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INTRODUCTION

English teaching methodology has flourished in recent years, thanks to the growing interest in foreign languages. Teachers and researchers are looking for effective methods and techniques, helpful not only in fast and long-lasting knowledge acquisition, but also fluent communication in a foreign language. Even though modern English teaching is characterised by a vast number of approaches, methods and techniques, improvements to the existing procedures are welcome. The developing methodology can be equated with improved teaching standards, since having a wide choice enables teachers to adapt the available materials to their students' needs, school profile or their own preferences.

However, the omnipresent English language creates new challenges for the teachers. More and more people are able to establish contacts with foreigners, visit other countries or gain access to authentic materials written in English. More and more students enrol onto language courses, and their aim is not only to acquire the basics of the language, but also to achieve levels certifiable by international exams. This inextricably involves the need to internalise thousands of new words. The teacher's task is to make this process easier by suggesting various strategies and techniques which will enable the learner to acquire vocabulary in a relatively fast and effortless manner. It is also vital that the memorised vocabulary is available for retrieval at any moment to be used in an appropriate context.

The mundane procedure of overlearning new words by repeating them with their native equivalents has become less appealing to the modern learner. Language instructors are expected to present techniques which are not only effective, but also likely to encourage further advances in language knowledge. This is where mnemonic devices enter the stage.

The major aim of the present work is to contribute to a better understanding of mnemotechnics and their potential effectiveness in language acquisition. Although known for centuries, mnemonics have been underestimated in different approaches. Thus, the first four chapters attempt to change the *status quo* of mnemonic devices in second language teaching by describing and classifying them in detail, as well as reviewing the state of the art in the research on mnemonic language instruction. The remaining chapter focuses on the practical application of mnemonics to the study of English phrasal verbs.

Chapter 1 reviews various definitions of the notion of mnemonic device, as well as its characteristic features. It also describes different classifications, suggested by both

psychologists and language researchers. Moreover, it examines memory models and processes which account for the effectiveness of mnemonics.

Chapter 2 presents and exemplifies several kinds of mnemonic devices utilised in second language instruction. It is a collection of methods and techniques, gathered from a host of sources, which deserve to be termed mnemonic devices in accordance with the criteria mentioned in *Chapter 1*.

Chapter 3 deals with the variables which make one particular mnemonic, the keyword technique, most effective. The description of data following several studies allows for defining the characteristics of an effective keyword and image. *Section 3.3* presents *Linkword* courses, which draw upon the above-mentioned research. Some suggestions on how to combine learning vocabulary in and out of context successfully in the classroom are provided in *Section 3.4*.

Chapter 4 focuses on the study of English phrasal verbs. First, it explains the need for inventing a new technique for introducing phrasal verbs, and describes the proposed *literal-keyword technique*. *Section 4.2* presents and discusses a three-phase study into the effectiveness of this technique. The study, conducted with advanced students of English during three consecutive years, aimed at comparing the proposed technique with more traditional approaches to teaching phrasal verbs, as well as identifying the variables and modes of presentation affecting the efficiency of the technique.

Finally, the major points covered in the present work are summarised in the *Conclusion*. Some suggestions concerning the future of the *literal-keyword technique* are also provided there.

CHAPTER 1

MNEMONIC DEVICES: THEORETICAL CONSIDERATIONS

In order to assess the significance of mnemonic devices in second language instruction, it is necessary to clarify what they are. Thus, *Chapter 1* attempts to provide a comprehensive review of definitions, characteristic features and criteria, which allow for placing various techniques and methods under the term "mnemonics" (also referred to as "mnemonic devices" or "mnemotechnics"). It also discusses different classifications, offered both by psychologists and language researchers, as well as the difficulties connected with assigning mnemonics to particular strategy types. The last section of *Chapter 1* examines memory models and theories which are believed to account for mnemonic effects.

1.1 Origins and definitions of mnemonics

In the words of the *Longman Dictionary of English Language and Culture* (1992:853) "mnemonic" means "used for helping one to remember". The word can be used as an adjective or noun. Pressley, Levin and Delaney (1982:61) define mnemonic devices as "systematic procedures for transforming difficult to remember stimuli into more easily remembered stimuli". As the memory system is most efficient when dealing with meaningful, integrated material where clear retrieval clues are available, mnemonic devices supply meaning, integration and cues where none naturally exist (Morris 1979:39). Higbee (1978:147) describes them as unusual, "artificial" memory aids, but Bellezza (1981:247) explains that they operate by the use of cognitive structures which have no relation to the material being learned. In another article, Bellezza states that mnemonics are effective techniques for memorising, and adds that they are relatively simple, but seem complicated, because the learner is aware of their operation (1987:34).

