Szilvia Bátyi
THE IMPACT OF THE SOCIAL CONTEXT ON THE BILINGUAL MENTAL LEXICON. THE EXAMPLE OF TRANSCARPATIA

– SUMMARY –

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Veszprém
2011
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1. INTRODUCTION AND GOALS

There is a growing interest in the research of bilingualism in the areas like psychology, psycholinguistics, applied linguistics, neuropsychology, education, and sociolinguistics. This interest is rooted from the fact that bilinguals outnumber monolinguals in the world, and their number seems to be growing with the ceasing of borders, with tourism and the growth of the international communication network.

One of the research areas of psycholinguistics is the bilingual mental lexicon. The examination of the mental lexicon is a difficult task as it is not static, it always changes and its content is influenced by many factors (Navracsics 2007). There are many unanswered questions concerning the lexical and semantic level, the language production and perception. While examining the bilingual lexicon we should take into account the linguistic background of the individual, which requires an interdisciplinary approach.

The topicality of this research lies in the fact that in the region (Transcarpathia) such research has never been conducted till now, so the research was much needed. The investigation of bilingualism from a psycholinguistic perspective may reveal the bilingual language processing and the results can be applied in the education of bilinguals.

The object of this research is the investigation of the bilingual mental lexicon of Transcarpathian students in psycholinguistic context.

The aim of this study is to reveal the links that connect information within the bilingual mental lexicon focusing on the main organisational principles. For this purpose various methodologies were applied. The linguistic environment, the social milieu, the attitude of the individual and the society towards languages may have an impact on the knowledge of these languages and on the interlingual connections. This study covers the analysis of the impact of these factors. Research on the bilingual mental lexicon has brought contradictory results so far. In order to obtain more precise results, in this study, various methods were used, each focusing on the linguistic background of the target group. Our hypotheses were as follows:

- the organisation of the mental lexicon of the Transcarpathian students is different from that of their monolingual peers, but similar to that of their bilingual Hungarian-Slovak peers;
- language dominance is a determining factor in storage;
• the examined factors have an impact on the number of responses;
• more responses are likely to arrive to L2 stimulus words from those who use L2 frequently;
• differences can be observed in the organisation of the mental lexicon of the target group:
  a) the medium of instruction of the school can be determining;
  b) the type of school can be influential (whether the school is situated in a city or village, whether it is a secondary school or a grade school etc.)
  c) the mother tongue of the parents, their education can be important in storage, etc.;
• paradigmatic relations are predominant within semantic relationships;
• the organisation of L1 and L2 are different;
• within language interference is greater than cross-linguistic interference;
• language dominance has an impact on the degree of interference.

2. SUBJECTS AND METHODS

The research was conducted in Transcarpathian Hungarian schools. The subjects were selected according to different aspects, so the selected sample is representative from different perspectives. Subjects studied in the seventh form at the time of the investigation (age 12-13). Hungarian monolinguals from Hungary, Ukrainian monolinguals from Ukraine and bilinguals from Slovakia were tested as control groups. Before the association test was applied, subjects filled in a sociological/sociolinguistic questionnaire. The questions of the questionnaire were designed to focus on the factors that influence language proficiency. As it was mentioned above, the method of the research was continuous word association test on interlingual level. This type of test besides answering questions that the traditional one-response tests do (Aitchison 1987; 2003) also reveals the weaker associations.

In recent years the Stroop paradigm has become one of the best-known procedures in the field of cognitive psychology to study the efficiency of cognitive control mechanisms. In this paradigm, research participants are asked to name ink colours of printed conflicting colour words, for example, when the word blue is printed in red ink, the correct expected task response is red. The delay in
colour naming evoked in this incongruent condition is called the Stroop effect or interference effect (Stroop, 1935) and refers to an increase of response time measured in this colour-naming condition comparing to the response time in a neutral (control) naming condition (for example: naming the colours of colour patches or rectangles or coloured Xs).

Psycholinguistics of bilingualism has frequently used the Stroop paradigm to study the ability to control and regulate bilingual language processing (Lee, Chan, 2000; Roselli, Ardila et al., 2002; Zied et al., 2004; Goldfarb, Tzelgov, 2007). In our study we used the bilingual version of the Stroop test. 16 students served as subjects with normal colour vision. We used language dominance as an independent factor in the study, which was examined by a questionnaire. An html-programme was created with inbuilt javascript application to measure reaction time.

