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ABSTRACT

This paper discusses the kinds of vocabulary items retained by a group of native German speakers in the context of an English language proficiency examination. Its main purpose is to indicate the kind of information that can be gathered using cloze procedures, with the aim to integrate this information into further learning strategies for the acquisition and retention of second language vocabulary. Students of English at a German university were given an examination testing vocabulary, reading comprehension, syntax, and translation. A statistical analysis of cloze responses was undertaken. Results reveal that not only are the correct responses to cloze passages of interest, but also those responses considered "incorrect." The author investigates the kinds of vocabulary items generated in response to the cloze items. In all but a few cases, a high degree of structural sensitivity was exhibited by the students. Cloze items, along with whatever else they may reveal about the readability of a given prose text or about other language skills, can provide information about the vocabulary range of a group of subjects. In dealing with a "dictionary of expectancy," students reveal the strategies used in selecting a finite set of words from a potentially infinite second language vocabulary. (JK)

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Cloze Procedures and Long-term Vocabulary Retention.

A considerable amount of research has been conducted on the use of the cloze procedure in language learning and teaching. It is not the purpose of this paper to review all of it. John Oller (1979) has done this very well and should be referred to. Nor is it the purpose of this paper to describe the phenomenon of cloze as a psychological construct. There are a number of articles on the psychology of cloze, of which the most basic ones are described in James (1979) as well as Oller (1979). What will be discussed is work that is being done to determine the kinds of vocabulary items retained by a group of native speakers of German and revealed in the context of an English-language proficiency examination. It is thus the main purpose of this paper to indicate the kind of information that can be gathered using cloze procedures, with an eye to integrating the information into further learning strategies for the acquisition and retention of second-language vocabulary.

Research into the use of cloze procedures as measures of vocabulary retention reveals that little has been done to analyze the kinds of information that students provide in responding to a given blank or set of blanks in a sample of continuous prose text. Aborn, Rubenstein and Sterling (1959) describe the phenomenon of inverse proportionality of grammatical class size to the predictability of a given response. The fewer the members of a class (preposition, conjunction, article), the fewer the possible responses that will need to be analyzed, that is, the more possible it is to predict accurately which items will be selected. MacGinitie (1961) criticized this conclusion because it was based on "short" contexts, i.e., those in single sentences, not longer texts. At the same time he discovered that larger contexts, that is, those with more than five words to the left or right of a given blank, did not necessarily help produce acceptable responses. Coleman and Miller (1967) reinforced MacGinitie's conclusions, showing that contexts beyond twenty words from a given cloze item do not contribute significantly to its resolution. They qualify this, however, by pointing out that the context must not be mutilated, specifically, words in the context must not be "clozed" themselves. Oller (1975) maintains, however, that larger contexts do help resolve a cloze item, even for so-called "function" words like prepositions and articles. In addition, James (1979) points out that once a cloze item has been resolved it contributes to the resolution of other items proactively and retroactively. To what extent an

"incorrectly" resolved blank contributes negatively to the resolution of a blank further on in a text has not been investigated. Practical experience shows, however, that students rarely return to items which they have not resolved the first time around with information that they may have gathered from other items. This is no doubt due to the "discrete-point" habits instilled in students: they may be encouraged to make use of all the information given in a reading text, but treat each test item as a separate subtest, independent of other subtests/items.

First, the procedures used. All students of English at the Universitat Erlangen-Nurnberg in Erlangen, Federal Republic of Germany, are required to participate in a two-and-a-half hour examination held at the beginning of each academic semester. The particular version of the examination to be reported on here was held on April 24, 1979, and contained 120 items, in the following four skill groups: 1) Vocabulary (30 fill-in-the-blank items); 2) Reading Comprehension (two brief reading passages, one followed by 8 multiple-choice questions, the other followed by 7, as well as one cloze passage with 15 blanks, which is the subject of this paper); 3) Syntax (10 fill-in's calling for insertion of the appropriate preposition, 15 completion exercises with "scrambled" words as cues, 15 fill-in's calling for the insertion of the correct verb tense, and 5 sentences to be rewritten in indirect speech); and 4) Translation (15 German sentences to be translated into English). The examination just described serves as an entrance examination for new students as well as the final examination for students who have completed a one-semester grammar/reading course. The items in the examination change from semester to semester, so that one semester's entrance examinees become next semester's final examinee, with two different examinations at the beginning and at the end of a given semester. Thus the two groups to be described here represent those students without any formal exposure to cloze procedures prior to the examination and those who in the course of the semester preceeding the test had been given reading texts with cloze items and who were thus familiar with the procedure.

