

THE PROBLEM OF SYNFORMS (SIMILAR LEXICAL FORMS)

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Abstract. *The paper deals with the problem of synformy as an intralexical difficulty factor in the process of vocabulary acquisition in non-native speakers of English. The paper is dedicated to the description of the research on synform effects in non-native speakers conducted by the author and the analysis of the results and implications. The evaluation of the study and suggestions for further research are given in the Conclusion section.*

Key words: *synforms, lexical confusions, vocabulary learning, synform categories*

THE CONCEPT OF SYNFORMY

Synforms are defined as lexical forms similar in their phonological, graphic and/or morphological features, prone to causing lexical confusions in learners of English (Laufer, 1988) The basis for determining what a synform includes is intuitive analysis of the corpus of lexical errors of learners and analysis of lexical disruption of native speakers, which revealed that synforms share many common features. The target word and its synform counterpart usually have the same number of syllables, the only exception being the case when there is one additional syllable, usually the one that differentiates the two words. Furthermore, synform pairs usually have the same stress pattern, except in the cases when the differing factor is the presence of a prefix or a suffix in one of the words. Another shared property of synforms is the fact that most of the confused words and the target words belong to the same syntactic class. Moreover, synform pairs usually differ in very few phonemes, while the phonemes confused have very similar features to the features of the phonemes they were confused with.

When it comes to synformic confusions, there are also noticeable patterns. The error may consist in substitution, omission or addition of a unit (vowel, consonant, prefix or suffix). The possible errors may be classified according to the type of confusion and the unit they involve.

According to Laufer's (1988) classification, there are ten different categories of synforms.

- Category 1 includes synforms with the same root, productive in present-day English but different suffixes (e.g. considerable/considerate, successful/successive).
- Category 2 – synforms with the same root, non-productive in present-day English, but different suffixes (e.g. credible/credulous, capable/capacious).
- Category 3 includes synforms which differ in the presence of a suffix in only one of them (e.g. historic/historical, sect/sector).
- Category 4 – synforms with the same root, non-productive in present-day English, but different prefixes (e.g. consumption/assumption/resumption, compress/suppress/repress/oppress).
- Category 5 – synforms differing in the presence of a prefix in one of them (e.g. passion/compassion, mission/commission).
- Category 6 includes synforms identical in all phonemes except for one vowel/diphthong in the same position (e.g. affect/effect, staff/stuff).
- Category 7 – synforms differing in one vowel present in only one of the synforms (e.g. cute/acute, quite/quiet).
- Category 8 – synforms with identical phonemes except for one consonant (e.g. price/prize, extend/extent).
- Category 9 includes synforms that differ in a consonant present in one synform but not in the other (e.g. simulate/stimulate, addition/addiction).
- Category 10 – synforms which, although identical in consonants, have different vowels (e.g. base/bias, manual/menial).

The results of the study of synforms may prove important for understanding the process of language acquisition in terms of discoveries about several areas related to interlanguage. Firstly, patterns of synform errors may reveal whether there is a connection between the salience of certain features in the lexicons of native and non-native speakers. Secondly, synform-related research may shed light on the issue of lexical representation of stems and affixes in the learner's mental lexicon. Thirdly, comparing the results of synform tests of learners whose mother tongues belong to different language families may illuminate the language learning process in terms of determining whether L2 is shaped by the L1 structure or is constructed by the learner based on the input received. Finally, the significance of synform research may also be diagnostic; namely, if established that synformic confusions represent a major difficulty for the learners, then appropriate materials and teaching treatment could be applied.

RESEARCH BACKGROUND

This research was inspired by the work of Batia Laufer, the author who first drew attention to the importance of the phenomenon of synformy and conducted thorough and systematic research of different categories of similar lexical forms and their influence on both native and non-native speakers of English.

The author's idea was to test Serbian learners of English in order to examine the effects of synforms on representatives of the Slavic language family. Thus the picture of theoretical and practical considerations of synformic confusions could be enriched with more data obtained from more learners. Moreover, the students of English language and literature were deliberately excluded from Laufer's testing. The author of this paper found the idea of testing more advanced learners, who are being trained to become English

teachers, equally interesting. Thus, the effects of synforms could be tested on a wider range of learners with regard to different proficiency levels.

