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L2 INFLUENCE ON L1 CONCEPTUAL REPRESENTATIONS: A CASE FOR MULTI-COMPETENCE?

This paper presents the results of a study of how Polish-English bilinguals conceptualise and process picture – cues in their native language (L1). The study sought to discover whether and to what extent advanced proficiency in a second/foreign language has an observable impact on concept representation and language use in the L1. The underlying assumption was that each of the bilingual's languages is represented at three distinct levels, i.e. the lexical, semantic and conceptual level (Pavlenko 2002), and that concepts are stored in a representation common to both languages (De Groot 2002), while words and their meanings are stored in separate lexicons. Following from this, the contention is that L2 lexical transfer into the L1 could have its source in the conceptual system, which is affected by both proficiency in the bilingual's languages and the manner as well as context of language use (Pavlenko 2002). The findings will be discussed in the light of current research into bilingualism and within the framework of Cook's (1996) theory of multi-competence.

Introduction

One of the intriguing, though not altogether unexpected findings of research into bilingualism has been that a high level of proficiency in a second language (henceforth L2) alters the bilingual's use and control of his native language (henceforth L1). Consequently, the bilingual's competence in the language is different from that of monolinguals, as documented by studies of L2–L1 influence in areas such as lexico-semantics, morphosyntax and pragmatics (Cook 2003). In referring to this phenomenon, Cook (1996: 65) uses the term multi-competence, which he defines as *knowledge of more than one language in the same mind.* In essence, the term suggests that bilinguals' L1 and L2 competences should not be construed as independent, i.e. monolingual constructs but rather as a composite of interacting and possibly integrated linguistic systems.

In the light of this statement, the primary objective of this paper is to investigate how the notion of multi-competence relates to the bilingual's control of his lexical stock in the L1. Following claims that instructed foreign language learning in a class-

room environment may lead to the development of multi-competence (Kecskes and Papp 2003) and that lexical borrowing is a major manifestation of L2 influence on L1 lexis (Pavlenko 2003), the paper seeks to establish whether a high degree of proficiency in L2 English has a verifiable impact on vocabulary use in L1 Polish in cases when translation equivalents in the respective languages are linked to different concepts. Moreover, since the emphasis is on semantic and/or conceptual transfer rather than on purely lexical influence, it is hoped that the study will shed light on the principles behind conceptual interaction and/or transfer and help determine the extent, if any, to which they influence vocabulary choice in the bilingual's native language.

Current models of bilingual lexical representation

The literature on bilingualism seems far from presenting a united front with regard to the organization of the bilingual lexicon/memory. Perhaps the most popular view is that there is at least partial separation between the L1 and L2 lexicons (Singleton 2003) and that they have a hierarchical (two-layered) structure, which encompasses word forms and meanings. The former are stored in two independent lexicons, which are language specific, i.e. the L1 and L2 lexicons, while the latter are integrated into a single semantic/conceptual store, which is shared by both languages (DeGroot 2002; DeGroot and Kroll 1997; Kroll and Tokowicz 2001). The layers and lexicons are interconnected.

Overall, this model rests on the assumption that the L1 is the dominant language while the L2, on account of being acquired later in life, is less well developed. Thus there is an asymmetry both in the size of the L1 and L2 lexicons and in the strength of links between them (DeGroot and Kroll 1997; Kroll and Tokowicz 2001). Moreover, research with bilinguals at different levels of proficiency shows that L2 learners initially access concepts through words in the L1. It is only when they develop fluency (Kroll and DeGroot 1997) in L2 that they begin to directly access concepts in that language. To put it another way, there is a developmental shift from lexical to conceptual mediation for L2 words, which is determined by increasing expertise in the language.

According to Kroll (1993), this shift is also responsible for the already-mentioned asymmetry between lexical and conceptual links operating within the model. Since there is a strong initial reliance on L1 words during L2 semantic processing, the links from L2 to L1 lexicons are stronger than the L1 to L2 connections. Likewise, the conceptual connections are stronger for the L1 (Kroll and Stewart 1994), which reflects the L2 learners' progression from lexis-dependent learning to direct concept mediation for the L2, and has been confirmed by word translation studies involving forward and backward translation.[1]

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[1] These studies proved that translation from L1 to L2 engages conceptual processing while L2 to L1 translation is carried out on the lexical level only.