Second, the reading text used. On the basis of the previous experience the text was felt to be of a level of difficulty commensurate with what the students were already familiar, although the actual text was unfamiliar to them. No attempt was made to mechanically blank every nth item. In one case, in fact, the distance between two blanks was only one word, and the indefinite article "a" at that! The blanks were selected on the basis of the structural features they represented, so that a variety of form/function types was attained. Thus there were six nouns, three verbs, one preposition of location, one phrasal verb (with prepositional complement), one conjunction, one adjective, and one verbal (participial adjective). At this point it should be mentioned that no deliberate attempt was made to select items purely on the basis of their sentential function, i.e. subject vs. object or subject-verb agreement. Nor were items selected because of particular lexical or referential functions they might possess, although the selections of one nouns over another does reflect this interest. The resulting fifteen blanks thus represent a variety of content/function types, as the following analysis will show.

Third, the data. Although information is available on the overall performance of both groups on other parts of the examination battery, only the results on the cloze part will be discussed here. The data on each student across each cloze item is given in Tables 1, 2a, and 2b. Table 1 represents the beginning students (labeled EST = "Einstufungstest"), of whom there were 29. Tables 2a and 2b represent those who students with already one semester of university-level ESOL instruction behind them, (labeled GKK = "Grundkursklausur") of whom there were 94.

The students were ranked in these tables on the basis of the number of "correct" responses on all 15 items, with the number of verbatim (or exact) responses having precedence in the ranking over the number of verbatim plus acceptable responses, followed by those students with acceptable plus unacceptable responses, whereby an unacceptable response is one which was considered by the scorer to be unacceptable or which was simply not given, i.e., blank. Thus in Table 1 Student E6 is listed ahead of Student E7, because the former had 10 verbatim items and 1 acceptable, while the latter had 9 verbatim and 2 acceptable Note, of course, that Student E14, with 8 verbatim and 4 acceptable (equals 12 total correct) responses is listed after Student E15, because the latter had 8 verbatim responses, but only two additional correct (acceptable) responses, giving a total of only 10 correct responses overall.

On the basis of the mean scores on the cloze part of the examination (15 items = 15 points), it was determined that the mean scores of the two groups were statistically similar, that is, not significantly different, using the Student's t distribution ($t = .411$). Using the F distribution on the variances of the two groups yielded no statistically significant difference as well ($F = 1.08$). This held true even when a sample of those students with previous experience with cloze (the GKK group) was taken, based on merely considering every third student out of the total group of 94, so that a subsample of 31 was available to compare with the students without cloze experience (EST n = 29).

This would seem to indicate that no special training is necessary for the population of subjects under investigation. At this point it should be stated that all the students discussed here came from secondary schools where English as a foreign language is a mandatory subject for anywhere from five to nine years, so that we are dealing with subjects with considerable exposure to a large number of vocabulary items, as well as to a variety of contexts, in English.

However, if one delves into the individual items, one notices divergences between the two groups. In order to

compare one item with another, the percentage of students answering an item correctly, that is, either with a verbatim or acceptable response, was computed for each item in each group. The percentages are given in Table 4. The items of perhaps greatest interest are those where the deviation between the two groups is 10% or more, that is, Items 2, 3, 9, and 15, although Items 8 and 10 could also be included, with 8% and 9% discrepency respectively. Of the six items just mentioned, only Items 3 and 9 show a higher percentage of beginners giving correct answers on them than their more experienced colleagues. Since, of course, a change of one or two subject-responses has less impact on a large sample than on a small sample, a comparison between two roughly equal groups would seem to be in order. The comparison subsample, with n=31, shows that only in Item 3 was the 10% discrepency in performace between the EST and the GKK group maintained.