In this, to my knowledge first investigation of the effects of synforms on Serbian learners of English the research questions were formulated as follows:

- What are the effects of synform categories 1, 2 and 10 on Serbian advanced learners of English?
- What is the relationship between the difficulties caused by synform confusions in categories 1 and 2 and the ones caused by synform confusions in category 10?

Therefore, the first aim was to establish the relationship between synform and correct answers and then between synform and other distractor answers. Thus, hopefully, the degree of influence of synforms on vocabulary learning could be established by verifying that synform answers were preferred to other answers in a sufficient number of instances. Secondly, the intention was to examine which categories of synforms are more likely to cause difficulties for Serbian learners. As suggested by Laufer (1990) the differentiation between vocalic synforms followed by the accurate differentiation between suffix synforms are the two final phases of the developmental route of vocabulary acquisition. The hypothesis in this research was that suffix synforms (categories 1 and 2) would be a more significant difficulty factor for the advanced learners than the vocalic synforms (category 10). The confirmation of this hypothesis could be the results of synform testing. If suffix categories of synforms proved to be more problematic for advanced learners than the vocalic ones, then this could provide justification for the research hypothesis.

RESEARCH PROCEDURES

The research included 20 students of English Language and Literature at the Faculty of Philosophy in Nis, Serbia. All students were native speakers of Serbian and 3rd-year students at the English Department. Participants volunteered for the research and were given the information sheet and a consent form. They were informed that the main subject of testing would be their L2 vocabulary knowledge, but did not know the details of the testing regarding synformic confusions in order to ensure the reliability of test results. It should be pointed out that the same group of participants did both tests for categories 1 and 2 and for category 10.

It has to be mentioned that no formal testing was conducted prior to the research to determine the level of proficiency of participants. However, the participants were required to give the information regarding their prior experience in learning English as a foreign language. All participants had a minimum 12 years of experience in learning English – 5 years in primary school, 4 years in secondary school and 3 years at the university level. Bearing in mind the fact that tests were administered towards the end of the second semester of their 3rd year of studies and considering their prior instruction in English, the participants may be considered to have been at the advanced level of proficiency at the time when testing was conducted.

Native speakers of English were not among the subjects of the testing. The reasons for this are the difficulties in matching the levels of proficiency of native and non-native speakers and the fact that the main object of testing was the effects of synforms on non-native speakers with Serbian L1 background.

The method chosen for this testing was the same as used in Laufer's research. Two versions of each test were administered to each student one after another. Both versions

were based on a multiple choice principle, one tested synform effects within the context, the other tested ability to match a particular synform with its definition. The categories which were found not to represent a factor of difficulty for either native or non-native speakers in the original research were excluded from the testing. So, the research did not test the effects of synforms differing in prefixes (categories 4 and 5) and synforms differing in one vowel and one consonant (categories 6, 8 and 9). Furthermore, due to the limitations of this project in terms of time and the number of participants, the author decided not to test the effects of synform categories 3 and 7, which were found to be minor difficulty inducing factors in Laufer's research.

Hierarchies of difficulty presented by Laufer suggest that the most problematic categories for non-native speakers tend to be the synforms differing in suffixes and the synforms differing in more than one vowel. Taking into consideration the fact that the subjects of this research were advanced foreign learners, it was supposed that precisely these categories should be tested in order to gain valid information about the degree of lexical confusions they cause. Therefore, the subjects were tested on lexical confusions caused by synforms with the same root and different suffixes (categories 1 and 2) and synforms with identical consonants but different vowels (category 10). The idea was to obtain the results on these most conspicuous synform categories in order to verify the significance of this phenomenon for Serbian learners and examine the potential for further research in this area.

The tests were administered on 16 May 2007 (categories 1 and 2) and 17 May 2007 (category 10) by a colleague of mine whom I personally instructed regarding the procedure. All the tests were taken during the regular classes at the Faculty. The participants were first given the version A of each test and then the version B. They were informed that the purpose of the testing was for research only and that no credit would be given for the results. A special effort was made to create as relaxed atmosphere as possible in order to reduce the exam-like tension. All tests were completed by students themselves without any use of dictionaries or help of their class teachers or fellow students. The time limit for the completion of each test was not set, but completing both versions of each test did not exceed 30 minutes.