Probably the oldest mnemonic is the method of loci. According to Hunter (1972:294), its invention can be attributed to Simonides around the year 500 B. C. The system occurred to its author under dramatic circumstances. Simonides had been invited to a banquet to provide a recitation as a part of the entertainment. Having done that, he was called away to speak with two men waiting outside. Scarcely had he left the room when the walls collapsed, killing all the guests inside. The bodies were so mutilated that it was impossible for the relatives to tell

who was who. However, as Simonides had observed the positions occupied by the guests during his performance, he was able to identify the bodies by searching in the appropriate places. Simonides concluded that if he was able to remember people by assigning them places in the room, the memorisation of objects, names and ideas could also be facilitated by associating them with fixed positions in space. The name "loci method" comes from Latin and means "the method of places". This mnemonic is also referred to as the "locality" or "topical" system, the second name coming from the Greek word for "place".

Thompson (1987:45) describes the loci method as follows: one has to imagine a familiar location, such as a room, a house or a street. Then the first item to be remembered is mentally placed in the first location (e.g. on the table), the second item in the second location (e.g. next to the chair), and so forth. In order to recall the items in the correct order, one takes an imaginary walk along the landmarks, mentally examining each one and retrieving the items formerly placed there.

For centuries, this method was used to remember large amounts of information. One can imagine the importance of such a powerful memory aid in the absence of the printed word. It can be assumed that with the help of the loci method, ancient myths, stories and poems were retained in people's memories throughout hundreds of years. But it was the sole mnemonic known to humans until the 17th century.

A major advance in the applicability of mnemonics came with the introduction of the method of translating digits into letters that could then be formed into imaginable words. The earliest system is attributed to Winckelman in 1648 (Higbee 1988:173), who chose vowels and consonants to represent digits in an arbitrary way. In 1813, Feinagle refined the phonetic method so that only consonants were used, and their selection was based on their similarity to the digits they represented. By the end of the 19th century the digit-consonant system had evolved into its present form (described in *Section 2.13*), and allowed for the easier memorisation of numbers and dates.

At more or less the same time as Winckelman devised his number-letter mnemonic, a Cambridge man, Henry Herdson, worked on a logical development of the locality system. He dispensed with its spatial aspect, and represented each numeral by one of a variety of objects (Hunter 1972:295). The objects were not chosen in a haphazard fashion: they had to resemble, to some extent, the number to which they were assigned. For instance, a candle was believed to look like the number 1, a swan was chosen to represent number 2, a trident replaced number 3 etc. These objects functioned as "pegs" or "hooks" on which the items to be remembered were "hung". If the first item was a tree, one could imagine a candle burning on a

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branch of a tree, if the second item was a table, the mental picture could depict a swan sitting on a table. As in the loci method, the association between the peg and the object to be remembered was emphasised. When a person wanted to recollect the item attached to number one, they would imagine a candle. The picture of a tree with a candle would subsequently pop up, revealing the tree to be the memorised item.

It is beyond the scope of this work to describe the history of mnemonics in detail. A fascinating account of the ways in which people have tried to aid their memories can be found in Yates (1966). It will be useful, however, to systematise the currently known mnemonic devices.

Several researchers have tried to classify contemporary memory aids, but they have been unable to create one consistent scheme. What follows is an attempt at clarifying the criteria under which all existing mnemonics could fall.

The most obvious distinction was made by Harris (1980), who separated memory aids into external and internal ones. **External** memory aids are tangible, physical objects. Herrmann and Petro (1990) divided them into memory prosthetics, which facilitate memory performance (e.g. an alarm clock), memory correctors (e.g. a scanning device for lost keys), and memory robots (e.g. an automatic thermostat). Among these, they differentiated between 74 commercial (i.e. available for purchase) memory aids, but only 26 non-commercial (i.e. user-made) ones. **Internal** memory aids, on the other hand, rely on mental activity. Searleman and Herrmann (1994) further developed the idea of internal memory aids and divided them into naïve and technical. **Naïve** mnemonics are strategies or methods that ordinary people often use spontaneously, and they do not need to have any formal instruction to be able to benefit from them. Strategies such as repetition, rhyming, and forming acronyms or acrostics fall under this category. **Technical** mnemonics, however, cannot usually be used until a person has learned an encoding scheme. The method of loci and pegs, described before, as well as the hookword and keyword techniques, described in *Sections 2.2.13* and *2.2.14* are good examples of mnemonics requiring at least some formal instruction.