What, however, is of more interest is the kinds of vocabulary items generated by the two groups in response to the cloze items. This means that not only are the correct responses of interest but also those responses considered "incorrect." It is at this point that formal statistical analysis becomes less useful, since we are no longer interested in, for example, item discrimination or item difficulty. Rather we are interested in the actual words perceived by the students as fitting into the blank spaces. From a linguistic point of view, therefore, it is valuable to examine the words actually given as responses.

Before investigating individual items, it should be stated that in all but a few cases a high degree of structural sensitivity was exhibited by both groups of students. Thus, where a noun was expected, a noun was produced. Where a preposition was mandatory, a preposition was used, as in Item 14. If a past tense was the only one plausible, as in Item 8, this was, in fact, given. Even certain semantic constraints were adhered to, such as that in Item 7, which in the majority of cases produced word related to the semantic algorithm "human-female-young-married." Where a noticeable divergence between what is expected and what is produced exists, such as in Item 14, the incorrectly chosen response "by" (as opposed to "with") lies within the realm of possibility for collocation with the preceeding verb, "entertain," since a realistic paraphrase for the expression, "... had to entertain the company with pianoplaying ..." is "... had to entertain the company by playing the piano ..." Curiously, this avoidance of "with" is contrary to normal German usage, since the equivalent of "with" ("mit") would be expected.

What strikes one almost immediately is the very large number of different responses given to several items. One would expect a group of 123 students to come up with many

different responses on an open-ended mesaure. Most of these responses should be easy to categorize as acceptable or not acceptable, probable or improbable, likely or unlikely. However, when the number of distinct responses approaches the total number of students in the sample group, the responses require closer examination. Questions of acceptable or non acceptable begin to take on highly subjective overtones. For this purpose, the author devised two interrelated measures, one reflecting the number of distinct correct responses accepted, as compared with the total number of distinct answers produced, the other reflecting the total number of subjects responding to the item. Thus, with the first measure, which will be designated "C," there is normally only one correct response for all subjects, but there could be up to n incorrect responses. In the case of cloze measurement, however, there might be more than one response which could be deemed correct, which could possibly render such a measure meaningless. In practice, only those responses will be considered as potentially correct that are actually given. The decision to accept or reject a response is admittedly highly subjective but well within the bounds normally tolerated by students and fellow teachers alike for the acceptance or rejection of an anamolous answer! This makes the second measure, designated as "T," more realistic, since the actual number of different responses is taken into account, whether correct or incorrect, and then compared with the number of students-subject participating in the measurement.

The two measures have the same mathematical limits, but in reverse. "C" has limits of +1 (= only the predetermined correct response is chosen by all subjects) to 1/n (each subject gives a different response). "T" has the limits 1/n (only one distinct response is given) to 1 (each subject gives a distinct response). A computational example. Item 7 yielded one verbatim and three acceptable responses, or four correct responses, for the beginning (EST) group. There were, including the correct responses, a total of nine distinct responses given, including zero responses. Thus "C" for the EST group is .44. For the nine distinct responses there 29 subjects, producing a "T" value of .31 for the EST group. Across the page, the GKK group also had the same number of correct responses, 4, and the same number of total responses, 9, for a "C" of .44 again. However, there were 94 of them, yielding a "T" value of .10.

Most evaluators feel that they have developed at least a reliable measure if the greatest number of subjects chooses the fewest number of responses to a test item, that is, the majority of them chooses only one response, the one designated "best" or "most correct." Thus a "C" value of 1.0 might be considered optimum, while a "T" value approaching 0 might be considered best. What do these two

measures tell us? For test construction purposes, an item which yields the highest "C" value and the lowest "T" value would seem to be best for inclusion in future testing, taking into account, of course, the fact that cloze items can not be readily removed from their context without ceasing to be "cloze items" in the traditional sense. On the other hand, an item like #6 ("... look for ..."), which has a "C" of .50 and a "T" of .07, retains its usefulness as a phrasal verb test item in a number of contexts. Item 7 is also useful as a test item, because of the semantic envelope around it which makes it semantically and culturally stable. With this in mind, the following items from the experimental text seem to be "good" items for other tests: 1, 4, 6, and 7. On the other hand, the items with a low (= minus) "C" to "T" relationship seem likely candidates for a semantic "psychogram" describing the kinds of vocabulary elements present in the memories of a group of students. In this respect the following items from the 15 in the cloze test are interesting: 2, 5, 8, 9, and 12. Two of these items, 5 and 12, will now be discussed as to what they seem to tell us about the students' perception of the task involved in determining the correct response to the item.

