1. Introduction

Research on lexical development has been very scarce in the field of language acquisition, and the studies that deal with lexical matters are relatively recent (Boyd-Zimmerman 1997). In research on second language acquisition (SLA) the focus has been on grammar, leaving aside the fact that vocabulary is vital in language acquisition and communication (Laufer 1990b; Dagut 1977). Learners have to be able to “get across meaning” (Rivers in Laufer 1990b: 293), which is done, above all, with words. Grammatical rules are mere abstractions without communicative value if they do not relate sounds and meanings; and sound patterns are meaningless noise if they do not form a lexical item (Laufer 1986: 69). Nowadays, the development of lexical knowledge is considered by both researchers and teachers to be central to the acquisition of a second language (Read and Chapelle 2001).

Lexical knowledge is not only basic as regards communication, but it also serves as an academic predictor in the second language and in school performance in general (Verhallen and Schoonen 1993). In general, the relationship between language proficiency and educational achievement (success at school), although not fully understood and explained yet, has been widely acknowledged. For example, several investigations have shown the strong relationship between vocabulary knowledge and reading comprehension (Grabe and Stoller 1997, Laufer 1997: 20).
Furthermore, lexical knowledge is assumed to be one of the most important factors in academic success (Verhallen and Schoonen 1993, 1998). As Verhallen and Schoonen (1998) discovered, children with a poorer lexical knowledge (in breadth and depth) lagged behind their peers in school performance. The more their vocabulary increased, the better they were at school.

Another aspect which inspires this terminological revision is the importance of lexical errors in communication. Vocabulary is considered to be a central part of language learning and also an essential component in communication. As a consequence of these two facts, when lexical errors are produced, communication is distorted. Lexical errors are, therefore, important in regard to their role as communication distractors. Furthermore, if one takes into account the findings that lexical errors are the most common type of error (Lennon 1991, Jiménez Catalán 1992), and are also inevitable in the process of language acquisition (Corder 1973), a study of lexical errors, of the terminology used to refer to them, and of their definition and classification becomes essential.

The importance of lexical errors can be understood in two ways: as the window that provides us with an insight into the learners’ lexical competence or as “the effect that errors have on the person(s) addressed” (Ellis 1994: 63). That is, whether the addressee comprehends what the learner wants to say, and how he reacts to this utterance. This second way of gauging errors resides in their role as communication distractors. Researchers who have dealt with the evaluation of errors have found out that lexical errors are considered the most serious, above all by native speaker judges (Johansson 1978, Khalil 1985, Ellis 1994: 63). These scholars also discovered the reason why lexical errors were considered to be so problematic and why they were so severely assessed, namely, because they distort communication. An utterance with a lexical error is less intelligible than another utterance with other types of error. Intelligibility is most impaired by lexical errors (Hughes and Lascaratou 1982: 179). Therefore, it is important to identify, describe, classify, evaluate and remedy lexical errors, since they are the main cause of communication problems and the most severely assessed in and outside the classroom.

In spite of all the studies on error analysis, few are the researchers (Dušková 1969; Warren 1982; Zimmermann 1986 a,b, 1987; Hyltenstam 1988; Lennon 1990, 1991; Zughoul 1991) that deal with the specific field of lexical errors. And those that do differ as regards the use and treatment of the term. Therefore, a clear definition of term ‘lexical error’, and a thorough classification of lexical errors are needed. The absence of definitions is the rule, and on the rare occasions where definitions are given, disparity of criteria can be observed (cf. Dušková 1969; Zimmermann 1986 a,b; Lennon 1991). The discussion of lexical knowledge and its components makes up a substantial body of literature in the field of vocabulary.
acquisition (Nagy and Herman 1987; Ohlsta 1987; Palmberg 1987; Nation 1990, 2001; Laufer and Nation 1995; Meara 1996; Wesche and Paribakht 1996; Schmitt and Meara 1997; Laufer and Paribakht 1998; Schmitt 1998; Jiménez Catalán 2000), whereas research on lexical errors and the critical reviews of work done in this field have been a neglected aspect of lexical research. This is the gap this paper intends to cover.