Baddeley (1997) proposed another interesting distinction. **Elaboration coding** mnemonics, as the name suggests, require their user to elaborate the material to be retained in order to make it more memorable. In practice, the idea boils down to linking the new material to something that is already known. Often, adding some information will be necessary to make the material meaningful to the learner. For example, in order to remember the strings of the guitar (EADGBE) you can remember the sentence "Eat All Dead Geese Before Easter". This acrostic contains additional consonants and vowels, but it also has meaning, which

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makes the senseless chain of letters easy to retain. This simple example demonstrates that it is not the amount of information that determines efficient memorisation, but its meaningfulness.

Reduction coding mnemonics, by contrast, contain less information than the material to be remembered. The acronym ROY G. BIV is commonly used to remember the colours of the rainbow (red, orange, yellow, green, blue, indigo, and violet). Acronyms work on the assumption that their users already know what words the letters stand for, and the thing to remember is the specific order in which those words are to be retained.

Higbee (1988) distinguishes between mnemonic **techniques**, which are specific for one purpose, and **systems**, which are general-purpose methods that can be applied to different kinds of memory tasks. The acronym HOMES is a technique, because it helps to remember the names of the Great Lakes of North America (Huron, Ontario, Michigan, Erie, and Superior), but not any other names. The loci method is a system, because it can be used over and over again to learn different sets of material.

Bellezza (1981) differentiates between **organizational** and **encoding** mnemonics. The first type involves organizing operations, which associate or relate units of information that at first appear unrelated. An example is a chain-type mnemonic. To remember a list of unrelated items, it is necessary to form a visual image connecting the first and the second word on the list, then associate the second word with the third one, then imagine the third item interacting with the fourth word, and so on. The second type requires an encoding operation, which transforms a unit of information into some other form, which will be easier to store. Changing a string of letters into an acrostic is one example of an encoding mnemonic. Transforming the abstract word "origin" into "egg" is an example of a **semantic encoding** mnemonic, while changing the same word, "origin", into "orange", represents **phonetic encoding** (Bellezza 1981:258).

Bellezza (1981) also separates **verbal** from **imagery** mnemonics. Although this distinction may seem quite obvious at first glance, it is the present author's opinion that it is not always applicable. Admittedly, some mnemonics are purely verbal (e.g. the rhyme "the Spanish Armada met its fate in fifteen hundred and eighty-eight", teaching the date of the defeat of the Spanish Armada by the British). However, there are verbal mnemonics which can be easily transformed into imagery ones. If a person learning the American English word *dorm* by the keyword technique is instructed: "Read and remember the sentence '*Dorm* brzmi podobnie jak polskie słowo *dom* i oznacza *akademik. Akademik* jest *domem* studentów'", he or she can eventually form the same mental image as the person told to imagine that a dorm is a students' house. As McDaniel and Pressley (1984:607-608) hypothesise, high-ability learners,

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in particular, are likely to engage in elaborative, keyword-like processing, even if they are not told to do so. Thus, McLaughlin Cook's conclusion (1989:16) that keyword mnemonics are equally effective whether used in a sentence or an imagery version seems premature, as the subjects' spontaneous use of imagery in the sentence condition cannot be ruled out.

Last, but not least, the distinction has to be made between **encoding** and **retrieval** mnemonic strategies. The former involve conscious attempts at fitting new information into an organizational scheme, so that it can be quickly and easily retrieved in the future. Virtually all the techniques mentioned earlier can be classified as encoding ones. Retrieval strategies, on the other hand, are used when a person has a problem trying to reconstruct a fact from the past. As Morris (1978:161) declares, problems arise at this stage, because at the time that encoding took place, either there seemed to be no reason for special encoding strategies, or there was no time, or the person was confident that their memory would not let them down. A classic example of a retrieval strategy is the cognitive interview. Described by Fisher and Geiselman (1992), it is a technique intended to improve eyewitness recall of the crime scene. Recreating the event's context by asking specific questions or showing a photograph, encouraging the eyewitness to concentrate and search through memory using different sensory modalities are but a few from a long list of ways to enhance memory.

Retrieval techniques, however, as well as external memory aids, are not the main focus of this work, and have only been mentioned in order to provide a wider context for mnemonic techniques, and the place they occupy in the study of languages. The usefulness of mnemonic devices among different types of memory operations is presented in *Figure 1.1*, with the mnemotechnics in bold print.

Mnemonic devices share several features. An exhaustive list of characteristics applicable to mental cues connected with mnemonics was offered by Bellezza (1981, 1987). The most distinctive are four properties: constructability, associability, discriminability and invertibility.

