

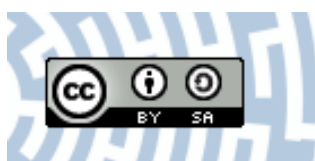


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## Developing language awareness through students' conceptualisations: Metaphoric approach in content courses

**Abstract:** This article aims to demonstrate to university lecturers as well as to students how “thinking outside the box” by means of metaphoric conceptualisations of studied issues in content courses can raise awareness about these issues. Two pedagogical dimensions are especially in focus here. First of all, one is the promotion of a more active involvement of students in content courses and a better understanding of content issues through a more creative approach to them. The second dimension of this creative approach can impact syllabus construction and the methodology used by lecturers. This article makes use of real life activities employed during lectures on multilingualism, focusing on complex issues of understanding multilingualism and individual multilinguality and the concept of the multilingual mental lexicon (MML). The teaching strategy used here consisted of introducing multilingualism and MML by means of individual student conceptualisations presented in a form of metaphoric representations (in this case, similes).

**Keywords:** creativity, multilingual mental lexicon, metaphor, simile, conceptualisation.

### 1. Introduction

As Aronin and Politis (2016: 27) put it, “[m]etaphors define the focus of exploration, direct scholarly vision, delimit the content of the research and, in a way, pre-determine research outcomes, as well as forming attitudes of laypeople and intellectuals towards the phenomena of life.” In education, Oxford et al. (1998: 5) believe a metaphor to be instrumental not only in language studies but also in the development of teacher awareness, as:

Metaphor has the power to enhance the subject's understanding of educational problems and thus increase perspective-consciousness. Diverse instructional styles and curriculum theories can be simplified by showing, through metaphor, the relationship between abstract concepts and something that is more familiar, concrete and visible.

This text looks at the ways university students and at the same time multilingual language users, a relatively homogenous group in terms of their learning histories and study profiles, conceptualise multilingualism and the construct of a multilingual mental lexicon. The project is based so far on narrative text use as data collection tools (Pavlenko 2005). The two groups of subjects were asked to conceptualise the phenomenon of multilingualism and multilinguality (group 1) and the construct of a multilingual mental lexicon (group 2) as expressed in reflective essays entitled "Multilingualism is like..." and "Being a multilingual person is like..." (group 1) and "The multilingual mental lexicon is like..." (group 2). Conceptualisations are verbalised as uniquely coined individual explicit metaphors (similes). The corpus of metaphors collected demonstrates the different degrees of subjects' awareness of the above phenomena and their different dimensions. On the one hand, they point to the areas where very little understanding is shown; on the other, and in significant contrast, some metaphors present a fairly novel understanding of and perspective on the multilingual mental lexicon. This way of introducing a new issue in a university content course allows both the lecturer and the students not only to raise their awareness of the issue but also to make their teaching/learning experience an exciting adventure of discovery.

A metaphoric understanding of language derives from our most basic life experiences, as "[m]etaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature" (Lakoff and Johnson 1980: 3). With the advance of cognitive sciences and specifically cognitive linguistics, it became an accepted view that metaphors give us a framework for thinking and reflect the way we experience, understand and interact with the world around us. More recently, neurolinguistic research demonstrates the importance of metaphors in brain imaging studies, which

have shown that talking about metaphorically grasping an idea uses the same parts of the brain as physically grasping an object.

This is strong connection between metaphor and bodily experience [...] has implications for political and social discourse (MetaNet: A Multilingual Metaphor Repository n.d.)

Metaphoric conceptualisations have been widely used in various areas of research. In psychology, studies embrace the following areas of research:

- studies of mental models;
- communication processes in psychotherapy/clinical psychology;
- analogical reasoning and problem-solving;
- understanding and decision-making processes;
- self-concept; and
- knowledge management and knowledge cooperation (for an overview, see Moser 2000).