With Item 5 not one of the EST group and only five of the 94 students in the GKK group gave the verbatim response ("... walking distance ...") to a stimulus on which most most native speakers of English would score almost perfectly, it being practically a fixed phrase in English. However, very few of the German native speakers, in all their 5+ years of English in school, apparently ever encountered this particular locution. And only one student in either group gave a response which was judged to be even partially acceptable, "... hiking distance ...," although most native speakers would no doubt reject this as odd at best. The other responses fall into two rough groups, one with -ing participial adjectives and the other with other adjectives. In the EST group there is a small number of students who gave prepositions (for, in, of), which can be explained by assuming that they thought that the preceeding word, "easy," is a noun, and that they were dealing with a sequence: noun/preposition/noun. There were almost as many students who gave a present participial as those who did not (8 to 14). Those in the former group apparently realized that the word sought was more closely linked to "distance" than to "easy," and would reflect some kind of continuous action, to be marked by a verbal with -ing. The others apparently did not realize that, in this context and with this orthographic rendering (there is, after all, no comma after "easy"), that another adjective parallel to "easy" (good, short, etc.) is not expected. What many students gave was the word "reachable" or another word ending in -able, such as "accessible," "approachable," "attainable," or "passable." Why? Because the closest equivalent in German is "erreichbar," the ending "-bar" in German being

morphosemantically equal to English "-able." Although the German word for "distance" is "Entfernung" and a German would not normally collocate "erreichbar" with "Entfernung," a slight semantic shift from "distance" to "goal" and from there to German "Ziel"(= goal) would yield a predictable English-German correspondence: "reachable (attainable?) goal" vs. "erreichbares Ziel" despite the incongruity of associating "goal" with "distance."

Interestingly enough, 27% of the GKK group did not attempt to respond to this item at all, as opposed to only 10% of the EST group. This could mean that the students who were more experienced in handling cloze texts thought it better to leave the item blank than to put in something that they knew could not be proper English. This did not, of course, stop 15% of them, as well as 17% of the beginners, from following their German instincts and inserting "reachable" where it doesn't belong. Item 12 shows a tighter perception of which response is sought. Both groups seemed to know which verbs in English can normally be followed by "up:" grow, bring, divide, make, dress, draw, get, pin, run, tear. For this reason, the responses which are considered unacceptable are unacceptable not because they cannot be structurally associated with what follows the blank, but rather are unacceptable because they do not fit the blank semantically. A native speaker is most likely to associate "up" with "grown" in the context of family members, regardless of other immediate semantic signals, something the native speakers of German in this sample did not. Yet many did know of the connection between "up-bringing" and "growing-up" so that the decision to reject anything that was not exactly "grown-up" was difficult. In a subsequent administration of the text to a group of native speakers, a decision was made to accept expressions such as "dressed-up" and "dolled-up," since these two options were considered acceptable by, it is assumed, proficient native speakers, although the examiners had previously decided to reject these two options as unacceptable. In a subsequent exercise related to the use of the English preposition cum verb complement the teacher would know at least which words the students associate with it and take appropriate pedagogical action.

The reader will have noticed that the two measures "C" and "T" resemble a standard statistical measure, item difficulty. However, both take into account the fact that there are measurement instruments which do not have a fixed "correct" response to the exclusion of all others, and that the number of actual responses, correct and incorrect, yield important information about not only the group of subjects being examined but also about the ability of an examination instrument to generate this information. Cloze items, whatever else they may tell us about the readability of a given prose text or about other language skills with which

they are frequently correlated, can provide information about the vocabulary range of a group of subjects. In sense we are dealing with a "dictionary of expectency" paralleling Oller's "grammar of expectency" (1974) which can help predict the possible choice of words which students can be expected to draw from when deciding which word to insert into a blank space within the procedures defined as "cloze." What is thus described are the strategies that students use in selecting a finite set of words from a potentially infinite second-language vocabulary.