The author designed both versions of both tests applying the same principles used by Laufer in the original research. Both versions of the Synform categories 1 and 2 tests contain 14 questions each – 9 examples of synform category 1 (synforms with the Latin root productive in present-day English and different suffixes) and 5 examples of synform category 2 (synforms with the Latin root non-productive in present-day English and different suffixes). The tests included the following synform pairs:

considerable/considerate	capacious/capable
integration/integrity	imaginative/imaginary
credulous/credible	sensible/sensitive
comprehensive/comprehensible	virtually/virtuously
respective/respectable	exhausted/exhaustive
tolerable/tolerant	numerous/numerical
industrious/industrial	respectably/respectfully

Synform tests for category 10 were adapted from the original test used in Laufer's research. The main objective was to test the effects of synforms identical in consonants but different in more than one vowel. The tests included the following synform pairs:

base/bias	propose/purpose
legible/eligible	manual/menial
merely/merrily	cancel/conceal
dairy/diary	spilt/split
embrace/embarrass	defiance/defence
human/humane	morale/moral
quit/quiet	fiery/fairy

The examples were from Laufer (1981) and the author added the distractors and adapted the test. Bearing in mind that no learners' corpus of errors was at the author's disposal, the examples of sentences for the version A of the test were adapted from the corpus at <http://www.lex tutor.ca/>. The aim was to provide the sentences as close as possible to the examples found in written and spoken language. The definitions of tested items in the test version B were adapted from the Longman Dictionary of Contemporary English. The main principles of test design were not to allow the participants to notice that the similarity of two particular items was tested and to minimise the guesswork. Therefore, in most cases, the distractors were selected on the basis of formal similarity, but in some instances both formally and semantically related distractors were chosen.

The version A of the test checked synform confusions within a sentence, whereas in the version B the participants had a task to circle an appropriate definition of a particular synform. As in Laufer's research, the emphasis was not on testing the effects of synforms within and out of the context, but rather on providing two different methods of elicitation in order to obtain more reliable results.

ANALYSIS OF THE RESULTS

Compared to the results of Laufer's tests with both native and non-native speakers, the frequencies of Categories 1&2 synform errors seem significantly lower. However, considering the number of participants in this research, their level of proficiency and the number of questions, these frequencies cannot be ignored or deemed insignificant. The level of proficiency of Laufer's testees was estimated to be intermediate, whereas this testing was conducted with advanced learners. When this fact is taken into consideration, the discrepancy between the results becomes plausible. It would be expected that learners with higher level of proficiency make fewer errors, especially if they are students of English, as it can be assumed that their vocabulary knowledge is both larger in scope and more solidly grounded. Still, it is also true that even the advanced learners had difficulties with suffix synforms, though to a lesser extent than less proficient learners.

Another interesting observation is that participants made more synform errors on the version B of the Categories 1&2 Synform test. This may suggest that the participants felt more confident when using synforms within the context because contextual clues helped them in making the right choice, whereas they had more problems in identifying synforms in isolation. This would be in accordance with the claim that the knowledge of a lexical item resembles a continuum, varying from one instance to another, i.e. the results

have shown that 'knowing' a particular lexical item may not always include the ability to use the item correctly in every context.

Thus, a tentative conclusion can be drawn that synform Categories 1 and 2 tend to be problematic for advanced Serbian learners, but further research is necessary in order to confirm their status of common errors.

When it comes to Category 10 synform error susceptibility of individual participants, the frequency goes over 20% in only 3 instances. Furthermore, it can be noticed that many participants made no synform or distractor confusions on any version of the test. These results differ to a large extent from the ones obtained in Laufer's research. Laufer found category 10 synforms significantly problematic for non-native learners. As far as the native speakers are concerned, Laufer's results suggest that category 10 synforms do not represent a major difficulty factor, and synform error frequencies for native speakers are similar to the ones obtained in this research. Rather than suggesting that category 10 synforms do not represent a difficulty factor in vocabulary learning for Serbian speakers, these results point to the differences among groups of non-native speakers with different levels of proficiency. As mentioned earlier, Serbian testees were advanced students of English and it would be plausible to expect that their L2 vocabulary knowledge was more similar to the one of native speakers, which would explain the similarity of obtained results.