Although the model encompasses the most recent research findings and thus constitutes a revised version of the initial hypothesis advanced by Potter (1984) and Weinreich (1953), it does not present a complete picture of bilingual memory and lexico-semantic representation. Among its drawbacks are failure to distinguish between written and spoken language, as well as lack of comment on the underlying network of intralingual and interlingual word form-concept connections (Kroll and DeGroot 1997). It remains to be seen how future research clarifies these issues.

Despite evidence to the contrary, voices can also be heard in favour of integration at the lexical and semantic levels. For example, Cook (2003:6) sees the bilingual mind as a whole that balances elements of L1 and L2 within it. What is more, in a rather theoretical way he discusses different 'logical' relationships between languages in the bilingual mind and proposes an integration continuum, which depicts possible linguistic configurations from total separation, through interconnected and/or partially integrated models to complete integration. The model is dynamic in the sense that it allows for varying degrees of conflation depending on the bilingual's state of mind, perception of linguistic context, overall amount of language use, stage of development and the like. Comprehensive as it seems, it cannot, however, escape notice that the model is highly parallel to Grosjean's (1997b) concept of language modes. These are defined as *the state of activation of the bilingual's languages and language processing mechanisms at a given point in time* (ibid.: 168) and are determined by the interlocutors, topic, situation and purpose of interaction. Given that similar factors affect the integration continuum, which does not cover the whole language system of a bilingual but instead differentiates both between language subsystems and between individuals on a moment-to-moment basis, one cannot help concluding that the differences between the two models arise mainly from opposing theoretical standpoints. Namely, while Cook (2002; 2003) argues for a unitary dynamic mental lexicon within the construct of multi-competence, Grosjean's theory implies the existence of two or more separate mental lexicons in the bilingual mind. Incidentally, the fact that both languages are stored in each other's vicinity is, in Cook's opinion (2003), a strong enough argument in support of at least partial connectedness and/or integration of the bilingual's languages.

Another possibility has been explored by Singleton (1999), who drawing on research into code-switching and bilingual processing, advances the view that the lexicons, though separate, are in communication, and that lexical organization within bilingual memory may be implemented on a word-by-word rather than language-by-language basis. All things considered, this interpretation sheds an entirely new light on the mechanics of lexical and semantic processing and thus offers a new perspective for future research to follow.

The conceptual level

Lexically integrated or not, the bilingual memory contains an independent conceptual store which by virtue of containing information about the meanings of words

is often referred to as the semantic level (DeGroot 2002). In an attempt to specify its contents, DeGroot (1997; 2002) proposes a conceptual feature model, which among other things, accounts for the asymmetries observed in the word form to meaning mappings across languages, i.e. the lack of complete translation equivalence. In the model, conceptual representations contain *sets of primitive meaning elements* (ibid.: 48) or semantic features, which determine the meanings of words in a particular language. The degree to which these features overlap in a given translation pair determines the extent of semantic equivalence for that pair. One of the merits of such a portrayal is that it gives an explanation for the existence of language-specific meanings, which are simply those features that are not shared by the words concerned. The model also accounts for the concreteness effect reported in word translation studies, whose major finding has been that concrete nouns are translated faster than abstract words. Since, according to DeGroot (2002), concrete nouns have specific referents that remain similar across languages and cultures, they are likely to activate a similar set of semantic features regardless of the language of the stimulus word. To put it another way, they have close translation equivalents, which are accessed faster because of the extent of conceptual overlap between them. At the same time, they maintain (part of) their language specificity, as those features that are not shared remain inactive.

An issue that aroused a lot of controversy is the alleged failure of the hierarchical model to differentiate between semantic and conceptual representations (Pavlenko 1999). Drawing on the work of Paradis (1997a), Pavlenko launches a staunch attack on current research methodology, and suggests that it is vital to distinguish between semantic and conceptual memory and thus introduce another level to models of bilingual representation and processing. In her view, the bilingual lexicon is organized on the following three levels:

– the lexical level, which contains the phonological and morphological features of words,

– the semantic level, which in the words of Pavlenko (1999: 212) covers *explicitly available information which relates the word to other words,*

– the conceptual component, which is non-linguistic in nature and as such includes *multi-modal information that includes imagery, schemas, motor programs, and auditory, tactile and somatosensory information based on experiential world knowledge* (ibid.: 212). To this she adds a three-layered model of grammaticised concepts such as aspect and/or gender, which according to Taylor (1995), constitute linguistic categories in their own right.