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"Family Reunions."

Before the Industrial (1) scattered populations and steam and later petrol engines ensured easy mobility, there could have been few family reunions as we know this ceremony at the present time, with its assembling of infrequently-encountered but still familiar figures and the consequent getting up to date with the events in other people's (2). There must have been indeed a good deal of "dropping-in," for if members of a (3) did not actually live (4) the same house, they were within easy (5) distance of one another. A man rarely went very far to look (6) a (7), and the girl who married someone from elswhere almost certainly said a final goodbye to her parents when she was taken off to her husband's home.

It was the Victorians who firmly (8) the family reunion. Present-day impressions of this important (9) are of a strange blending of formality, plain speaking with hovering dissension and a general (10) of natural warmth. (11) rarer such meetings were, it would seem, the more important it was to reflect prosperity and propriety. Firm attention was paid to suitable clothes and decorum while hostesses must demonstrate their ability to provide abundant meals in dignified surroundings. Children eyed little-known cousins with distrust and they, together with (12)-up daughters, had to (13) the company (14) piano-playing or recitations while their own parents beamed complacently. There was the barbed exchange of news, gossip, gloomy prognostications about absent relatives, reminiscences of Uncle Albert and shared (15) of childhood. The mask of formality gradually slipped and the natural individual, self-satisfied or envious, charitable or spiteful, assumed control.

Table 1

EST (Einstufungstest): students with no (known) previous exposure to cloze procedures

$n = 29$; $\Sigma X = 268$; $\bar{X} = 9.241$; $\Sigma X^2 = 182.8128$; $s_x = 2.555$

Student	Item 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
E1	X	X	X	X		X	X	•	•	X	X	X	X	X	X
E2	X	X	X	X		X	X		•	X	X	X	X	X	•
E3	X	X	X	X	•	X	X	•	•	X	X	X	X		
E4	•	X		X	X		X	X		•	X	X	X	X	X	•
E5		X	X	X	X		X	X	•		X	X	X	X	•
E6		X	X	X	X		X	X	•	X	X	X	X		
E7		X	•	X	X		X	X		•	X	X	X		X
E8		X	M	X	X		X	X		•	X	X	X		X
E9		X	X		X		X	•	X	•	•	X	X	•		X
E10			X	X	X		X	X		•	•		X	•	X	X
E11		X	X	X	•		X	X			•	X	X	X		
E12		X		X	X		X	•			X	X	X	X	X	•
E13		X		X	X		X	X		•	•	X	X	X		
E14			•	X	X		X	X	•	•	X	X	X	X		•
E15		X		X	X		X	X	•		X	X		X		•
E16					X		X	•		•	•	X	X	X		X
E17		X		X	X					•	X		X	•	X	•
E18		X		X	X	X	X			•	•					X
E19		X		X	X		X	•			X			X		
E20		X		X	X		X				X	X				
E21		X		X	X		X	•	•		X		•	•		
E22		X		X	X		X	•		•	X					
E23		X		X	X		X	•		•		X				
E24		X		X	X		X	•	•		X					
E25		X		X	X		X					X				
E26		X	•	X	X			•	•				•	•		
E27				X			X	X		•			•		X	
E28				X	X		X	•				X				
E29		X		X				•		•		X				

X - verbatim response
• - acceptable response
- unacceptable or no response

Table 2a

GKK (Grundkursklausur): student with previous practice with clozed texts of similar length during semester immediately prior to experiment.