The question arises as to whether error typologies are valuable and useful for the description and interpretation of lexical deviations, and whether they are applicable to the foreign language classroom. Our emphasis here will be a) on the critical analysis of the terminology used and of the taxonomies proposed, and b) on the need for a common definition and classification of lexical errors for the benefit of teaching and learning. With this purpose in mind, we will divide the article into three sections. In the first section, the terms used in the literature will be analyzed and compared and an attempt will be made to trace them back to their origin. In the second, a review of the different classifications proposed by the scholars will be made. Finally, an appendix will include a glossary of the terms used to allude to ‘lexical error(s)’. The glossary fulfills two purposes: it gives information about the terms and expressions used to refer to ‘lexical errors’, and which author uses them, and what they mean; secondly, it serves the function of making a compilation of terms. The terms in the glossary will be ordered alphabetically, and the author will be given in parenthesis.

To our mind, this systematization is useful for several reasons. It provides researchers with a list of terms for lexical errors and for lexical error types, seen from a variety of different taxonomies and classificatory criteria. It also gives teachers an overview of the classifications available to be used as an evaluation aid and as a preventive or remedial tool. Furthermore, the present critical review should stimulate reflection on the need for a careful treatment of lexical errors and their terminology. In the task of systematization, we will extract the different terms and classifications from the literature on the field of lexical errors and analyze and compare the disparate and inconsistent usages and taxonomies and describe the criteria and approaches that give rise to them.

2. Terminological Inconsistencies: “Error” Avoidance

Although there are innumerable studies of error analysis, in this article we will concentrate exclusively on those dealing with the analysis of lexical errors. This type of error has been neglected in the literature (Meara 1984). The purpose of this section is to identify and analyze the inconsistencies observed in the use of the term ‘lexical error’ and to determine the possible reasons for these inconsistencies. Two
different treatments of the term can be observed in the literature. On the one hand, some researchers avoid the term “error”; on the other hand, others use the term, either as an undifferentiated category or as a superordinate term (see Figure 1) (Zimmermann 1986a: 31).

![Figure 1. Summary of the tendencies in the literature dealing with lexical errors](image)

**Description**

In the use of the term ‘lexical error’ and in the treatment of lexical errors, a variety of both meanings and terms can be observed. Variety of meanings refers to the fact that different scholars understand different things under the term ‘lexical error’. For some (Dagut 1977, Steinbach 1981 in Zimmermann 1986a, Lennon 1990, 1991), it is the ragbag category where all errors that are not grammatical fit (spelling, phonology). They do not use a criterion to differentiate between different types of lexical errors, but treat the term as an undifferentiated category (grammar vs. lexis errors) (cf. Zimmermann 1986a).

Another group of scholars (Dušková 1969; Warren 1982; Ringbom 1983; Arabski 1979 in Zimmermann 1986a,b, 1987; Maingay and Rundell 1987; Hyltenstam 1988) alludes with the term ‘lexical error’ to the superordinate term that serves as a heading for several other types of errors (word formation errors, (semantic) field errors, collocation errors, errors due to confusion, equivalence errors). The term ‘lexical error’ includes, thus, different subcategories that group lexical errors according to different criteria. This understanding of the term implies necessarily a design of taxonomies of lexical errors, in contrast to the former case, where these typologies do not exist, as a consequence of seeing lexical errors as an undifferentiated category. From the former perspective, ‘lexical error’ is seen as a
category, this means that it includes instances and examples of errors. In the latter view, on the other hand, ‘lexical error’ is considered a term, an abstract entity that is used as the heading for a group of categories. It is these categories that actually include material examples of lexical errors of different types, not the abstract notion ‘lexical error’, which is a mind construct.


Discussion

These inconsistencies in the use of the term ‘lexical error’ may be due to two factors: the perspective taken by the author, and the general discarding of the term ‘error’ in recent years (Ellis 1994). Some use the term ‘lexical error’, as has been seen, simply as the reference frame for their analysis, but prefer to term particular instances differently (different lexical error types). For other authors, ‘lexical error’ is a category on its own, with a higher status. This wide category is seen as a big box where all errors in the field of lexis fit without further differentiation.