The criterion of *constructability* means that in order to be effective, mental cues must be easily generated during learning, and effortlessly retrievable during recall. What is more, the cues effective during recall must be the same as those encoded by the subject during learning. Ledzińska (1986) emphasises this notion of encoding specificity by quoting the results of research into the effects of using similar memory strategies during learning and retrieval. It seems that using analogous strategies during both stages of remembering result in higher levels of reproduction than applying different strategies. An interesting finding is that during recall people tend to subconsciously realise this phenomenon by sticking to the strategies used

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at encoding, which can even mean ignoring the experimenter's instructions to use non-identical strategies.

Another distinctive feature of mental cues for mnemonic devices is that they must allow for the formation of vivid complex images containing both the cue and the new information (the property of *associability*). Being already familiar with the mental cues (e.g. places in one's own house while using the method of loci) may enhance the effectiveness of the association. Other factors contributing to the associability of mental cues with special reference to the keyword technique will be discussed in *Chapter 3*.

The property of *discriminability* means that separate mental cues should be used for various items to be learned in order not to confuse the encoded information. However, Hauptmann (1999) stated that using the same keywords for different vocabulary items did not result in worse performance. Thus, the Polish word "willa" could be used as the keyword both for the English "village" and "willow". Since the learner would have to visualise two different images, one of the detached house ("willa") in interaction with the "village", and the other associating the house with a willow tree, there is no reason to assume that the acquired items could become confused.

The fourth property of mental cues utilised by mnemonic devices is *invertibility*. This means that the code created for an item must be a successful cue for the item to be recalled. If the word "honesty" is encoded phonetically as "honey", during retrieval the learner recalls either the image of honey, or the word itself. Successful transformation of "honey" into "honesty" (and not, for instance, "bee") proves the invertible quality of the mental cue. Paivio (1971) argues that associations involving imagery are invertible, while the ones making use of verbal representations are not.

In his description of mnemonic devices, Bellezza (1987) states that due to the limited capacity of conscious memory, only one mnemonic device can be active at any given time. The use of mnemonics is a voluntary process, activated by the learner both at the encoding and retrieval stage. In addition, they are characterised by a broad bandwidth: the same devices can be used several times to store various pieces of information. However, the limitation stemming from this particular quality is that no inferences can be made about missing information. If the information previously associated to the mnemonic cue is unavailable during recall, no guess can be made as to its nature.
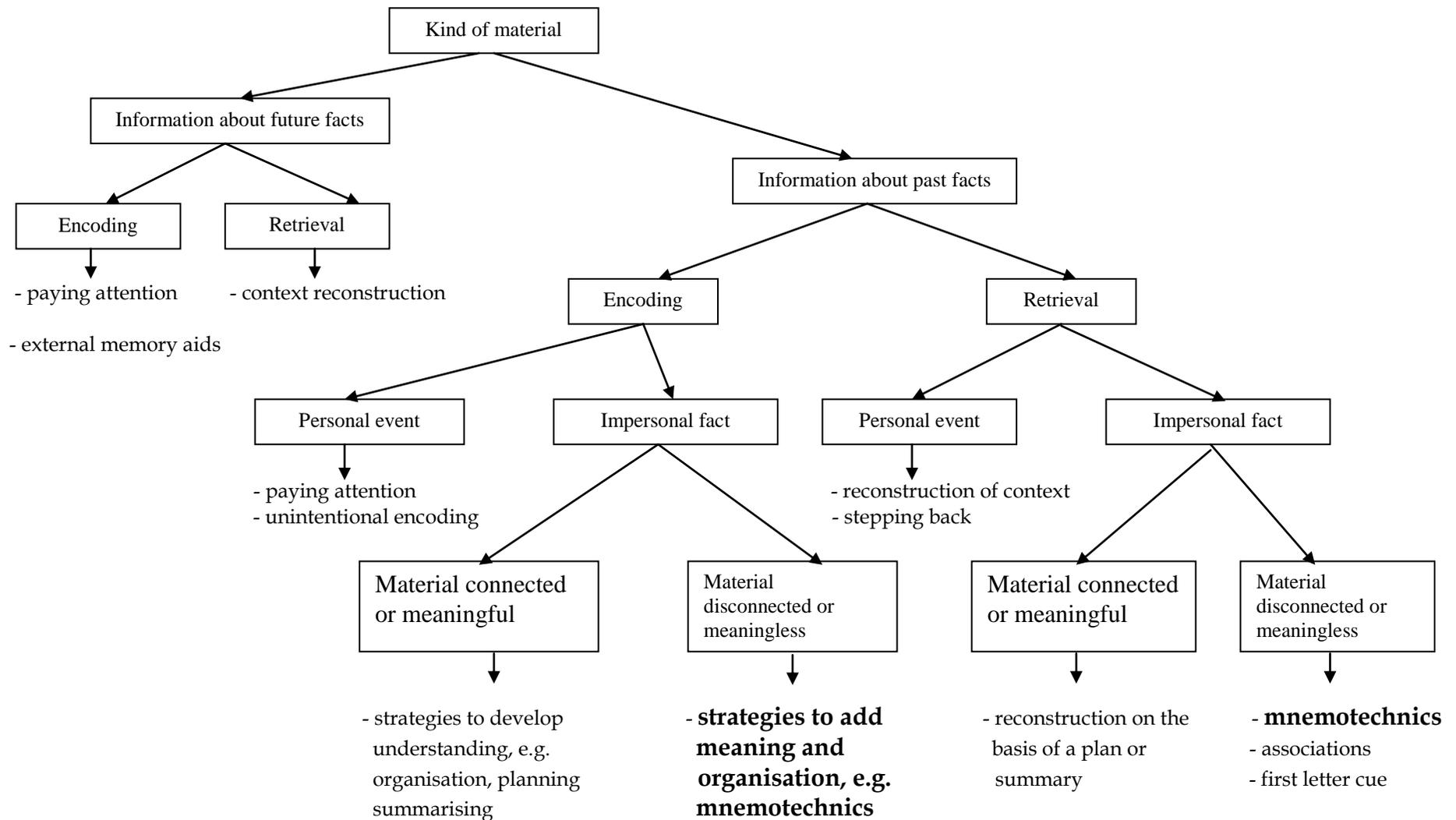
Figure 1.1: Strategies for retrieving various kinds of material (adapted from Czerniawska and Ledzińska 1994:59).