In education, and especially foreign language education, metaphors have been used as research tools to study:

- models of education;
- acquisition/learning of a foreign language and development of language skills;
- developing communicative and intercultural competences;
- constructing knowledge;
- creating motivation and developing critical thinking;
- approaches to teaching (transmission teaching vs. interactive teaching, teacher-centred vs. learner-centred classroom);
- teacher's roles; and
- teacher development and self-reflection (for an overview, see Gabryś-Barker 2012 and Komorowska 2013; see Table 1).

**Table 1.** Metaphors in language education research (based on Gabryś-Barker 2012; Komorowska 2013)

Area	Focus	Sources
Language development	Vocabulary acquisition and retention Didactic materials in teaching prepositions and collocations Development of communicative competence and proficiency Translation in language instruction	Boers 2000; Gao and Meng 2010  Gabryś 1993  Littlemore and Low 2006 Farquhar and Fitzsimons 2011
The affective dimension of FL learning	Developing motivation	Petrie and Oschlag (1996)

cont. tab. 1

Creativity and critical thinking development	New understanding of concepts (e.g., in literature, particularly in poetry) LLIL (Literature and Language Integrated Learning) Cultural context, social representations and intercultural competence	Kramersch and Kramersch 2000  Sroka 2011 Moscovici 2001; Yob 2003
Bodily experience in cognition (embodiment)	Image schemata: metaphors of containers, paths, up-and-down, etc.	Gibbs 2006
Educational research	Describing educational systems (authoritarian teaching, interactionist models). Teachers' and learners' perceptions of teaching and learning  Teacher reflections on their classroom roles	Panda 2012, Ponterotto 2000; Niemeier 2000; Oxford et al. 1998 De Guerrero and Villamil 2000  Gabryś-Barker 2012

In researching multilingualism and individual multilinguality by means of metaphoric conceptualisations, the following are the best-known studies:

- new research perspectives in multilingualism research (Aronin and Hufeisen 2009; Aronin 2014; Aronin and Jessner 2015);
- spacetimes of multilingualism (Aronin 2014; Aronin and Jessner 2016);
- multilingualism as an edge (Aronin and Politis 2016);
- bridging and exiting as metaphors of multilingual education (Panda 2012); and
- multilingualism and being multilingual (Gabryś-Barker 2016a, b).

## 2. The course *Introduction to multilingualism*

### 2.1 Complexity of multilingualism and individual multilinguality

Not only researching multilingualism and multilinguality but also lecturing on multilingualism is less straightforward than it might seem, indeed less so than some of the other content courses in modern language programmes in university philology departments. Research in this area

is fast growing, but remains fairly inconclusive in its findings. This is due to problems of complexity:

Multilingual language acquisition (MLA) is a process different from SLA both quantitatively, since more languages interact with each other, and qualitatively - thus it has to be viewed as a more complex process. But this complexity derives not only from a more extensive language basis but also from the more diversified patterns of acquisition. (Gabryś-Barker 2018)

The latter factor, diversified patterns of acquisition, stems from the fact that

languages are learnt in various sequences, each of them is acquired/learnt at different ages of acquisition, the processes occur in different contexts, the languages learnt may perform different functions in different domains of language use, the multilingual language users/learners have varied motivations and attitudes to each individual language learnt. Additionally, multilinguals (may) have different linguistic, learning and communicative sensitivities and language awareness and they will have their own identities at different stages of their lives when functioning in different languages (the L1 self, the L2 self, L3 self, etc.). (Gabryś-Barker 2018)

As stated elsewhere (Gabryś-Barker 2016a), individual multilinguality is seen as an ability to understand and use two or more languages, in which multilinguals may differ in their preferences for different languages in different contexts and for different functions. Multilingualism does not assert that this functionality must be balanced, but stresses the multiplicity of possible profiles of a multilingual language user. This complexity requires an individual approach to the issues of language(s) development and achievement.