To our mind, both explanations are intimately related, since the latter can explain the former. That is, in their effort to avoid the term ‘(lexical) error’, and in view of the impossibility of doing this (‘lexical deficiencies’, ‘lexical approximations’ are, after all, lexical errors), they develop a kind of “roundabout strategy” that allows them to deal with the object (error) while avoiding the term. These inconsistencies in the use of the term ‘lexical error’ leave the reader in the position of having to guess what the authors really mean when they use the term ‘lexical error’ and what type of error they are referring to. This happens since there is no common, general definition of the term ‘lexical error’ nor consensus as to what lexical items each author considers as liable to become the object of such lexical errors.
An observation that emerges from the review of the literature on vocabulary development and lexical competence is the ill-defined nature of these two terms. Read and Chapelle (2001: 3) observed that researchers could be divided into two groups with regard to the perspective they take in their consideration of vocabulary. On the one hand, Laufer, Meara and Nation (cf. Meara 1984, Laufer and Nation 1995), among others, seem to treat vocabulary as a separate component of linguistic knowledge. The other perspective questions this treatment of the lexical component as a separate construct in language, and prefers to see it simply as a part of language (Singleton 1999). The inconsistencies in the treatment and definition of lexical errors reflect the state of studies on vocabulary acquisition and lexical competence. If matters like what is meant by vocabulary, what is involved in learning a word, and even what a lexical item is, are not clear, it follows that the boundaries of a lexical error will also be blurred and confusing. Therefore, it is understandable that there will be inconsistencies in the use of the term. A clear definition of lexical error is needed, a definition that comprises all aspects pointed out by different authors and that serves all perspectives and analyses of errors in vocabulary. It is important, too, that a definition of lexical errors should distinguish between grammatical (or phonological, syntactic, etc.) and lexical errors.

In our opinion, the best use of the term ‘lexical error’ is as a superordinate term that can be divided into several categories. The further specification of categories such as errors of collocation, of style, of confusion, of equivalence etc. is positive, above all from the pedagogical point of view, since it provides a more adequate correction and evaluation criterion. At the same time, such specification brings about order and clarity to the field, for the benefit of researchers. From this point of view, the most appropriate definition of lexical error would be the following: the incorrect use of a lexical item (content word or idiom) in a specific context as a result of confusion between two words, owing to formal or semantic similarity and induced by mother tongue (L1) or target language (L2) influence. The concept of ‘incorrect’ is a convention in language teaching that refers to those utterances that somehow differ from those of a native speaker of the L2 (cf. Corder 1973).

3. Classifications

Description

The different perspectives give rise to a great many different error taxonomies. There are, however, within these, three main lines of thought to which all error typologies can somehow be ascribed depending on what classification criteria they use. In our view, these three classification criteria are: 1) the form/content
orientation of the lexical errors and the mental processes involved in that transfer; 2) the semantic analysis of the meaning features involved in the wrong production; and 3) the comparison of the erroneous lexical unit to the mother-tongue word, basis of the transfer, and the intended target word. We now attempt to classify the different taxonomies found in the literature on the basis of the criterion each uses to classify lexical errors (see Table 1 for a summary of the situation and classification of the taxonomies analyzed).

Ringbom (1983); Zimmermann (1987); also Arabsky ((1979) in Zimmermann 1986a); and Zughoul (1991) classify the erroneous lexical items depending on whether the inspiration for the error is to be found in the form or the content of the intended (L2 oriented) or the mother-tongue word (L1 oriented). For their classification, these authors also take into account the mental processes (learning and communication strategies) put into practice by the learner to produce that error. That is, they consider the process of error formation rather than the product, the error itself. Zughoul also discusses each type according to its implications for language acquisition (difficulty and learning strategies).

Other taxonomies (Warren 1982; Zimmermann 1986) follow from the implementation of a semantic feature analysis. Errors are divided into types according to the meaning features that have been wrongly rendered, and to the semantic relationships between the target and the error word. For example hyponymous, synonymous relationships or lack of semantic equivalence, among others, cause the lexical error. Thus, the use of the word *smell* instead of the more concrete *scent* in *I was thrilled by the white light and the special smell* (hyponymous relationship) (Zimmermann 1986a: 32) will be considered a lexical error.

Warren’s error typology (1982), like Dušková (1969), is also based on the comparison of the mother tongue with the target language units. The word which contains the lexical error is compared with the equivalent L1 word to see if the L1 is the source of the lexical errors. Warren (1982) also offers a higher-order classification based on formal or sense (content) deviation. Her classification is broader as she includes a subclassification of idiomatic errors, which most other authors neglect.

