

German proficiency measures in a Greek L1 attrition context

GIACOMO KLEIN

Aristotle University of Thessaloniki & Università di Trieste
giacomok@enl.auth.gr / gklein@units.it

ABSTRACT

This study concerns first language attrition among Greek immigrants in Germany, focusing in particular on the results of two German proficiency tests: a reading comprehension and a cloze test. The data collection took place both *in loco*, in the cities of Munich, Nuremberg and Augsburg, and during online interviews. The 66 participants of the study (41 female and 25 male participants) were selected based on the age at emigration (mean: 26.18 years; SD: 7.76), length of residence in Germany (mean: 16.23 years; SD: 9.7) and age (mean: 42.41; SD: 9.5). First of all, some data about the participants' social background, education, L1 and L2 use and exposure will be presented. Then we will discuss the results of the German proficiency tests both with a quantitative approach and by focusing on errors and error categories in the cloze test. Finally, we will present some examples of mistakes made by the participants and draw some conclusions using a qualitative approach.

KEYWORDS

L1 attrition, proficiency measures, cloze test, Greek, German

1. INTRODUCTION

The purpose of this article is the quantitative and qualitative analysis of errors made by the participants in a study of Greek L1 attrition in Germany with respect to a German cloze test. The following paragraphs will provide an overview of L1 attrition studies, a brief presentation of the participants' social background, attitudes and motivations before presenting the analysis of the aforementioned cloze test errors.

1.1. L1 ATTRITION: BRIEF LITERATURE OVERVIEW

First language (L1) attrition refers to the non-pathological loss of L1 or parts of L1 by an individual or a speech community in an L2 dominant environment (see Gürel 2004). It was also defined as “the non-pathological decrease in proficiency in a language that had previously been acquired by an individual” (Kopke & Schmid 2004: 3). Attrition can be described as the process taking place when proficiency in an L2 takes over on one's L1 proficiency level. For this reason, it is important to bear in mind the importance of defining L1 attrition as a nonpathological development or as a development of language skills. While linguists initially referred to this phenomenon as “language loss” (Lambert & Freed 1982), today language attrition is a very specific phenomenon whereby the migration of an individual from his or her home country to a country with a language other than his or her L1 can lead to variations in the balance of dominance between L1 and L2.

Studies on L1 attrition have concentrated on different aspects ranging from vocabulary, morphology, phonology, syntax and pragmatics, and concern both oral and written language. These analyses have revealed the presence of various levels of attrition and cover numerous language combinations of L1 and L2 worldwide. Nevertheless, we are not aware of any language attrition studies of Greek L1 speakers in Germany. This factor, together with the large presence of Greeks in Germany, prompted us to study this field, which we present here from an L2 proficiency perspective.

2. OUR POPULATION

2.1. SOCIAL BACKGROUND FEATURES

We used two questionnaires, the Social Background Questionnaire and the Attitudes and Motivation Questionnaire, in order to gather information concerning extra-linguistic elements, such as the participants' social background

as well as their attitude towards Germany, Greece, Germans, Greeks, and language learning in general. These questionnaires, described in the next subsections, are part of Monica Schmid's L1 attrition test battery available online¹ and have been translated into various languages. After gathering the data, we coded them in order to analyse them quantitatively. The participants have a mean age of 42.41 years (SD: 9.5) and their mean age at emigration is 26.18 years (SD: 7.76), while their mean length of residence in Germany is 16.23 years (SD: 9.7): all these data place our population in the category of attriters according to the guidelines proposed by Köpke and Schmid (2004). As far as education is concerned, the study of the abovementioned questionnaires shows that the majority of beginners obtained a Master's degree (24), a Bachelor's degree (19) or a high school diploma (11). With regard to contact with and exposure to L1 the L2, it emerged that German is mainly the language of work while Greek is the language used in the family sphere. The Attitudes & Motivation questionnaire does not reveal any particularly negative or positive perceptions by the participants regarding Germans, their Greek compatriots or their new homeland, Germany. One clear trend concerns attitudes towards language learning, which is seen by all participants as something extremely positive and important for personal and professional development.