## 2.2 Introduction to the course (syllabus)

The course *Introduction to multilingualism* focuses on:

- the constructs of multilinguality and multilingualism;
- aspects of cultural awareness in multilinguals;
- the affective dimension in multilingual learning and instruction;
- methods and instruments in researching multilinguality; and
- multilingual lexical representation (multilingual mental lexicon).

It is a two-semester course in the form of interactive (gapped) lectures. The idea of a gapped lecture consists of the active participation of students in the form of question answering, question asking, group and individual tasks, short narratives writing, association tasks, and such like activities. Its aim is to introduce the phenomena of multilingualism and individual multilinguality and processes involved in multilingual development. Table 2 presents the outline of the syllabus for both semesters.

Table 2. Syllabus of the course *Introduction to multilingualism*

Semester I syllabus	Semester II syllabus
MULTILINGUALISM AND MULTILINGUALITY	MULTILINGUAL LEXICAL REPRESENTATION
<p><b>Theme 1:</b> Introduction to multilingualism and multilinguality</p> <p><b>Theme 2:</b> Introducing multilingualism and multilinguality. The profile of a multilingual</p> <p><b>Theme 3:</b> A case study of a multilingual</p> <p><b>Theme 4:</b> Multilinguals' learning stories: change; critical incidents in multilingual-learning stories</p> <p><b>Theme 5:</b> Appraisal systems in multilingual development (theory and practice)</p> <p><b>Theme 6:</b> Affective dimension in language learning. Critical episodes in multilingual learning stories</p> <p><b>Theme 7:</b> Cultural awareness of multilinguals.</p> <p><b>Theme 8:</b> Multilingual language processing; thinking multilingually and multilingual dreaming.</p>	<p><b>Theme 1:</b> Introduction to lexical competence and lexical processing: theories and models.</p> <p><b>Theme 2:</b> L1 mental lexicon</p> <p><b>Theme 3:</b> The multilingual mental lexicon</p> <p><b>Theme 4:</b> Lexical access and processing</p> <p><b>Theme 5:</b> Multilingual language awareness</p> <p><b>Theme 6:</b> Multilingual lexical research and pedagogical implications.</p>

Requirements for the final credit for each semester are regular attendance, a review of an article on multilingualism/multilinguality, and a narrative text written in class. Also, active participation and involvement in answering and asking questions during the lecture are most appreciated. Appendix 1 presents the main bibliographical sources referred to in the lectures.

### 2.3 The challenges of multilingualism complexity: focus on the self

One of the main challenges for students attending this course is to understand that research in multilingualism does not allow for very

definite answers as to the phenomenon, that there is a lot of variability involved in study results – pointing to the idiosyncratic character of multilingualism and, as a consequence, multilinguality (individual multilingualism). The complexity of multilingualism as a phenomenon and therefore the research to understand it do not allow for a rigid approach to the interpretation of results, and emphasis needs to be placed on the idiosyncratic aspects of this phenomenon. The use of metaphoric conceptualisations presents a new approach to studying this area, as it allows for insights into various aspects of understanding the phenomenon of multilingualism on the individual level of the self, as can be observed in the data collected in the two studies outlined below. Before the course started, a pilot study was carried out (study 1).

### 2.3.1 Examples

**Study 1.** *Understanding multilingualism: Multilingualism and being multilingual* (Gabryś-Barker 2016a, b, 2018).

The study was a pilot of a longitudinal cross-sectional project on understanding the phenomenon of multilingualism and individual multilinguality. At the start of the project, the subjects of the study were multilingual language students at a foreign university (the University of Aveiro, Portugal) attending advanced practical English classes, with similar characteristics to those of Polish university students attending the lecture on multilingualism. During the practical English class, Portuguese students were asked to complete two sentences in a fifty-word narrative text:

*Multilingualism is like...*

*Being a multilingual is like...*

By the use of similes relating to multilingualism and what it is to be multilingual, it was possible to observe the subjects' perception of the phenomenon. The data demonstrated that perceptions of the subjects, who were multilinguals themselves, exhibited:

- focus on cultural understanding and communication (exposure to foreign cultures in travelling and communication, not in an instructed classroom).
- positive and enriching aspects on the individual level of achievement and knowledge.
- both a challenge and a need.
- both cognitive (knowledge) and affective (personality growth).
- recognition of the complexity of multilingualism; speaking skills as the essence of multilingualism (communication the main target).