The overall results for Category 10 synform testing show that the frequency of correct answers on both versions of the test significantly overrules frequencies of incorrect answers. Therefore, it can be said that the results of this research point that category 10 of synforms (synforms different in more than one vowel, but with the same consonants) is not a major difficulty factor for Serbian advanced learners. Not only are the frequencies of synform errors small, but they are also very close to the frequencies of distractor answers. This would imply that synform confusions cannot be viewed as either a major or the only difficulty factor in the process of vocabulary acquisition in advanced learners.

If the overall results of synform tests Categories 1&2 and Category 10 are compared, it becomes obvious that participants had significantly more difficulties with suffix synform pairs. The results suggest that synform categories 1&2 represent a difficulty factor in L2 vocabulary acquisition, whereas synform category 10 does not seem to be a major difficulty-inducing factor. If we take into account that the testees were at the advanced level of proficiency and that they were students of English, some implications about the development of L2 lexis can be drawn. These findings are in accord with Laufer's claim that in the process of distinguishing between synforms, both native and non-native speakers follow a similar route: the starting point is learning to differentiate between prefix and consonant synforms, the medium stage is distinction between vocalic synforms, whereas the final phase consists of accurate distinction between suffix synforms (1990). This hypothesis may account for the fact that intermediate learners in Laufer's research had major difficulties with both vocalic and suffix synforms, whereas the advanced learners in the research presented in this paper had difficulties with suffix synforms only. A larger-scale research involving native speakers as well would have to be undertaken in order to provide more conclusive evidence, but the findings of this research may serve as indicators of the possibility of such sequence in the vocabulary development process.

The research evidence cited in Talamas et al (1999) and Singleton (1999) also highlights the relationship between fluency and proneness to lexical confusions. Namely, these authors suggest that less fluent learners are more likely to be affected by lexical

confusions caused by formal similarity of lexical items. On the contrary, more advanced learners would more often make errors in linguistic production caused by semantic factors. This may be an explanation for the discrepancy between the results of Laufer's research and the one conducted by the author. As far as formal similarity is concerned, the results of this research show that advanced learners suffer negative effects of similarity of lexical forms only to a limited extent.

IMPLICATIONS

It can be said that the starting hypothesis of this research has been confirmed by the results, i.e. the results suggest that suffix synforms tend to cause difficulties in lexical production and comprehension of advanced learners, whereas vocalic synforms do not. The most important observation is that susceptibility to lexical confusions caused by form similarity among lexical items tends to lower with the increase in the level of proficiency. This would imply that formal similarity represents a major learning difficulty factor in early and medium stages of learning a foreign language. In more proficient learners, similarity of forms is less likely to cause confusions, except in the case of lexical items with the same roots and different suffixes. It would appear that these forms are among the last to be incorporated into the learner's mental lexicon. Therefore, even advanced learners can experience difficulties in lexical production and comprehension induced by formal similarity, especially if similar lexical items are not among the more frequent vocabulary.

This research was the first systematic investigation of synform effects on a group of Serbian learners. However, the results are not conclusive enough to allow hypothesising on the susceptibility of learners with Slavic L1 background to synform confusions. It can be said that such susceptibility exists, but its degree and the place of Slavic languages speakers within the L1 families framework in terms of synform confusions proneness are to be determined by a larger-scale study. What this research seems to point out is that the language distance may play a certain role in the process of vocabulary learning in terms of conditioning the difficulty of the learning tasks (Laufer-Dvorkin, 1991, Swan, 1997). Thus, speakers of European languages have advantage in learning English over their peers with Semitic L1 background. When it comes to ranking the learners with Slavic L1 background among their peers with L1s belonging to other European language families, this study has not provided enough evidence to enable drawing valid conclusions.