In addition to these lexical error typologies three others, which do not follow any of the general classification trends, can be identified. They have independent, unique criteria, and deal with lexical errors as products. Lennon (1990) uses the concepts of *extent* and *domain* as the basis for the typology. Thus, errors are classified depending on the linguistic unit (phrase, sentence, text, etc.) (domain) required to identify the erroneous unit (extent). In another classification one year later, Lennon divides lexical errors according to the word class to which the erroneous word belongs. Hyltenstam (1988) simply distinguishes between errors
that appear due to lexical confusions and nonce words, that is, words that are non-existent either in the mother tongue or in the target language.

<table>
<thead>
<tr>
<th>Interpretative axis</th>
<th>Descriptive axis</th>
<th>Transfer of features</th>
<th>L1 comparison</th>
<th>No interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form/content error</td>
<td>Zimmermann 1987</td>
<td>Dušková 1969</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ringbom 1983</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zughoul 1991</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semantic analysis</td>
<td>Warren 1982</td>
<td>Warren 1982</td>
<td></td>
<td>Zimmermann 1986 a,b</td>
</tr>
<tr>
<td>Recognizable word or not</td>
<td></td>
<td></td>
<td></td>
<td>Hyltenstam 1988</td>
</tr>
<tr>
<td>Content word influenced</td>
<td></td>
<td></td>
<td></td>
<td>Lennon 1991</td>
</tr>
<tr>
<td>Extent/domain</td>
<td></td>
<td></td>
<td></td>
<td>Lennon 1990</td>
</tr>
</tbody>
</table>

TABLE 1 Summary of taxonomies of lexical errors and their classification criteria

Interpretation and discussion

Many taxonomies, except those by Lennon (1990, 1991), Zimmermann (1986a, b), and Hyltenstam (1988), which are exclusively descriptive, are interpretative. The scholars describe the error, explain it and speculate about its possible psycholinguistic causes. They try to guess why the error was produced and to what mental processes it can be traced back. However, not all lexical error typologies, as has been seen, have these processes as their distinguishing criterion. What they all share is a common object of study. Lexical errors are considered confusions of content words from the mother tongue or the target language, the result of the confusion is a content word similar in meaning or form to the intended target word. The types are by no means mutually exclusive. However, we deem it an integral part of an adequate and useful classification, that these types should be unambiguous as possible.

Unfortunately, these classifications are of little help for the researcher who may want to apply one of them to his sample of lexical errors. All authors design their typologies according to their needs, once they have collected, identified and even analyzed the lexical errors. The classifications are developed to fit the concrete lexical error sample; they seem to work for the particular cases and lexical errors, but they may not be applicable to other examples, for instance, from learners with different mother tongues than the one considered in the given study (Swedish, Czech, etc.). Furthermore, these authors mix descriptive and interpretative criteria
and do not define their types very efficiently. An exception to this is Lennon’s (1990) classificatory criterion. The concepts of domain and extension can be applied to any instances of lexical errors, errors of any kind, but then the question arises as to the usefulness and strength of this criterion. Together with the breadth of applicability, the validity of a typology also resides in its usefulness for investigation and classroom purposes.

Another problem that these lexical error typologies present is their theoretical character. They serve as a kind of ordering of lexical errors, but in most cases have no further function than this, they simply order lexical errors (Zimmermann 1986 a,b; Hyltenstam 1988; Lennon 1991). They are used, in other cases, to prove or to support some new claim or theory of the author, for example the influence of the mother tongue on second language acquisition and on transfer errors (Dušková, Ringbom 1983), or new coined concepts (Zimmermann 1987, Lennon 1990). However, there are still few (Warren 1982, Zughoul 1991) taxonomies that have practical application in the classroom. Warren’s taxonomy has a strong pedagogical potential, because she uses her findings to teach her learners. The different types of lexical error show different causes, and taking this into account, Warren can help her students reduce the number of lexical errors in their productions in the foreign language. Nevertheless, this classification and, in general, all classifications that include some sort of interpretation carry with them a lot of presupposition with regard to the psycholinguistic causes of the errors.

4. Conclusion

The purpose of this paper is to systematize, analyze and compare the terminology and classifications in the field of lexical errors. In this attempt at systematization, inconsistencies in defining, terming and classifying lexical errors have been observed. By systematizing and interpreting these different terms and typologies teachers and researchers are provided with a framework of reference for their work in class, and studies on lexical errors. Furthermore, here a working definition has been offered to bring order and clarify the matter. The great variety of both meanings and terms observed in the terminology of lexical errors is responsible for the terminological and classificatory inconsistencies and disagreements. Different authors implement different classifications depending on their needs at a particular moment and their approach to language and errors.