- cross-cultural understanding as the basis for successful interaction; emphasis put on immersion (acquisition connected with travelling) rather than learning.

The characteristic qualities of multilingualism cited referred to its interactive, developmental, experiential, and nature-grounded understanding. Table 3 presents a selection of similes that the subjects produced in a written task (a narrative text). Each of them can be used as a stimulus for discussing multilingualism at its various levels, in various contexts and, above all, for discovering its characteristic features (for the details of the study, see Gabryś-Barker, forthcoming).

**Table 3.** Study 1: Understanding of multilingualism and being multilingual (Gabryś-Barker 2016a)

Multilingualism is like ...	Being a multilingual is like ...
<i>A 360- degree vision all the time. A peanut butter jelly sandwich. Having different tools. A road that connects different countries. A rainbow where colours are languages and cultures. A house in which every window opens to new reality.</i>	<i>Like having a Swiss army knife. Being a hiker in any part of the globe. Being a chameleon. Feeling you are a part of several countries, never being alone. Being a sponge that can be shaped (adjust to circumstances and blend in everywhere and whenever wanted). Being someone who spent most of his life learning different fighting techniques. Being an astronaut: everyone thinks you are awesome but most of the time you even don't know what you are doing. Having a good personality disorder, when you have one personality and change it with the language you use.</i>

The sample narrative texts illustrate some of the above similes.

*Multilingualism is like **an ice-cream shop**. There are several flavours to choose from, all are good in their own way [...] but some are better than others. Some flavours are popular and everyone buys them while others are exotic and only a few people will ever like them (s. 3).*

*Multilingualism is like **a puzzle** in which each language is a piece and they all fit together to create a beautiful landscape which is the international relationships and global context in which we fit by being able to speak more than one or two languages (s. 21.)*

*Multilingualism is like **a house** in which every window you open shows a new reality to you. It gives you the opportunity to discover new things (s. 5).*

*Being a multilingual person is like being **a chameleon** that is able to fit in many scenarios naturally, because it can talk the native*

*language and act like a part of the place itself, when confronted with the situation (s. 21).*

*Being a multilingual person is like having a good personality disorder, when you have several different personalities and change between them in accordance with the language you are using (s. 29).*

*Being a multilingual person is like having a **Swiss army knife**. Some tools are useful, some are just there only for the flare, but at least you'll always be ready [...] for most cases in life. The knife can be used for almost anything, even for tasks unrelated to its original purpose, while the toothpick is never used and everyone eventually loses it anyway (s. 30).*

The metaphors can be classified as relating to various dimensions of multilingualism and individual multilinguality, such as:

- relationships/partnership (*affair, feeling, understanding* – the affective dimension): INTERACTIVE;
- knowledge (*vision, book, puzzle, comprehending, new reality* – the cognitive dimension): DEVELOPMENTAL;
- a pleasant experience (*peanut butter sandwich, practising sports, ice-cream flavour*): EXPERIENTIAL;
- a challenging experience (*swimming in the sea, cooking, using tools, raising a multilingual child*): EXPERIENTIAL; and
- natural phenomena (*rainbow, beautiful landscape*): BASIC (NATURAL) (Gabryś-Barker 2016a).

As was also stated in the presentation of the pilot project (Gabryś-Barker 2016a), the above demonstrated a way of developing reflection on multilingualism as a complex process in which both teachers and learners get involved and which “could bring us closer to dynamic, interactive and experiential interpretivist teaching in line with the more and more eclectic communicative approach and Post-method Era” (Komorowska 2013: 69). The above observations made on the basis of the pilot study have implications for both syllabus design and ways of introducing the theme of multilingualism in a lecture form. The continuation of the project in the group of students actually attending the *Introduction to multilingualism* lecture will also provide data for cross-cultural comparison of multilingualism perceptions between two groups with different national (cultural) backgrounds (Gabryś-Barker 2018).