Inspired by Levelt's (1993) model of monolingual speech production where lexical and semantic representations exemplify lexemes and lemmas respectively, the theory offers exciting new prospects for research into bilingual memory and speech production. An objection that can be raised, however, is that despite its theoretical appeal, it may be difficult, if not impossible, to implement Pavlenko's proposals in practice, as the task of separating conceptual and semantic representations and defining the differences between them may turn out to be tedious (DeGroot 2000) and infeasible. After all, both are derived from experience with words and the world at

large, and as such reflect internal thought processes and interactions with the environment (Lakoff 1987). Although there is a growing consensus among psycholinguists that cognitive processes employ the language of thought, i.e. mentalese (Saeed 2003) which is not necessarily verbal, rather than a particular spoken language, it seems both logical and pragmatic to conflate the two levels for reasons mentioned above. For an in-depth analysis of this issue see DeGroot (2000).

Conceptual cross-linguistic influence

An issue that merits consideration is whether language-specific concepts influence the bilinguals' use of their languages and what principles underlie this phenomenon in SLA and bilingual contexts.

As regards the first question, Kellerman (1995: 137) argues that languages *predispose their speakers to conceptualize experience* within the limits of their language-specific conceptual range. Simply put, language can determine the content and organization of mental representations to the effect that the way they are mapped onto concepts and lexicalized will vary from language to language (Singleton 2003). Differences in conceptual content may, for instance, be observed in polysemous words in different languages, which share some or just one of the central meanings and differ in the peripheral ones. Also, the way concepts are organized into networks and linked to other concepts seems to be a function of language. An additional factor to consider is that of culture. Lakoff (1987) observes that languages have different conceptualizations and/or prototypes because of differences in experience. Indeed, it is possible that concepts are derived from exemplars, i.e. memories of actual objects that serve as a basis for comparison and classification on the grounds of category resemblance (Saeed 2003). It should come as no surprise then that the robin is the prototypical bird in the USA, while the sparrow is considered the best representative of the bird category in Japan and Korea, where other birds are less common (Jarvis 1998).

Studies of SLA suggest strongly that L2 learning, at least in its initial stages, involves acquiring new linguistic forms that are mapped onto the already-existing L1 conceptual structures (Jarvis 1998: 25), which incidentally, confirms the predictions of the hierarchical model of bilingual memory. Research has also corroborated that L1-based concepts have a strong impact on lexical acquisition in L2 and determine concept boundaries in interlanguage (Pavlenko 1999).

Of special interest to this discussion are prototypicality studies which prove that factors such as transparency and centrality of meaning affect overall concept transferability (Kellerman 1983). While there is no doubt that these studies assume a certain degree of cross-linguistic interaction and comparison between the lexicons involved, they also indicate that the most (proto)typical and central meanings in L1 have the most chance of being reallocated to the L2 by virtue of being 'primary counterparts' (Arabski 1985) of the relevant L1 items. By the same token, there is a range of evidence to suggest that central and/or prototypical meanings are acquired before the noncentral and metaphorical ones, and finally, that idiomatic and metaphorical mean-

ings are least likely to be transferred (Kellerman 1983). This, incidentally, may prove to be an answer to the second question posed in this section.

Persistent adherence to L1 concepts is not the only option available to the L2 learner. Sufficient exposure to the L2, most preferably in its natural context of use, will result in the acquisition and/or formation of new L2-based concepts with solely L2 formal associations, and thus give rise to a composite conceptual store containing L1 and L2-specific concepts with different ranges of distribution and shared features. Kecskes and Papp (2003:249) discuss these processes in terms of the emergence of a Common Underlying Conceptual Base (CUCB), which should be conceived of as a *container* including knowledge, both language-neutral and language-specific, as well as skills except the language system itself. It is the CUCB that is responsible for generating ideas and for the operation of the language channels available to the L2 learner. Since the development of this construct is linked to a high level of L2 proficiency, intensive foreign language training may be a sufficient condition for the acquisition of new concepts and subsequent restructuring of the conceptual base. Kecskes and Papp also mention (Pavlenko 1999) the possibility that language-specific concepts may, in fact, be easier to adopt as they do not have to compete with other concepts in the bilingual's memory. What needs to be stressed, however, is that in their theory, the L1–L2 influence is largely intellectual and can best be described as skill and knowledge transfer which affects L1 use as a whole.