$n = 94$; $\Sigma Y = 889$; $\bar{Y} = 9.458$; $\Sigma Y^2 = 469.5819$; $s_y = 2.247$
comparison sample: $n = 31$; $\Sigma Y = 295$; $\bar{Y} = 9.516$; $\Sigma Y^2 = 133.7424$; $s_y = 2.111$

Student	Item 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
G1	X	X	X	X		X	X	•	•	•	X	X	X	X	
G2	X	X	X	X	X	X	X	•		X	X	-	X	X	
G3	X	X		X		X	X	X	•	X	X	X	X		X
G4	X	X	X	X		X	X		X	•	X	X	X		X
G5	X	X	X	X		X	X	•		X	X	X	X	X	•
G6	X	X	X	X		X	X	•	•	•	X		X	X	X
G7	X	X	X	X		X	X	•	•	•	X		X	X	X
G8	X	X	X	X		X	X	•		X	X		X	X	•
G9	X		X	X		X		X	•	X	X	X		X	X
G10	X		X	X		X	X	X			X	X	X		X
G11	X	•	X	X	X	X	•	•	•	X	X	X	•		X
G12	X		X	X		X	X	•	•	X	X	X		X	•
G13	X	X		X		X	X	•	•	X	X	X	X		•
G14	X	X	X	X		X	X	•		X	X		•	X	•
G15	X	•	X	X		X	X		•		X	X	X	X	•
G16	X	X	X	X	X	X	•		X	X				X	•
G17	X	•	X	X		X	•			X	X		X	X	X
G18	X		X	X		X	X	•		X	X	X	•	X	
G19	X	X	X	X		X	X	X	•	•	X		X		
G20	X		X	X						X	X	X	X	X	X
G21	X		X	X		X	X			•	X	X	X		X
G22	X		X	X		X	X	X			X	X	X		•
G23	X		X	X		X	X			X		X	X		X
G24	X	X	X	X		X	X				X	X			X
G25	X		X	X		X	X			X	X	X			X
G27	X		X	X		X	•	•	•	•	X	X	X		X
G28	X		X	X		X	X	•		X	X	X	•		•
G29	X		X	X		X	•			•	X	X		X	X
G30	X	X	X	X					•	X	X	X	•	X	•
G31	X	•	X	X		X		X	•	•	X	X	X		
G32	X		X	X		X	X			X	X		•	X	•
G33	X		X	X					•	X	X	X	X	X	•
G34	X		X	X		X	•		•	X	X	X		X	
G35	X	X	X	X		X	•			•	X	X	X		
G36	X	•	X	X		X	X	•			X	X	X		
G37	X	•	X	X		X					X	X	•	X	X
G38	X	X	X	•		X	•			X		X	X	X	
G39	X	•		X		X	X			•	X	X	X		X
G40	X		X	X		X	X	X		•		X	•	X	•
G41	X	•		X		X	X			X	X		X	X	
G42	X		X	X				•		X	X	X		X	X
G43	X		X	X		X	X				X	X	X		•
G44	X		X	X		X	•	X				X	X	X	
G26	X		X	X		X	•	•	•	•	X	X	X		X

Table 2b

Student	Item 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
G45	X	•	X	•		X	•		•	X	X	X	•	X	
G46	X		X	•		X	X		•	X	X	X	•		•
G47	•		X	X		X	•		•	X	X	X	•		•
G48	X		X	X		X	•			•		X	•	X	X
G49	X	•	X	X		X	X	•			X	X	•	•	
G50	X		X	X		X	•			•		X	•	X	X
G51	X		X	X		X	X	•	•		X	X			•
G52	X		X	X		X	•	•	•		X			X	X
G53	X			X		X	X	•		•	X	X	X		•
G54	X		X	X		X	X			•	X	X	X		
G55	X		X	X	X	X	X		•	X		X	•		
G56	X	•	X	X		X	X	•			X		X		
G57	X			•		X	X			•		X	X	X	X
G58	X		X	X		X	X			•	X	X			
G59		X	X	X		X	X					X	•	X	
G60	X		X	X		X	X	•			X		X		
G61	X		X	X		X			•		X	X		X	
G62	X			X		X				X	X	X	•	X	
G63	X	•	X	X		X					X	X	X		
G64	X		X	X		X	X				X	X	•		
G65	X		X	X		X	X			X	X				
G66	•	•	X	X		X	•	•		X	X		X		•
G67	X	•	X	X		X	•	•	•	•		X		X	
G68	X		X	X		X	•	•			X	X	•		
G69	X		X	X		X	•			•	X	X			•
G70	X		X	X		X	X	•	•			X			
G71	•		X	X		X	•		•	X	X				X
G72	X	X	X	•		X	X			•	X				
G73	X		X	X		X	•	•			X	X			
G74	X		X	X		X	X			•				X	
G75	X		X	X			X				X	X	X		
G76	X		X	X							X	X	X		
G77	X		X	X		X	X					X			
G78	X			X		X	•	•	•	•	X	X	•		•
G79	X			X		X	•	•	•	•	X	X			•
G80	X	•	X	X		X	•			•		X			•
G81	X		X	•		X	•				X	X			•
G82	X			•		X					X	X		X	•
G83	•	•		X		X	X				X	X			•
G84	X			X		X	X	•			X		•		•
G85	X			X		X	•			•	X		X		
G86	X		X	X				•				X		X	
G87	X	X		X		X				•		X			
G88	X			•		X				•					X
G89			X	•		X	X		•				•		
G90			X	X						•		X			
G91				X		X				•		X			
G92			X	X		X			•						
G93						X	X								•
G94															