### **Study 2: Multilingual mental lexicon**

As with study 1, the subjects (also multilingual language learners and users attending the course on multilingualism at the University of Silesia)

were asked to focus on the multilingual mental lexicon (MML), one of the most fuzzy concepts in multilingualism research. They were first introduced to the concept of MML and using their knowledge of the issues of multilingualism (the first semester lecture in multilingualism), they were asked to write a fifty-word narrative text:

*The multilingual mental lexicon is like...*

The data collected showed clearly three basic aspects of MML that would constitute the areas the lecture was to focus on (see the syllabus earlier). These different understandings allow the lecturer to use individual similes in presentation and discussion of the concept during the lectures. Table 4 gives examples of the similes produced by the subjects.

**Table 4.** Multilingual mental lexicon similes (study 2, Gabryś-Barker 2016b)

MML as a:	Qualities	Sample metaphors
CONTAINER	borders, separation, system, order, units	<i>A jewel casket, a library, a chest of drawers, an attic full of storage boxes, a huge box with many small boxes, a detailed map, a storage in the brain, a collection of words, an internal inventory of words.</i>
NETWORK (CONDUIT)	a part of a whole, complementarity, links, manipulation/adaptation, different roles	<i>A patchwork, like a friendship, like a network, a piano, like a musical composition, a mind map, a liquid crystal, a lego box/magic box, a detailed map with a large scale, a person at a party.</i>
ACCESS	a known code (alphabet, part of speech), program, software	<i>A dictionary, files in a computer, online dictionary.</i>
NATURAL EMBODIMENT	growth, variety, effects, infinite, useful and profitable, focused (target-oriented)	<i>The field of cultivated flowers, bunch of crops, veggies and flowers, a tree, a big garden with fruit trees, like the universe, a person at a party.</i>

It might be interesting to look at sample narrative texts written by the subjects.

### **Container**

*A mental lexicon can be compared to a private and personalized warehouse of every person. Everyone has their own organizing pattern as well as the way of storing [...]. Our peers or parents organize their objects but the way we do it is our own idea and is our personal feature. We put everything in the place that is most convenient (s. 4).*

### **Network/Conduit**

*MML is like a spider web. When you learn a new word, you are like a spider which is constructing a cobweb around them. The spider is starting in the center around which the network of associations is built. New words as insects can be trapped in the spider web. They may remain there but it is also possible for them to escape. It resembles our memory. [...] in the case of a multilingual person the spider web is thicker and the spaces from one point to another are shorter. There are more connections because the other languages need space in our mental lexicon as well as our native language. A multilingual person is able to acquire new words more easily because his/her brain is more flexible. The connections are shorter. It means that building a new thread/connection does not require as much effort from the spider. It also means that new insects/words can be trapped more easily because omitting thick cobweb is almost impossible for them (s. 31).*

### **Access**

*MML is like a performance of a DJ during a party. A good disc jockey has to have essential information about a particular song. He has to learn the tempo, the content and the genre of the track in order to use it in a perfect moment of a party [...]. DJ uses turntables to mix songs. Mixing improves the quality of the show, because there are no pauses between the songs. Speakers who are multilingual are like DJs and each language that they use is like one additional turntable. Moreover, DJs use the so-called "cross-fader" to control which turntable is used and which is paused. Similarly, MML is used to select words from the appropriate language according to the situation the speaker is exposed to (s. 21).*

### **Natural embodiment**

*MML is like a basket full of fruit [...] there are different kinds of them, starting with exotic, wild fruits like avocado or a cantaloupe (words seldom used), ending with basic, typical fruit like an apple or a pear (words often used). [...] if we do not use some words, like fruit they can be forgotten (go to the bin like rotten fruit) (s. 26).*

(for more examples see appendix 2)

Even general analysis of the data collected demonstrated that the subjects focused in their understanding of MML on the container metaphor (a list, an inventory). There was not much focus on cross-linguistic consultations (language transfer), though connections within a language were occasionally observed. No multilingual dimension surfaced in the

data, no similarities or differences in terms of individual languages and how they could affect the MML structure were pointed out. In other words, the subjects consciously perceive neither the facilitative nor inhibitive power of a multilingual mental lexicon.