The mechanics of L2-induced change within the conceptual domain are discussed at length in Pavlenko (1999) and Kecskes and Papp (2003). These papers as well as those by Jarvis (1998), Cook (2003) and Latkowska (2001a) lend support to the notion that conceptual change and modification are likely to determine lexical choice and overall L1 use in bilinguals with advanced L2 proficiency.

The study

In an earlier study of cross-linguistic influence in the area of L1 vocabulary (Latkowska 2001a) I obtained evidence of significant second language influence in lexical acceptability judgment tests, which required Polish-English bilinguals to evaluate the correctness of L1 sentences containing lexical calques and semantic borrowings from L2 English. These ratings were matched against the judgments of a monolingual Polish group. Overall, the study revealed a substantially higher degree of approval in the bilingual group, which led to the conclusion that the L2 contributed to a change in the bilinguals' perception of their L1 lexical stock and was a source of lexical expansion rather than loss. In its simplest sense, this finding suggests that under the influence of L2 English, the bilingual subjects included L2-specific concepts in their L1 and used them for comprehension and acceptability judgments in the language.

Since a minimal incidence of L2-induced borrowing was found in production tasks, which involved backward (L2–L1) translation, it was concluded that that the domain that demonstrates the greatest vulnerability to cross-linguistic influence is that of vocabulary and comprehension skills.

Despite its preliminary character, the present study takes the research a step further in that it taps into conceptual/semantic memory in an attempt to discover how Polish-English bilinguals perceive and categorize experience in general, and what lexemes they use to refer to specific visual stimuli. This should help determine whether they show a preference for lexical ranges that are different from those of monolingual Polish speakers, and whether these preferences can be explained in terms of conceptual transfer from English.

The task

The principal data-collection tool was a picture-naming task, which as confirmed by studies of translation speed and by visual elicitation tasks (DeGroot 2002; Kroll and Stewart 1994), involves access to conceptual memory. It contained 15 pictures of concrete objects that were associated with different concepts in both Polish and English (wskazówka zegara – hand) or involved a noncentral polysemous meaning in either or both languages (a ladder in a stocking – oczko w pończosze). Two of the pictures referred to words that had close semantic equivalents in both languages. One of them involved a shared polysemous meaning (the neck of a bottle) while the other represented two distinct lexemes (mapa, plan miasta – a map, plan of a city), one of which was considered less common and/or typical in Polish, i.e. mapa as opposed to its English equivalent *map* which is used more frequently (BNC listing, July 2004).

The task was hoped to shed light on the bilingual and monolingual subjects' preferred lexical ranges, as well as on the extent of differences between them. For the sake of clarity, a referential lexical range is *the set of words that a person feels is appropriate to refer to a given object* (Jarvis 1998: 4).

The test also contained four pictures which were visual illustrations of popular English idioms that either had different lexical counterparts in Polish or had no direct equivalent at all. They included *to pay through the nose* (słono zapłacić, zapłacić jak za zboże), *like a red rag to a bull* (jak płachta na byka), *a storm in a teacup* (burza w szklance wody) and *a skeleton in the cupboard.* These pictures were intended to ascertain whether activation of the lexical level through visual stimulation would result in the activation of the concept/meaning associated with that item in the subjects' L2.

To induce activation of the monolingual language mode (Grosjean 1998), the subjects were instructed in Polish (L1) to provide the first Polish words they thought of in response to the picture stimuli. In the case of the idioms, they were requested to specify what situation, expression or saying the pictures reminded them of. To ensure that the study elicited spontaneous and unedited data, the task was timed. The time allotted to it was 15 minutes.

The subjects

Three groups of subjects participated in this project. The first group consisted of 17 Polish university students of English philology who were in their 4th year of study in the English Department at the University of Silesia and who were taught through the medium of English. They were, therefore, assumed to have developed advanced proficiency in L2 English as attested to by the end-of-year examinations in General English administered at the department in question. All of the subjects used both Polish and English for reading and watching TV, as well as interactions with relatives and friends for about 30 and 15 hours a week respectively. However, they all admitted using English mainly in a formal academic setting. Moreover, all of the subjects in this group had lived in an English-speaking country for at least 6 months. The average length of stay was 9 months.

The second group was composed of 17 students who fitted the description of the first group except that its members either stayed in an English – speaking country for less than a month (10 students) or did not visit one at all (7 students). The inclusion of subjects with limited experience of the L2 culture was expected to help test Pavlenko's (1999: 213) assertion that exposure to L2 in a formal classroom context leads to concept categorization *along the lines of the first language and culture.* Accordingly, the data obtained for this group were expected to show limited L2 influence and substantial differences from the 'culture-wise' bilingual group.