Although several criteria and characteristics concerning mnemonic devices have been listed, two of their features need to be described as crucial and shared by all effective memory strategies. First, the learner's engagement in the process of acquiring new information plays an undeniably important role. Second, the relationship between the encoding and retrieval stages determines the effectiveness of applied mental cues (Czerniawska 1985).

Mnemotechnics, in spite of being appreciated by many, have not escaped criticism. Higbee (1978) listed a few most common accusations, and called them "pseudo-limitations".

The first one was that mnemonics are not practical, because the tasks demonstrating their advantages in laboratory conditions have little in common with real life. It will be demonstrated in the following chapters that mnemonic devices not only help to remember such down-to-earth information as telephone numbers, or to associate faces with names, but also to acquire languages and various kinds of information on content subjects.

The second charge made against mnemonics was that they do not foster understanding. Higbee (1978) argued that they are not intended for such tasks as reasoning or problem-solving, but for straightforward remembering, which makes the criticism inadequate. His answer to calling mnemonic devices "crutches" was that being dependent on them does not deserve punishment, as there is nothing wrong in relying on glasses if a person cannot see properly. He also pointed out that the discerning "crutch" criticism is actually based on two conflicting accusations:

> *On one hand, the critic says that you cannot remember the material without the crutch (meaning that you are lost if you forget the crutch). On the other hand, the critic says that you become too dependent on the crutch for remembering the material (meaning that you cannot forget the crutch)* (Higbee 1978:151).

The last "pseudo-limitation" mentioned by Higbee (1978) was that mnemonics are "tricks", and as such cannot be treated seriously by either researchers or practitioners. In fact, mnemonics employ basic psychological principles of learning, such as association, organisation, meaningfulness, attention, retrieval clues, deep encoding and visual imagery. Some mnemonic devices may use all of them, while others may only be based on the selected ones. Nevertheless, the phenomena which make mnemonics effective can always be explained by the widely accepted memory processes (cf. *Section 1.3*).

Meara (1980) was one of the critics who did not hesitate to undermine the validity of the vast research conducted in the field of keyword studies. He claimed that experiments ignored the complex patterns of meaning relationships characterising a fully developed

lexicon and did not study real language learners. He also doubted whether the keyword mnemonic was able to aid production. Since that time, however, several studies have been conducted, proving keywords to be helpful in backward, as well as forward recall (cf. *Chapter 3*). The participation of 'real' subjects in 'real' classrooms has not diminished the mnemonic's effectiveness. As for the criticism concerning the lack of consideration of complex patterns of meaning, it can be argued that this particular mnemonic has been devised to help learners remember millions of words which have direct equivalents, either in the form of native translations, or tangible (as well as easily imaginable) objects. Thus, studying the relationships between them can be left to other language learning strategies. In this way, Meara's (1980) reservations seem to be no longer adequate.