Table 3a

EST	GKK
ITEM 1	
V: revolution, 25	V: revolution, 84
A: age, 0	A: age, 3
N: area, devellopment, epoche, society	N: recession, 3 companies, development, profession, time, Ø
ITEM 2	
V: lives, 7	V: lives, 25
A: affairs, families	A: families, 7 affairs, 5 homes, 5
N: life, 5 housed, 4 Ø, 3 countries, family, house, lifes, live, matters, mind, unions	N: life, 19 lifes; 8 houses, 5 Ø, 4 countries, 3 live, 3 behalf, 2 family, 2 house, 2 affair, environment, familiar, history, home, minds, questions, spheres, times, view
ITEM 3	
V: family, 28	V: family, 78
N: reunion, 1	N: Ø, 6 community, 4 clan, family(reunion), generation, kind, relationship, reunion
ITEM 4	
V: in, 25	V: in, 84
A: together in, within	A: toggther in, 4 within, 3
N: at, commonly	N: Ø, 2 into, 1
ITEM 5	
V: walking, 0	V: walking, 5
A: hiking, 1	A: hiking, 0
N: reachable, 5 reaching, 3 Ø, 3 having, 2 long, 2 adquirable, for, holding, in, keeping, kept, large, long, of, overcome, passing, rahher, short, small	N: Ø, 25 reachable, 14 calling, 5 in, 4 reaching, 4 great, 3 little, 3 short, 2; sight, 2; taken, 2

Table 3b

along, approachable, attainable, accessible, away, bearable, big, connected, covered, far, going, keeping, near, overbridging, overcoming, passable, passing, ranging, regular, small, some, to, to keep, at, at a

EST	ITEM 6	GKK
V: for, 26		V: for, 87
N: after, 3		N: after, 4 zero, at, around

ITEM 7

V: wife, 14	V: wife, 50
A: girl, 4 woman, 4 bride, 1	A: bride, 10 girl, 9 woman, 9
N: Ø, a boy, family, home, member	N: job, 8 Ø, 5 relative, 3 a boy, flat

ITEM 8

V: established, 1	V: established, 9
A: supported, 6 introduced, 4	A: supported, 19 introduced, 10 started, 3 encouraged, maintained
N: celebrated, 2 Ø, attented, avoided, constituted, created, founded, grounded, influence, made, postulated, returned to, set, start, sustained, wanted, were used to	N: settled, 4 proclaimed, 3 believed in, 2; demanded, 2; finished, 2; invented, 2; practiced, 2; practised, 2; advocated, brought, consisted in, destroyed, discovered, establish, insisted in, insisted on, kept, presented, put forward, realized, recovered, stressed, tied, took care of, wished

ITEM 9

V: occasion, 0	V: occasion, 0
A: event, 8 meeting, 2 day, institution, reunion	A: event, 19 ceremony, 2; custom, 2; institution, meeting, 2; festivity, reunion, tradition
N: fact, 2; time, 2; act, aera, age, case, changing, environment, epoche, happening, events, measurement, period of time, Ø	N: fact, 8 Ø, 7; period, 7 act, 4; time, 4; idea, 3; step, 3; thing, 3; things, 3; inventure, 2, meetings, 2; adventure, aera, age, attempt, change, date, epoch, epoche, get together, happening, incident, invention, periods, progress, relationship, reunions, state, theme