The last, third group was a monolingual control group which numbered 16 monolingual Polish speakers. All of them received secondary education in Polish and had no communication skills in English or any other foreign language.

All of the subjects were asked to complete a language background questionnaire (Laufer 2003), which focused on the amount and types of interaction in both their languages. The student groups were tested in a single session while the remaining subjects did the test individually.

Results

To assess statistical significance of this project's findings, each of the bilingual groups was compared with the monolingual control group by means of a paired t-test. The results of the analysis revealed that there was no statistically significant difference between the bilinguals and monolinguals (p=ns). Additionally, a paired t-test was performed to evaluate the impact that prolonged exposure to the L2 in its natural context of use had on the bilinguals' use of L1 vocabulary. In this case, too, no statistically significant difference was found between the two bilingual groups. A detailed analysis of the findings is presented below.

The picture-naming task

The results of the picture-naming task point to observable differences between the lexical ranges preferred by the monolingual and bilingual subjects. Namely, while the former show a clear preference for a limited number of lexical options, most often the targeted ones, the bilinguals' answers can best be described as more varied and unpredictable (cf. Kecskes and Papp 2003). Table 1 presents the most conspicuous differences between the subjects' lexical choices. Careful analysis reveals that they have been determined by processes well documented in the literature on cross-linguistic influence and L1 attrition, of which the following come to the forefront:

1. Loss of specificity of meaning, which may be symptomatic of retrieval difficulties. For instance, when referring to *a ball of wool* (kłębek, motek wełny), some of the bilinguals used expressions such as *a reel of cotton*, *cotton*, *a picture or cloud*, which stood in sharp contrast to the words suggested by the monolinguals. Likewise, the word *diamond (one of the four suits in a set of cards)* elicited a variety of responses, some of which bore no relation to the semantic/conceptual field examined, e.g. *poduszka* (*cushion*). In this case, however, one might claim the subjects were influenced by the shape of the referent. Processes of this kind have been reported in the literature on L1 attrition (Olshtain and Barzilay 1991) and indicate that while searching for words individuals are affected not only by the relevant semantic domain but also by the word's formal similarity (Pavlenko 2003) to the item in question. *Żyłka-wędka, wędzidło, kłębek-kłąb* are certainly cases in point. Quite common, too, is the tendency to replace unavailable items with more general terms, i.e. *wool* for *a ball of wool.* Additionally, to compensate for retrieval problems, bilinguals may be tempted to make use of less typical, if not idiosyncratic expressions (*brace and tip of a bottle*), which certainly contributes to the notion that their L1 diverges from that of monolingual speakers.

Table 1. Selected lexical ranges from the picture-naming task

Bilinguals without firsthand experience of L2 culture	Bilinguals with experience of L2 culture	Monolingual control
Kamień (stone) 41% Oczko (eye) 37% Brylant (diamond) 11% No answer 5% Klejnot (jewel) 5%	Kamień (stone) 41%% Oczko (eye) 52%% Ozdoba (decoration) 5%	Kamień (stone) 6% Oczko (eye) 75% Pierścionek (ring) 6% Diament (diamond) 12%
Kłębek (a ball of wool) 37% **Włóczka (wool)** 11% Motek (a ball of wool) 11% **Szpulka nici (reel of cotton)** 24% **Kordonek (cotton)** 5% **Obrazek (picture)** 11%	Kłębek (a ball of wool) 52% **Włóczka (wool)** 11% Motek (a ball of wool) 11% **Szpulka nici (reel of cotton)** 5% **Kłąb (cloud)** 5% **Obrazek (picture)** 11%	Kłębek (a ball of wool) 50% Włóczka (wool) 6% Motek (a ball of wool) 43%