The final criticism, mentioned by Higbee (1990), was that of the effort which needs to be put into learning the mnemonic. Higbee (1990) admitted that depending on the complexity of the applied mnemonic device, the cost-benefit ratio of learning it should be considered. It is obvious that learning a hook mnemonic and using it only once may not be worthwhile. However, if used frequently, "the possibility of reduced effort in using the mnemonic might help counterbalance the additional effort in learning the mnemonic" (Higbee 1990:877).

1.2 Classifying mnemonics in language learning: methods, techniques or strategies?

The previous section was an attempt at systematising mnemonic devices used for different purposes and providing a framework for their categorisation. It is now vital to focus on their classification for foreign language teaching methodology. As will be demonstrated, mnemonics can be perceived as methods, techniques or strategies by different researchers, and this perception will largely depend on the adopted terminology. The subsequent review of literature focuses on the place of mnemonic devices among other procedures used in modern methodology.

According to Anthony (1963, in Richards and Rodgers 1991:15), a *method* is "an overall plan for the orderly presentation of language material, no part of which contradicts, and all of which is based upon, the selected approach". A *technique*, on the other hand, is "what actually takes place in the classroom: a particular trick, stratagem, or contrivance used to accomplish an immediate objective".

This distinction is criticised by Richards and Rodgers (1991:16), who say that Anthony's proposal does not account sufficiently for the nature of the method itself, as it fails

to mention the roles of teachers, learners, and instructional materials. Neither does it explain how an approach may be realised in a method, or how method and technique are related.

Larsen-Freeman (1986:xi) also criticises Anthony's concept of method as being too indeterminate. She postulates that a *method* consists of principles and techniques. The principles consist of five aspects: the teacher, the learner, the teaching process, the learning process and the target language/culture, which form the theoretical framework of the method. She defines *techniques* as the behavioural manifestation of the principles, which takes the form of classroom activities and procedures derived from an application of the principles. An important remark is that a given technique does not have to correspond to only one method. If two methods share certain principles, then the techniques derived from these principles may well be appropriate for both methods (Larsen-Freeman 1986:xii). This idea is shared and expanded by Hubbard et al. (1990:31), who say that if teachers find not only new and better techniques, but also methods fitting their approach, they can adopt them.

Richards and Rodgers (1991:16) see the need to treat approach and method at the level of design, where syllabus and contents are determined, and the roles of learners, teachers and materials specified. In an attempt at extending Anthony's (1963) model, *technique* is replaced by a more comprehensive term *procedure*, which comprises classroom techniques, practices and behaviours observed when the method is used. This may involve resources, interactional patterns, tactics and strategies used by teachers and learners during the practical realisation of the method (ibid.:28).

A very simple and useful distinction was offered by Hubbard et al. (1990:31). Without going too deeply into what each of the above mentioned terms could denote, they define a *technique* as a procedure used in the classroom, and a *method* as a set of procedures or a collection of techniques used in a systematic way. Their terminology is probably closest to reality, because a technique, the narrowest term meaning one single procedure, is usually manifested by a single activity in the classroom.

It is extremely difficult to decide whether the keyword mnemonic is a method or a technique. Originally, it was referred to as the Keyword Method, but it needs to be mentioned here that its first systematic researchers (Raugh and Atkinson) were psychologists, not language teachers. They might not have known that a method is a <u>set</u> of techniques. On the other hand, a method is based on certain theoretical assumptions about human cognition. In this light, the keyword mnemonic could be perceived as a method, since its effectiveness for foreign language learning can be explained by the deep processing and *dual coding theory* (cf. *Section 1.3*).

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Besides, a look at any Gruneberg's (e.g. 1987) *Linkword* course reveals that the keyword mnemonic (together with systematic testing) is the only technique used throughout the books. In this case, therefore, the terms *technique* and *method* become equivalent. To make things more complicated, Gruneberg refers to his invention as Linkword Language System, and on the cover of *French by Association* (1994) you can read that it is "an effective technique" and "the innovative method".

Another point is that several researchers do not seem to be particularly concerned about naming the keyword mnemonic. Numerous writers refer to it as "strategy" (e.g. Ott et al. 1973), "procedure" (e.g. Raugh and Atkinson 1975), "method" (e.g. Pressley et al. 1980), "technique" (e.g. Paivio and Desrochers 1981), or "approach" (e.g. Stoller and Grabe 1993), without necessarily being consistent throughout their papers. In the present author's opinion, one of the reasons for this phenomenon is that most research on the topic has been published in psychological journals instead of journals on language acquisition and teaching. One of the most interesting contributions as far as classification is concerned was made by Ramirez (1986), who manipulated treatments within one method - Suggestopedia - and referred to the keyword technique as one of the method's components. Thus, one group received the "full Suggestopedia", including keywords, and the other was subjected to "Suggestopedia-minus-imagery" treatment, which meant the same procedures except for the keyword technique.