The immediate implications for the syllabus on MML relate to the need for developing students' language awareness in the context of multilinguality and developing reflectivity on their learning experiences of multiple languages in general. In more in-depth terms, the syllabus will need to embrace issues related to lexical storage, width and depth, separation/integration, and transfer vs. non-transfer. This can be done by using individually-created similes, but it also has to go beyond this, as the similes focused more conspicuously on storage issues than anything else. The interactive, that is, language consultations issues in particular, need to be emphasised.

### 3. Conclusions and implications

Focused-narrative texts based on metaphoric conceptualisations and similes allow for insights into various aspects of understanding the phenomena relating to multilingualism and its complexity and/or highly idiosyncratic character, as was shown in the examples (study 1 and study 2). Metaphoric conceptualisations point to the individual character of multilinguality and the uniqueness of its perceptions and their bearing on individual multilinguality (a wide thematic spread of data), and possibly have an impact on the way multiple language learning occurs.

The use of metaphors (similes) presented here by means of narrative texts in studying content courses generates "active involvement in learning and personal ownerships of learning," and it helps "to explore the self, personal constructs of meaning and understand one's view of the world" as well as "to enhance creativity and make better use of intuitive understanding" (Moon 2004: 189–193).

Another pedagogic aspect of this approach consists in introducing students' feedback to the task. In their assessment of the task in this study, the students themselves stated that:

*Despite the fact that the concept of MML is very complex and sometimes problematic, it is possible to compare it to things from our surroundings. The comparisons [...] may help us to understand this elaborate concept. (s. 21)*

It offers not only a better understanding but also the value of challenge and thus a motivational source that appeals to the subjects as a novel way for them to approach language learning and develop (multilingual) language awareness:

*what needs to be highlighted is the significance of MML in a proper acquisition and learning a FL. To my mind possessing an ability of looking at the language in a critical and analytic way may not only be helpful in learning some new lexical items, but also it may be an unusual experience in everyday struggle with this language (s. 15)*

Since metaphoric conceptualisations of various academic constructs are a challenging approach to developing knowledge, it seems to be most relevant and feasible in a university context.

### Reflective questions

Q1: Discuss different aspects of multilingualism that the similes below reflect.

**Multilingualism is like...**

- a. *a 360-degree vision all the time.*
- b. *a peanut butter jelly sandwich.*
- c. *a rainbow where colours are languages and cultures. A house in which every window opens to new reality.* (Gabryś-Barker 2016a)

Q2: Think about what different aspects of a multilingual person's profile (characteristics) the similes quoted below make use of.

**Being a multilingual is like...**

- a. *having a Swiss army knife.*
- b. *being a chameleon.*
- c. *feeling you are a part of several countries, never being alone.*
- d. *being a sponge that can be shaped (adjust to circumstances and blend in everywhere and whenever wanted).*
- e. *having a good personality disorder, when you have one personality and change it with the language you use* (Gabryś-Barker 2016a).

### Practical tasks

T1: The method presented here in relation to lectures on multilingualism can be equally well used in any content course. For example,

in a course of methodology of teaching FLs, the following sentence openings can serve as stimuli in creating metaphors (similes):

*Teaching a foreign language is like...*

*Learning a foreign language is like...*

Use students' conceptualisations in each case of a metaphor (simile) to discuss the construct/phenomenon/issue in relation to different perspectives each of these metaphors may offer for understanding teaching and learning a foreign language, their different approaches and different aspects.