The first step in deciding whether or not the phenomenon of synformy should receive a special teaching treatment is determining if synforms represent a factor of difficulty in vocabulary learning. To some extent, this research has shown that synforms can be the causes of lexical confusions for even more advanced learners. It may be assumed then that less proficient learners would have more problems in distinguishing between similar lexical forms. The next step would be identifying which categories of synforms are most likely to cause disruptions in production and comprehension and treat them accordingly in the classrooms. Teachers themselves would probably have the most important role in that process, as their practice would show which synform pairs are most likely to be confused by the learners. Although synform tests may provide general indications as to which synform categories are most problematic, we saw that in both versions of the synform categories 1&2 test none of the participants confused the *sensible/sensitive* synform pair, whereas the error frequencies were highest for the *comprehensive/comprehensible*

pair. This would mean that the teacher of this particular group of learners should include these examples into classroom exercises and/or tests.

Some ideas for synform exercises could be blank filling or multiple choice exercises similar to the ones used in synform tests (see Appendices 3, 4, 5 and 6). Furthermore, distinguishing between synforms could be practised through the exercises of word family building. Thus, the learners' attention could be directed towards words with the same stem and different prefixes and suffixes and the effects they have on the alteration of the meaning of a word. Negative effects of word form similarity could also be reduced by more spelling practice through dictations or word cloze tests.

Another role that synformy may play is in test design. Synformy may be one of the criteria for the distractors in multiple choice vocabulary tests (Laufer-Dvorkin, 1991). This would enable improving the testing tools by providing distractors based on the real data – the corpus of learners' errors.

CONCLUSION

Before evaluating the overall success of the research, it is first necessary to consider its limitations. The reasons for not including native speakers among the subjects of the study have already been explained by the author earlier. Despite the fact that some of the data obtained by Laufer on tests with native speakers have been referred to in the analysis section of the paper, it is true that the research would certainly have benefited from the original data. The results of native speakers' tests would give a fuller picture of synform effects on advanced learners and provide a more solid and broader basis for drawing conclusions and implications.

The size of the sample of testees and the bank of tests may be considered sufficient for the purpose of this research. It is worth mentioning, though, that valuable data could have been obtained if a larger number of participants had been tested on a larger number of synform categories. Thus, it would have been possible to obtain an ever deeper insight into the problem of synformy in general. Furthermore, consideration of synform effects with regard to learners' L1 background would have been possible.

What may be considered an advantage of this research over the one conducted by Laufer is the fact that both synform categories were tested on the same group of learners, which was not the case with Laufer's study. The author believes that this is the approach which significantly contributes to the reliability of the overall results and thus should be taken in any potential future study of the same phenomenon.

In this final section, the author will also mention some of the possibilities for further research in the area of similarity of lexical forms in general and in Serbian context in particular. Some of the ideas sprang from the conducted research. Firstly, as shown by the research conducted here, testing of learners with different levels of proficiency and comparing the results with the ones obtained from the native speakers on the same level, would not only contribute to the research on synformy, but possibly to the research on developmental stages in the process of vocabulary acquisition.

Secondly, the methodology of testing synform effects could be modified so as to include more different types of tasks. Both studies discussed in this paper were based on written tests. However, if listening tasks were incorporated in the testing process, it would be possible to observe synform effects across both spoken and written language.

As far as the Serbian learning/teaching context is concerned, it might be a good idea to test a larger number of learners with different proficiency levels so that a more detailed picture of the effects of the mother tongue, i.e. language distance on synform confusions could be gained. In relation to this proposal, the phenomenon of synforms could be examined on more languages, other than English; this might provide clues as to whether the phenomenon is interlanguage universal.

Finally, an area which might prove particularly fruitful in the future could be establishing connections between lexical confusions caused by both formal and semantic similarity. It may be interesting and useful to find out whether solely formal or both formal and semantic similarities between lexical items are more likely to induce errors in learners.

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PROBLEM SINFORMI (SLIČNIH LEKSIČKIH FORMI)

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Ovaj rad bavi se problemom sinformije kao intraleksičkim faktorom u procesu usvajanja novih reči kod studenata kojima engleski nije maternji jezik. Opisano je sprovedeno istraživanje uticaja sinformi i predstavljeni su analiza rezultata i implikacije. U završnom odeljku data je evaluacija projekta kao i sugestije za dalje istraživanje.

Ključne reči: *sinforme, leksičke pogreške, učenje vokabulara, kategorije sinformi*