In addition to the dispute over classifying the use of keywords as a technique or a method, several examples of treating it as a *strategy* can be found. While techniques and methods are utilised by teachers, strategies are attributed to learners. As Grenfell and Harris (1999:87) put it, teachers may model some of the strategies, learners may model others. Learning strategies are often suggested or imposed by teachers and depend on their preferences. This is the reason why the keyword mnemonic can be viewed as a strategy: although presented by the teacher, it requires the learner to memorise the associations and later retrieve the meanings of words.

Several researchers have tried to define and systematise learning strategies. In Rubin's words, they are the techniques or devices which a learner may use to acquire knowledge (1975:43), or to develop his or her language system (1987:23). Tarone (1980:419) specifies Rubin's "knowledge" to be linguistic and sociolinguistic competence in the target language. Schmeck (1983:234) perceives learning strategies as patterns of information-processing activities utilised in preparation for an anticipated test of memory, while in the words of O'Malley et al. (1985a:23), their function is to facilitate the acquisition, storage, retrieval and use of information. Mayer's definition (1988:21) is more general: they are behaviours

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intended to manipulate a person's cognitive processes during learning. Oxford (1990:8) expands the above definitions by saying that learning strategies are specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations. Nisbet and Shucksmith (1986:25) compare learning strategies to the tactics used by football players: although planned in advance for achieving a goal, they must be monitored and redeployed if ineffective. Brown (1994:104) defines learning strategies as specific methods of approaching a problem or task, and equates them to contextualised "battle plans" which can vary depending on time and person.

The notion of a hierarchy in language learning strategy operations in the individual has been proposed by several psychologists. Weinstein and Mayer (1986), for example, listed eight categories of learning strategies: (1) basic and (2) complex rehearsal strategies, (3) basic and (4) complex elaboration strategies, (5) basic and (6) complex organizational strategies, (7) comprehension monitoring strategies and (8) affective (motivational) strategies. Since learning a foreign language is essentially a simple, paired-associate task, the keyword technique was placed among elaboration strategies for basic learning tasks.

Among language learning strategy classification systems, three have been often quoted and referred to. They were proposed by Rubin (1981, cited in Rubin 1987), O'Malley et al. (1985a), and Oxford (1990).

Figures 1.2, 1.3 and *1.4* present the place of mnemonic techniques (in italics and bold print) in the classification schemes according to each of the above-mentioned researchers respectively.

Categorising learning strategies is not a simple process, as there is constant overlapping between categories. Even the apparently obvious distinction between cognitive and metacognitive strategies is not clear-cut. In Brown's words (1994:115), metacognitive strategies involve planning, monitoring and evaluating learning, whereas cognitive strategies are more limited to specific learning tasks and involve more direct manipulation of the learning material. However, as Oxford (1990:16) points out, metacognitive *self-assessment* and *planning* often require reasoning, which is itself a cognitive strategy. A good example illustrating this kind of defining difficulty can be the strategy of *questioning for clarification*. Included in the cognitive strategies group by O'Malley et al. (1985a), it was specified as a socioaffective strategy by the same authors (1985b).

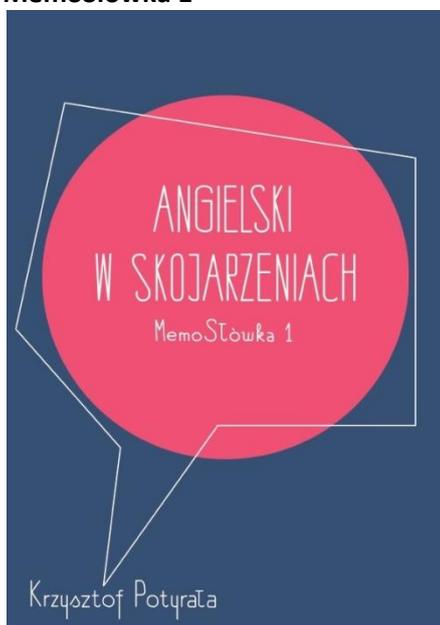Appendix 3b: **Sample study materials. Groups 2 and 3 (Paced and Unpaced Pictures conditions)**

16.