Szyjka (neck of bottle) 88% Gwint (bottle thread) 11%	Szyjka (neck of bottle) 88% Główka (head) 5% Czubek butelki (tip of bottle) 5%	Szyjka (neck of bottle) 75% Korek (cork) 12% Nakrętka (cap) 6% Gwint (bottle thread) 6%
Karo (diamond) 70% Kier (heart) 11% **Poduszka (cushion)** 5% No answer 5% Pik (spade) 5%	Karo (diamond) 58% Walet (jack) 5% Kier (heart) 5% Dzwonek (diamond) 5% Symbol (symbol) 5% No answer 5% **Poduszka (cushion)** 5% Pik (spade) 5%	Karo (diamond) 100%
Mapa (map) 58% Plan (plan) 35% Książka 5%	Mapa (map) 58% Przewodnik (guidebook) 17% Plan (plan) 17% Książka (book) 17%	Mapa (map) 43% Plan (plan) 31% No answer 18% Atlas (atlas) 6%
Obrączka (wedding ring) 82% Pierścionek (ring) 17%	Obrączka (wedding ring) 88% Pierścionek (ring) 11%	Obrączka (wedding ring) 100%
Obroża (collar) 94% Smycz (lead) 6%	Obroża (collar) 94% Obręcz (brace) 5%	Obroża (collar) 93% Smycz (lead) 6%
Żyłka (fishing line) 47% **Linka (line)** 23% **Wędka (fishing rod)** 23% Spławik (float) 5%	Żyłka (fishing line) 58% **Linka (line)** 11% **Wędka (fishing rod)** 23% **Wędzidło (bit-part of bridle)** 5%	Żyłka (fishing line) 87% Wędka (fishing rod) 12%

2. Preference for L2 words and/or concepts. This takes the form of semantic borrowing and/or extension (Grosjean 1982), which occur between items that are similar in form despite having unrelated senses, e.g. *linka for a fishing line*. As shown in Table 1, the correct Polish word is *żyłka*. By the same token, words such as *ring* (pierścionek) and *stone* (kamień) were used to denote *obrączka* (wedding ring) and *oczko* (eye – the jewel fixed to a ring) respectively, which contrasted sharply with the monolinguals' preferences. There can be no doubt that this particular choice of words was motivated by L2 English and can be interpreted as an attempt to denote L2 – specific concepts. To put it another way, some of the lexical prototypes that emerge from the data clearly reflect L2 influence.[2]

Interestingly but not surprisingly, the study confirmed the prediction derived from SLA research that peripheral meanings of polysemous words are not likely to be transferred (Kellerman 1983) in either direction, i.e. L1–L2 and L2–L1. What it did not confirm was that one-to-one correspondences (Kellerman 1977, cited in Odlin

[2] Jarvis (1998: 69) defines lexical prototypes as foremost lexical preferences that emerge within a range of available lexical options to do with a given referent.

1989) between languages are often avoided, szyjka butelki – a neck of a bottle being a case in point. Equally significant is the fact that the subjects did not manifest symptoms of attrition and discard language-specific options in favour of more universal and central meanings. All in all, the findings of this study demonstrate that in situations when little or no overt cross-linguistic comparison takes place, as in a non-verbal picture-naming task implemented in a monolingual mode, bilingual subjects do not show dramatic signs of loss and/or L2–L1 transfer. It must be stressed, however, that some of their lexical choices diverge from the monolingual norm, which may be indicative of underlying L2-induced restructuring processes. This, in turn, lends support to Cook's notion of multi-competence.

The idioms

The data collected in this task showed even greater diversity in the elicited corpus than the previous test. This could be observed mainly in the monolingual group whose comments extended beyond the linguistic domain of set expressions and idioms, and referred to cultural phenomena such as bull fighting, biology lessons (for *skeleton in the cupboard*) and safety notices (hot surface for *a storm in a teacup*) that bore no direct relation to the elicited items. On the face of it, it appears that this might have been caused by the respondents' lack of familiarity with the test format. After all, none of the monolinguals had a background in linguistics or language teaching. On second thoughts, however, one cannot rule out the possibility that, unlike their bilingual counterparts, the monolingual subjects had poor metalinguistic skills and were therefore unable to relate the pictures to relevant lexical counterparts.

There are also noticeable differences between the expressions used by the bilingual groups on the one hand, and the monolingual control on the other. This, among other things, hints at the possibility that they drew on different conceptual ranges. As Lakoff (1987: 467) remarks, speakers of the same L1 share a conventionalised knowledge of form-meaning pairs and word-concept associations. Accordingly, speakers with the same homogenous L1 competence will demonstrate similar lexical choices when referring to the same referent(s) (Jarvis 1998). In the light of this statement, consistent use of words from the bilinguals' L2 would undoubtedly denote a heavy reliance on the concepts of that language. This, however, has not been observed in this study as the bilingual groups used correct Polish expressions most of the time. The occasional intrusion of a borrowing from English as in *burza w **filiżance** wody* or *burza w szklance **herbaty*** was only a marginal occurrence.