T2: Choose one of the conceptualisations of the multilingual mental lexicon and write a 50-word comment (explanation):

*The multilingual mental lexicon is like...*

*the field of cultivated flowers.*

*an attic full of storage boxes.*

*a mind map.*

*files in a computer.*

T3: Choose one specific area of research/academic interest relevant for you (as a teacher or as a student) and think of expressing your understanding of its main concept(s) in the form of a metaphor (simile) (see task 3 above).

## Appendix 1

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## Appendix 2. Metaphors of multilingual mental lexicon (study 2)

### CONTAINER (storage)

*A mental lexicon can be compared to a private and personalized warehouse of every person. Everyone has their own organizing pattern as well as the way of finding and storing [...]. Our peers or parents organize their objects but the way we do it is our own idea and is our personal feature. We put everything in the place that is most convenient (s. 4).*



*(MML) is like a jewel casket. It is usually used to hold necklaces, rings or other precious things, and thus the vocabulary, grammar and target cultures of the languages we know and store in our mind can be compared to our belongings. [...] What is more, looking back at an item may bring back memories and direct us to associations, helping in stressful situations [...]. Connections between two and more languages tend to break like necklaces and then hinder communication and comprehension of the languages (s. 6).*

*MML is like a chest of drawers. One may put different items into the drawers thanks to an input and practice, store them and retrieve when necessary [...]. When it comes to grammar, there are drawers for every grammatical structure [...]. Pulling a drawer's handle, one can open it and look for a necessary word which symbolises a lexical search. [...] drawers are strong, integrated and interconnected because they are in one piece of furniture so links between them can be established [...] one drawer contains only items in one language, drawers are separated and symbolise a brain in which different areas are activated when the informant performs in L1 and when he/she functions in L2/Ln (s. 11).*

*I imagine that MML is like a huge box with many small boxes inside which information is stored. When you use one language, you open one of those boxes and take words and structures which are needed but when you switch to the other language you simply close the box and open another one (s. 14).*

*MML is like a basket full of fruit [...] there are different kinds of them, starting with exotic, wild fruits like avocado or a cantaloupe (words seldom used), ending with basic, typical fruit like an apple or a pear (words often used). [...] if we do not use some words, like fruit they can be forgotten (go to the bin like rotten fruit) (s. 26).*

*ML of every multilingual person looks differently, so does the attic and generally the house of each family living in one. The collection of words in a ML as well as the contents of an attic room in every house can say much about their owners themselves and their interest (s. 23).*

### **NETWORK/CONDUIT (processing)**

*When we are learning a new word, we are like a tailor who is sewing a crazy quilt. The tailor starts from a small piece of cloth around which other pieces of cloth of different shapes and colours are sewn together. [...] even the most colourful patchwork will sometimes fade. It is forgetting (in the case of MML). Even though the colours are dingy, the stitches are still strong. The system (MML) is able to find another solution to replace some forgotten word. The most dangerous for our patchwork is a tear which even the best tailor will not be able to sew. This can be compared to the person with brain damages or illness that affects memory. In most cases the torn patch work (MML) stays destroyed, even when reconstructed it cannot function as well as previously (s.2).*

*MML is like a library because it takes care of a work of our mind and proper communication as well as protects against communicative confusion or misunder-*

*standings [...] Libraries arrange books in order. Here could be numerous methods of arranging books: they maybe arranged alphabetically, topic-wise, author-wise, year-wise and so on. I get the impression that MML behaves similarly (s. 12).*

*(MML) functions as conduit between form and meaning in the production, processing and interpretation of languages. Additionally, the mental lexicon offers such a vast variety of aspects that it cannot be regarded as a lexicon but a storage in multiple ways: as a library, a computer memory, an attic or even a treasure chest (s. 12).*