3. STRUCTURE

The structure of the dissertation consists of five main parts. The first part LITERATURE REVIEW details, summarises and criticises the results of the past in this area. The subjects of the research are members of a bilingual community, so this part deals with the questions of becoming bilingual on the individual and on the community level as well. A subparagraph deals with the Transcarpathian speech community, its location, language use and the state of education. Paragraph 1.3. presents and compares the results of research on the topic of the bilingual mental lexicon. Here we can have an insight into the different models of the mental lexicon getting to Pavlenko’s (2009) model, the Revised Hierarchical Model of the bilingual memory representation. A special attention was paid to the semantic representation and its examination methods because they were used in the study. The formulation of the AIMS AND HYPOTHESES closes Part 1.

Part 2. MATERIAL AND METHODS describes the subjects, who participated in the investigation, the aspects according to which the representative sample was chosen, the methods of the research, it explains the circumstances and the process of the research and lists the softwares used for analyses.

Part 3. RESULTS demonstrates all the results that were gained from the analysis. Thematically it falls into four main parts that comes from the different perspectives of data analyses. The first subpart details the results of the sociological/sociolinguistic
questionnaire in the experimental group and in the Slovakian control group. This is followed by a quantitative analysis of the associations in the light of the examined factors. Sub-chapter 3.2. examines the word-class distribution of the responses, while the next paragraph deals with the semantic relationships of the stimulus and response words according to the paradigmatic/syntagmatic/associative principle. The last subparagraph demonstrates the statistically analyzed results of the Stroop test.

The fourth part of the work is the DISCUSSION where results are discussed and compared with the literature on this topic.

The last part of the dissertation is the CONCLUSIONS where the main conclusions are derived from the results and new findings are listed.

At the end of the work REFERENCES, LIST OF TABLES AND FIGURES can be found and ANNEXES which contain all the associations organised into articles.

4. MAIN RESULTS

In what follows, the main findings of the research is summarized in the form of thesis points

1. Göncz Lajos (2004) claims that language dominance in a bilingual individual can be measured with the methods of word-association and questionnaire. The present research applied both methods to obtain more precise results. The summoning of the data of the questionnaires revealed that the experimental group is Hungarian dominant bilingual, which is true for the Slovakian control group as well. The results of the word-association test proved this, because the Hungarian stimulus words triggered significantly (p<0.001) more responses than Ukrainian (Slovak) words.

2. Social factors have an impact on the organisation of the bilingual mental lexicon. The language of communication used in the family, the mother tongue of the parents, the attitude towards languages, the linguistic environment (minority/majority) influence the knowledge of languages and the connections between languages.
3. The developed metalinguistic awareness of the bilingual group is proved by the result that the members of the experimental group wrote more responses to the stimulus words in both languages than the members of the monolingual control group. The mental lexicon of the bilingual group is organised in a different way from the monolingual one as the ratio of the associations differs in these groups.

4. The results of the experiment prove the network based organisation of the mental lexicon. Words within the mental lexicon are not just connected directly but through other words. In our study it is proved by the great number of weak associates.

5. Lexical equivalents (stimulus words) did not trigger responses in the same ratio in the two languages. This result can be explained by Pavlenko’s model in which conceptual representation can be common, partly overlapped and language specific. Our results show that the conceptual representation of concrete nouns is common, but the representation of abstract nouns is likely to be partly overlapped.

6. The results of the research seem to prove that the subjects store their languages in a coordinate system because the ratio of lexical equivalents is high in the responses for the L2 stimulus words.

7. Examining the main organisational principles within the bilingual mental lexicon we found that associative links are predominant in both languages that refer to the processing of the associative memory. In the case of weak associates associative links show much greater dominance.

8. The Stroop test revealed that the bilingual is not able to exclude effects from the inactive language that was brought to the surface by the special experimental situation. The orthographies of the two languages are different, so the language of response causes greater interference in processing than the stimulus language which takes part in perception.
5. BIBLIOGRAPHY


6. OWN PUBLICATIONS ON THE TOPIC


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Book reviews