The observed conceptual influence was of a much subtler nature. Namely, some of the pictures evoked different associations in the bilingual and monolingual groups. For instance, while a vast majority of bilinguals spoke of wealth and a knack for making money when referring to the *pay through the nose* picture, the monolinguals emphasised a careless attitude towards it as well as skill in making it, which reflects the conceptualisations inherent in their respective languages. Likewise, in *referring to a skeleton in the cupboard*, some of the bilinguals mentioned the English meaning

of the idiom, i.e. a mystery, which indicates conceptual influence of L2. Unfortunately, the tendency was marginal and statistically insignificant. Still, there can be no doubt that it hints at potential changes within the conceptual domain which should be researched more thoroughly in a study conducted on a much larger sample. Table 2 displays some of the data collected in the task.

Table 2. Interpretations of the *'pay through the nose'* picture

Monolingual group	Bilinguals with limited experience of L2 culture	Bilinguals with experience of L2 culture
Mieć wszystkiego po dziurki w nosie (6%) Pieniądz nie śmierdzi (12%) Zapach pieniędzy (6%) Kichać na pieniądze (18%) No answer – (6%) Pieniądze wychodzą mu nosem (12%) Mieć nosa do pieniędzy (6%) Mieć coś w nosie (12%) Mieć pieniądze w nosie (12%) Kręcić nosem na pieniądze (6%)	Zapach pieniędzy (11%) Mieć pieniędzy po nos (11%) No answer – (29%) Sypać kasą z rękawa (5%) Mieć nosa do pieniędzy (5%) Mieć w nosie pieniądze (17%) Rozrzucać pieniądze (5%) Pieniądze leżą na ulicy (5%) Pieniądz nie śmierdzi (11%)	Czuć pieniądze nosem (11%) Zapach pieniędzy (17%) Mieć pieniędzy po nos (17%) No answer (5%) Pieniądze wychodzą mu nosem (5%) Czuć forsę nosem (11%) Sypać kasą z rękawa (11%) Wygrana na loterii (5%) Mieć nosa do pieniędzy (11%) Szastać pieniędzmi na prawo i lewo (5%)

Conclusion

To sum up, it appears that a high level of proficiency in a foreign language has a noticeable yet statistically insignificant influence on bilinguals' lexical choices in their native language. In that vein, one can only speak of limited L2 conceptual influence, which is independent of the context of language use and manifests itself mainly as altered lexical prototypes and a preference for L2-specific concepts, as well as higher metalinguistic skills.

As regards the notion of multi-competence alluded to in the paper's title, the study has not provided solid evidence in its favour. This, however, does not detract from the concept's empirical validity as its significance lies in the fact that it constitutes a radical departure from the Chomskian concept of idealized monolingual native-speaker competence by recognizing that bilinguals' L1 knowledge is different from that of monolinguals. What this means in practice is that bilinguals should be studied as language users and speakers in their own right. In view of recent reports of a noticeable L2 influence in most aspects of L1 proficiency, and of a definite bilingual advantage in overall cognitive development, Cook's (1993) arguments become all the more potent and justified.

References

Arabski, J. (1985). *O przyswajaniu języka drugiego (Obcego)*. Katowice: University of Silesia Press.

Cook, V. (2003). Introduction: The Changing L1 in the L2 User's Mind. In V. Cook (ed.). *Effects of the Second Language on the First*. Clevedon: Multilingual Matters.

Cook, V. (2002). Background to The L2 User. V. Cook (ed.). In *Portraits of the L2 User*. Clevedon: Multilingual Matters.

Cook, V. (1996). Competence and Multi-competence. In G. Brown, K. Malmkjaær and J. Williams (eds). *Performance & Competence in Second Language Acquisition*. Cambridge: CUP.

Cook, V. (1992). Evidence for Multi-competence. *Language Learning* 42(4): 557–591.

DeGroot, A. (2000). On the Source and Nature of Semantic and Conceptual Knowledge. *Bilingualism: Language and Cognition* 3(1): 7–9.

DeGroot, A.M.B. (2002). Lexical Representation and Lexical Processing in the L2 User. In V. Cook (ed.). *Portraits of the L2 User*. Clevedon: Multilingual Matters.

DeGroot, A.M.B., J.F. Kroll. (1997). Lexical and Conceptual Memory in the Bilingual: Mapping Form to Meaning in Two Languages. In A.M.B. DeGroot and J.F. Kroll. (eds). *Tutorials in Bilingualism*. Mahwah, NJ: Lawrence Erlbaum.