*I would compare it (MML) to a tree. Both in the case of our mental dictionaries and trees, there are a lot of interlinks between different elements of their constructions. Trees have branches that supply the farthest components of their "bodies" with things which are indispensable for life. Without these special conduits, trees would not be bale to produce leavers, flowers or fruit. The same situation is with mental lexicon [...] Lexical connectivity is linked to association chains we well, we can find the "chains" of leaves on each tree (s. 19).*

*MML is like a spider web. When you learn a new word, you are like a spider which is constructing a cobweb around them. The spider is starting in the center around which the network of associations is built. New words as insects can be trapped in the spider web. They may remain there but it is also possible for them to escape. It resembles our memory. [...] in the case of a multilingual person the spider web is thicker and the spaces from one point to another are shorter. There are more connections because the other languages need space in our mental lexicon as well as our native language. A multilingual person is able to acquire new words more easily because his/her brain is more flexible. The connections are shorter. It means that building a new thread/connection does not require so much effort from the spider. It also means that new insects/words can be trapped more easily because omitting thick cobweb is almost impossible for them (s 31).*

*I decided to equate MML with the piano. This instrument has got a lot of strings and keys. [...] among piano keys there are a few which are similar to others and the only difference is in tone, some of them are higher, some are lower. Nevertheless, they produce very similar melodies. It can be compared to the synonymous words in our minds. Sometimes we have more than one picture matched to a particular meaning (s. 37).*

### **ACCESS (retrieval)**

*My own perception of the mental lexicon combines the element of magic with the diversity of concepts and meanings ascribed to the term. Putting words together in pairs or making a combination of various suffixes, prefixes or affixes in English, reminds me of the times when as a child, I used to put together different lego blocks. This opportunity of turning back in time to my childhood evokes feelings of joy, happiness and freedom in what I am doing. In a way, it is magical and*

*mysterious, because quite frequently I discover some new word combinations, as for instance: the word carpet being a composite of car and pet (..) what needs to be highlighted is the significance of MML in a proper acquisition and learning a FL. To my mind possessing an ability of looking at the language in a critical and analytic way may not only be helpful in learning some new lexical items, but also it may be an unusual experience in everyday struggle with this language (s. 15).*

*MML is like a performance of a DJ during a party. A good disc jockey has to have essential information about a particular song. He has to learn the tempo, the content and the genre of the track in order to use it in a perfect moment of a party [...]. DJ uses turntables to mix songs. Mixing improves the quality of the show, because there are no pauses between the songs. Speakers who are multilingual are like DJs and each language that they use is like one additional turntable. Moreover, DJs use the so-called “cross-fader” to control which turntable is used and which is paused. Similarly, MML is used to select words from the appropriate language according to the situation the speaker is exposed to (s. 21).*

*If anybody thinks that creating music is simple that is a big mistake because it is a complex and long term process like the elaborate organization of mental lexicon. [...] MML presents a collection of words which are pronounced and written down. Music is a representation of many sounds and notes. Emotional reactions make the process of learning faster (compared to reactions of the audience during the performance) (s. 27).*

### **NATURAL EMBODIMENT**

*MML is not just an empty collection of words, just as the field cultivated by farmers is not just a random bunch of crops, vegetables and flowers [...]. Some of the items (words) seem to be unimportant, some meaningful but they make a consistent whole. As in the field, some plants are only grown in order to prevent others not to be damaged by vermin or pests. Moreover, it sometimes happens that a vegetable or crop becomes rotten or parched. It might be the case of neglect or independent of the farmer. In our mental lexicon, there are also words that we have learnt but stopped using or learnt and forgot. These are rotten crops of our lexical items [...] Learning a new language is hard work as the work of a farmer. One’s MML is like a field with certain crops grown on it, and which has to be constantly looked after and cultivated so as not to become damaged or parched (s. 9).*

*The MML is like an unidentified liquid solution of numerous lexical data, which is very flexible and constantly changing, that behaves like a liquid crystal or quicksilver whose shape and form depend not always but mostly, on the owner’s will (s. 16).*

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