We hope to have contributed to the clarification of the inconsistencies in terminology and classification of lexical errors. However, there is still much work to be done in order to fill all the gaps in research. There is still the need to establish a definition by consensus, that covers all instances of lexical errors and that helps
design a working typology that accounts for all types of lexical error. Furthermore, a taxonomy with a strong pedagogical potential is needed. Teachers require a typology of lexical errors that can be used for preventive purposes (by means of problematic word lists), for remedial purposes (adopting strategies to correct their lexical errors), and for evaluation purposes (using lexical errors as assessment criteria).

This terminological and classificatory review intends to be the catalyst and starting point for a new, original, and inclusive proposal of classification of lexical errors. There is a crucial need to develop a typology of lexical errors that will enhance the work of researchers, teachers and other language professionals, like translators, by providing them with a more systematic and objective work instrument. This classification should be a research and pedagogical tool for scholars and teachers. It could describe lexical errors and interpret them according to psycholinguistic criteria (L1 or L2 source), linguistic criteria (at what linguistic level it occurs: semantic, syntactic, orthographic/phonetic or stylistic) or according to pedagogical criteria (what word class if affected by the error). Such a description would provide information as regards the lexical competence of the learners, their (vocabulary) learning process and its stages, and the strategies they use in order to come to terms with the difficult task of communicating in a foreign language. There is still much research to be done in the field of lexical errors, their classification and their use as a teaching tool.

Acknowledgements

This research has been supported by grant FPI 2004 from the Comunidad Autónoma de La Rioja. We also want to thank the reviewers of the article for their helpful comments and suggestions that have contributed to improving the quality of the article.

Notes

1. This refers to the size of their lexicon, to how many words they know.

2. This alludes to the quality of their word knowledge, that is, how well they know those words.

3. Here the different classifications are only briefly presented due to lack of space. Therefore, we suggest the reader should go to the original source if interested in seeing examples of how these taxonomies are applied or in learning more about them.
A critical review of the terminology and taxonomies used in the ...


Appendix: A List of Terms and Expressions for Lexical Error

**error in the lexical choice** (Zughoul 1991, Lennon 1991): refers to the wrong use of a word that comes to take the place of another. A word (or non-word) is used as if it were another.

**incongruency in lexical ‘gridding’**: “wrong use of words resulting from false assumptions about the identity of Heb. (Hebrew) and Eng. (English) (L1 and L2) lexical classifications”; “anomalies that arise from what may be figuratively described as the different ‘grids’ imposed by the Heb. and Eng. (L1 and L2) lexicons on their respective ‘mappings’ of experience” (Dagut 1977: 225).

**lexical approximation** (Zimmermann 1986a,b): See semantic deviation. See also Hyltenstam (1982) for another notion of lexical approximation.

**lexical confusion** (Laufer 1990a): words of similar form (synforms) are confounded, that is, one is used instead of the other.


**lexical deviancy** (Hyltenstam 1988): “lexical units that deviate from the native norm” (Hyltenstam 1988: 71); “features of the second language learner’s interlanguage that deviate from the native norm” (Hyltenstam 1988: 68).

**lexical disruption** (Laufer 1991): See lexical confusion.

**lexical slip of the tongue** (Nooteboom 1980): “errors against whole words or morphemes (lexical errors)” (Nooteboom 1980: 88), also lexical error of speech.

**lexical simplification** (Blum-Kulka and Levenston 1978): “process and/or result [lexical error] of making do with less words” (Blum-Kulka and Levenston 1978: 399). Reducing the lexical items used/using a reduced number of lexical items giving rise (sometimes) to lexical phrases that deviate from the lexical norm (incorrect in that context at least).

**semantic deviation** (Zimmermann 1986a,b; Laufer 1990a, 1991): some semantic features of a L1 word are wrongly transferred to the target word. See incongruency in lexical ‘gridding’.

**structural slip** (Hotopf 1983): “To be classified as a structural slip error and target word had to have the same number of phonemes in common as there were syllables in the longer words, provided these phonemes were in the same order in the two words. By that is meant that they should be in the same syllable (first, second, etc.) and in the same position within that syllable.” (Hotopf 1983: 166).

**vocabulary error** (Warren 1982): mistakes that have to do with lexical facts.

**whole-word slip of the tongue** (Hotopf 1980): See lexical slip of the tongue.