Grosjean, F. (1982). *Life with Two Languages: An Introduction to Bilingualism*. Cambridge, MA: Harvard University Press.

Grosjean, F. (1997b). The Bilingual Individual. *Interpreting: International Journal of Research and Practice in Interpreting*. 2: 163–191.

Grosjean, F. (1998). Transfer and Language Mode. *Bilingualism: Language and Cognition*. 1(3): 175–176.

Grosjean, F. (2001). The Bilingual's Language Modes. In J.L. Nicol (ed.). *One Mind, Two Languages*. Oxford: Blackwell.

Jarvis, S. (1998). *Conceptual Transfer in the Interlingual Lexicon*. Bloomington, Indiana: Indiana University Linguistics Club Publications.

Kecskes and Papp (2003). How to Demonstrate the Conceptual Effect of L2 on L1? Methods and Techniques. In V. Cook (ed.). *Effects of the Second Language on the First*. Clevedon: Multilingual Matters.

Kellerman, E. (1983). Now you see it, now you don't. In S. Gass and L. Selinker (eds). *Language Transfer in Language Learning*. Rowley: Newbury House Publishers.

Kellerman, E. (1995). Crosslinguistic influence: transfer to nowhere? *Annual Review of Applied Linguistics* 15, 125–150.

Kroll, J. (1993). Accessing Conceptual Representations for Words in a Second Language. In R. Schreuder and B. Weltens (eds). *The Bilingual Lexicon*. Amsterdam/Philadelphia: John Benjamins.

Kroll, J.F., N. Tokowicz. (2001). The Development of Conceptual Representation for Words in a Second Language. In J.L. Nicol (ed.). *One Mind, Two Languages*. Oxford: Blackwell.

Kroll, J.F., E. Stewart (1994). Category interference in Translation and Picture Naming: Evidence for Asymmetric Connections between Bilingual Memory Representations. *Journal of Memory and Language* 33: 149–174.

Lakoff, G. (1987). *Women, Fire and Dangerous Things: What Categories Reveal about the Mind*. Chicago: Chicago University Press.

Latkowska, J. (2001a). The Influence of the L2 on L1 Competence: a Study of Crosslinguistic Interaction in an L1 Environment. In J. Arabski (ed.). *Insights into Foreign Language Acquisition and Teaching.* Katowice: University of Silesia Press.

Laufer, B. (2003). The Influence of L2 on L1 Collocational Knowledge and on L1 Lexical Diversity In Free Written Expression. In V. Cook (ed.). *Effects of the Second Language on the First.* Clevedon: Multilingual Matters.

Levelt, W.J.M. (1993). *Speaking.* Cambridge, MA: The MIT Press.

Odlin, T. (1989). *Language Transfer. Crosslinguistic Influence in Language Learning.* Cambridge: CUP.

Olshtain, E., M. Barzilay. (1991). Lexical retrieval difficulties in adult language attrition. In R. Vago and H. Seliger (eds). *First Language Attrition.* Cambridge: CUP.

Paradis, M. (1997a). The Cognitive Neuropsychology of Bilingualism. In A.M.B. DeGroot and J.F. Kroll. (eds). *Tutorials in Bilingualism.* Mahwah, NJ: Lawrence Erlbaum.

Pavlenko, A. (1999). New Approaches to Concepts in Bilingual Memory. *Bilingualism: Language and Cognition* 2(3): 209–230.

Pavlenko, A. (2003). 'I feel clumsy speaking Russian': L2 Influence on L1 in Narratives of Russian L2 Users of English. In V. Cook (ed.). *Effects of the Second Language on the First.* Clevedon: Multilingual Matters.

Potter, M.C., K.F. So, B. von Eckardt, L.B. Feldman (1984). Lexical and conceptual representation in beginning and more proficient bilinguals. *Journal of Verbal Learning and Verbal Behaviour* 23: 23–38.

Saeed, J. (2003). *Semantics.* Oxford: Blackwell.

Singleton, D. (1999). *Exploring the Second Language Mental Lexicon.* Cambridge: Cambridge University Press.

Singleton, D. (2003). Lexical transfer: interlexical or intralexical? Paper presented at The International Conference on Foreign/Second Language Acquisition. Szczyrk, Poland.

Taylor, J. (1995). *Linguistic Categorization. Prototypes in Linguistic Theory.* Oxford: Clarendon Press.