shoulders*, *shroud*, *sit*, *smiles*, *smug*, *sour*, *stage*,  
*stand*, *strapless*  
*team*, *tear up*, *the*, *their*, *they*, *three*, *to*  
*up*  
*volunteers*  
*watch*, *when*, *white*, *wistful*, *with*, *work*

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#### NAUKA SŁOWNICTWA Z AUDIODESKRYPCJI DO FILMU NA PRZYKŁADZIE STUDENTÓW WIDZĄCYCH

##### Streszczenie

Audiodeskrypcja opisuje treści wizualne filmu i jest przeznaczona dla widowni niewidomej i słabowidzącej. Jednak, gdy jest używana przez osoby widzące, staje się dodatkowym kanałem komunikacyjnym, dzięki czemu może korzystnie wpływać na uczenie się języka obcego. Audiodeskrypcja zostaje wzmocniona przez towarzyszący jej obraz. W konsekwencji, ta kombinacja werbalnych i wizualnych danych może wspomagać proces uczenia się słownictwa (koncepcja podwójnego kodowania Paivio, teoria multimodalnego uczenia się i nauczania Kressa). Ten artykuł prezentuje zastosowanie audiodeskrypcji w incydentalnym uczeniu się języka angielskiego przez uczniów widzących. Cel tego badania pilotażowego był dwojaki: po pierwsze, sprawdzenie czy uczenie się słownictwa w języku angielskim może być wspomagane przez audiodeskrypcję i po drugie, wypróbowanie metody badawczej. Badanie przeprowadzono na grupie 120 osób uczących się języka angielskiego na uczelni wyższej. Uczestnicy badania byli podzieleni na cztery grupy

(dwie kontrolne i dwie eksperymentalne). Narzędzia wykorzystane w badaniu pilotażowym to: pre-testy, oglądanie filmu z audiodeskrypcją (w grupach eksperymentalnych) i bez audiodeskrypcji (w grupach kontrolnych), powtórzone post-testy oraz nagranie ustnej wypowiedzi (tylko w grupie Kontrolnej 2 i w grupie Eksperymentalnej 2). Wstępne obserwacje wskazują, że audio deskrypcja może wspierać uczenie się drugiego języka, jednakże jeszcze wiele zagadnień należałoby dokładniej przeanalizować, np. częstotliwość ekspozycji na audiodeskrypcję, rodzaj audiodeskrypcji, rodzaj i zakres badanego słownictwa oraz liczba uczestników badania.

**Słowa kluczowe:** deskrypcja; film; niewidomi i słabo widzący; uczenie się języka obcego; incydentalne uczenie się; słownictwo.