phrasal verb: die away
meaning: become fainter and then cease
keyword (s): **away – an arrow saying "this way"**
example sentence: When the teacher entered the classroom, the noise <u>died</u> <u>away</u>.
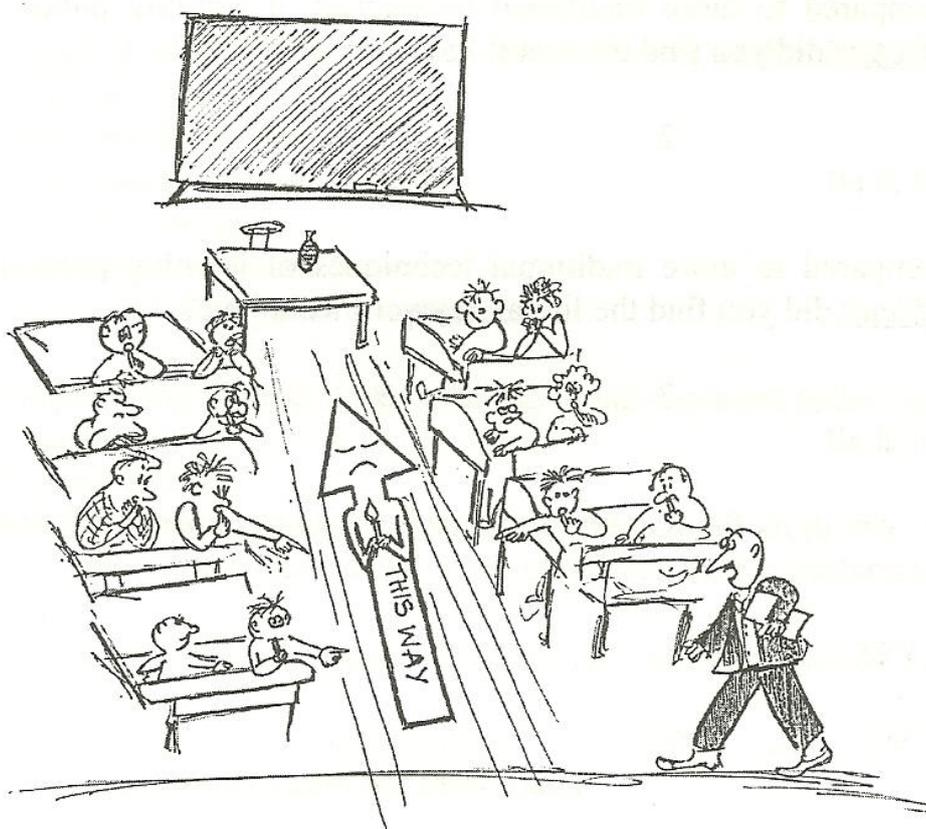
Students in a classroom are saying "hush, hush" as the teacher comes in. The noise they were making must <u>**stop**</u>, because the <u>**arrow saying "this way"**</u> has <u>**died**</u>.

Ponadto, polecamy Państwu następujące tytuły:

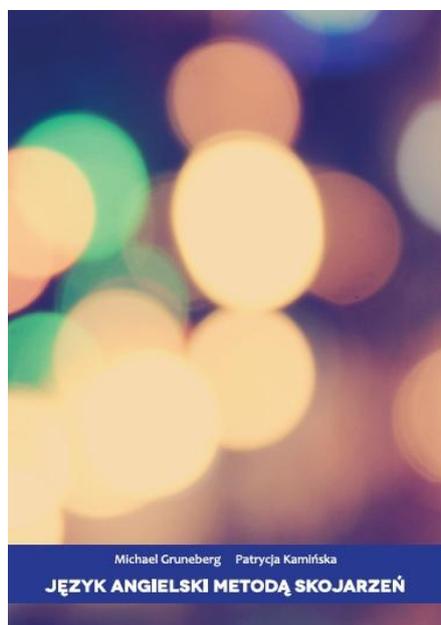| **Angielski w skojarzeniach – MemoSłówka 1**	Język angielski metodą skojarzeń	Język hiszpański metodą skojarzeń
Książka ☺ **Ebook PDF** ☺ **Niebawem ebook epub/mobi**	**Książka** ☺ **Niebawem ebook PDF/epub/mobi**	**Książka** ☺ **Niebawem ebook PDF/epub/mobi**

Więcej przykładów ilustracji ze skojarzeniami można znaleźć na naszym fanpage'u na FB:

https://www.facebook.com/pages/Good-Memorypl/492287247537800

Dodatkowe zadania do wybranych publikacji znajdują się również na naszym kanale GoodMemory.pl na YouTube:

https://www.youtube.com/channel/UCs__XxSyde64rDBAYxGl5lQ

Będziemy wdzięczni za polecanie naszych książek Państwa rodzinie, przyjaciołom i znajomym.

Życzymy sukcesów w nauce języków,

Patrycja Kamińska i Krzysztof Potyrała