Table 3c

EST		GKK
	ITEM 10	
V: lack, 7		V: lack, 32
A: feeling, 8 absence, 2; atmosphere		A: feeling, 28 absence, 2; atmosphere, 2
N: idea, 2; need, 2; aspect, attitude, expression, ignorance, missing, unuse, Ø		N: Ø, 9 touch, 6 missing, 3; wish, 3; desire, 2; attitude, decrease, lacking, loss, oppression; pleasure, view
	ITEM 11	
V: the, 20		V: the, 70
N: as, 4; Ø, 3; much, yet		N: as, 8; Ø, 8 the more, 2; though, 2; getting, how, increasing, the less
	ITEM 12	
V: grown, 21		V: grown, 68
N: brought, 2; growing, 2; Ø, 2; divided, educated, made		N: brought, 8 growing, 4; Ø, 3; dressed, 2; bringing, drawn-up, getting, grow, higher, pin, run, torn, well brought up
	ITEM 13	
V: entertain, 12		V: entertain, 39
A: amuse, 5; join, 3 delight		A: amuse, 13 join, 7; delight, 4; please, 3, impress
N: Ø, chair, complete, enjoy, leave, listen to share, take		N: enjoy, 6; Ø, 4 follow, 3, share, 3, bear, 2; adjoin, assemble, attend, be, delectate, endure, entertained, give, have, stand, support
	ITEM 14	
V: with, 10		V: with, 36
N: by, 9; in, 4; of, 3; for, study, to		N: by, 39; of, 9, for, 3; Ø, 2; at, 2 on, to, to hear
	ITEM 15	
V: memories, 8		V: memories, 26
A: adventures, 7		A: adventures, 23; experiences, 5; impressions, problems, reminiscences
N: Ø, 3; events, 3; stories, 2; minds, happiness, reminds, souvenirs, thoughts		N: events, 10; stories, 7; remembrance, 4; history, 3; memory, 3 years, 2; remembers, 2; Ø, 2 days, laughters, narrative, photos, remembrances, times

Table 4

Item	EST (n = 29)	GKK (n = 94)
1	25 + 0 = 25/86%	84 + 3 = 87/93%
2	7 + 2 = 9/31%	25 + 17 = 42/45%
3	28 + 0 = 28/ 9%	78 + 0 = 78/83%
4	25 + 2 = 27/93%	84 + 7 = 91/96%
5	0 + 1 = 1/ 4%	5 + 0 = 5/ 5%
6	26 + 0 = 26/93%	87 + 0 = 87/93%
7	14 + 9 = 23/79%	50 + 28 = 78/83%
8	1 + 10 = 11/38%	9 + 34 = 43/46%
9	0 + 13 = 13/45%	0 + 30 = 30/32%
10	7 + 10 = 17/59%	32 + 32 = 64/68%
11	20 + 0 = 20/69%	70 + 0 = 70/75%
12	21 + 0 = 21/72%	68 + 0 = 68/72%
13	12 + 9 = 21/72%	39 + 24 = 63/67%
14	10 + 0 = 10/35%	36 + 0 = 36/38%
15	8 + 7 = 15/62%	26 + 31 = 67/71%

Table 5

Item	EST (n = 29)			GKK (n = 94)		
	C	T	C - T	C	T	C - T
1	.20	.17	+.03	.25	.08	+.17
2	.21	.48	-.27	.17	.25	-.08
3	.50	.07	-.43	.11	.10	+.01
4	.60	.17	+.43	.60	.05	+.55
5	.11	.66	-.55	.06	.38	-.32
6	.50	.07	+.43	.20	.05	+.15
7	.44	.31	+.13	.44	.10	+.34
8	.16	.66	-.50	.19	.33	-.14
9	.33	.62	-.29	.34	.19	-.15
10	.31	.45	-.14	.25	.17	+.08
11	.20	.17	+.03	.11	.10	+.01
12	.14	.24	-.10	.07	.15	-.08
13	.33	.41	-.08	.27	.23	+.04
14	.14	.24	-.10	.11	.10	+.01
15	.20	.35	-.15	.30	.21	+.09