2.2. L1 & L2 SELF-EVALUATION

In addition to information on social background and attitudes, participants also carried out a self-assessment of their language skills in Greek and German. For this analysis we adopted two approaches: on the one hand, we asked participants to assess their general Greek and German skills before settling in Germany and now; on the other hand, we asked them to self-assess their skills in both written and oral production and comprehension. The diachronic approach showed that beginners felt that their German had improved a lot over the years of their stay in Germany, whereas they did not perceive a significant change in their proficiency in Greek. As far as the various comprehension and production skills in L1 and L2 are concerned, no major differences were detected between the two languages.

1 <https://languageattrition.org/resources-for-researchers/experiment-materials/> (accessed 10.11.2022).

3. PROFICIENCY TESTING: METHODS & INSTRUMENTS

3.1. READING COMPREHENSION

In order to gather more data on the participants' proficiency level in Greek and German, we chose not to limit ourselves to the cloze test but to administer a reading comprehension with 5 multiple-choice questions as well. This exercise was conducted in both languages at a C1 reference level: we chose this particular level based on the assumption that an attriter is someone who has achieved a very high level of proficiency in the L2 and may have lost something in their L1. Results of these tests were coded and then compared between each other. The topic of the two comprehension texts was generic, the text length was the same. For this part of the study we used C1 exams samples (ÖSD Zertifiakt for German and Centre for the Greek Language (KEΓ) samples as far as Greek is concerned.

3.2. CLOZE TEST

The second proficiency test we administered to the participants was a cloze test of approximately 250 words with 15 gaps. It is a type of task often used in attrition studies (cfr. Gürel 2004; Bylund & Díaz 201; Ribes & Llanes 2015; Karayayla & Schmid 2019). For this study we decided to use two texts of C1 proficiency level, again assuming that this level can correspond to the L1 and L2 skills of the attriters. The German cloze test is an exercise from the ÖSD C1 certification tests.² Since the similar Greek language certifications tests do not include such exercises, we chose to select a text of the same difficulty and length from the database of the Greek Language Center (KEΓ) and to remove 15 elements (nouns, verbs, adjectives, prepositions and conjunctions) that correspond to C1 level of Greek proficiency.³ Results from the two cloze tests were then analysed, coded and compared.

2 https://www.osd.at/wp-content/uploads/2018/10/zc1__modellsatz__modul2__schriftlich.pdf (accessed 10.11.2022).

3 <https://www.greek-language.gr/certification/dbs/teachers/index.html> (accessed 10.11.2022).

German cloze test

Die süßen Seiten des Lebens
Josef Zotter hat sich der Kunst der Schokoladenherstellung (0) verschrieben, um zu zeigen, dass Schokolade mehr sein kann, (1) _____ sie üblicherweise ist. Die Kakaobohne, der Ursprung aller Schokoladenträume, beinhaltet über 1000 Aromenkomponenten, von (2) _____ 400 bereits näher bestimmt sind. Mit seinen handgeschöpften Schokoladen begann Zotter all diesen Geschmacksnuancen auf den Grund zu (3) _____. Die Marke Zotter (4) _____ für Vielfalt und individuellen Geschmack. Schließlich hat jeder Mensch seinen eigenen Kopf und folglich auch seinen eigenen Bauch und Gaumen. Diesen unterschiedlichen Vorlieben möchte Zotter mit seinem Angebot (5) _____ werden: Rund 365 unterschiedliche Schokoladenartikel (6) _____ Zotter im Sortiment. Und (7) _____ Herr Zotter ein ruheloser Erfindergeist ist und sich immer und überall Anregungen (8) _____, kommen jährlich neue Sorten dazu. Das Experimentieren und die unbändige Neugierde für Rohstoffe sind der pulsierende Motor der Zotter Manufaktur. Mit jeder Entscheidung, die Josef Zotter (9) _____, versucht er, sich gegen die Standardisierung von Geschmack, Lebensmitteln und in letzter Folge auch des Lebens zur Wehr zu (10) _____. Was (11) _____, ist das Produkt und nicht der Verkaufserfolg. Nur so hat das Besondere eine Chance. Wenn wir nun Ihr (12) _____ geweckt und Sie Lust auf mehr Schokolade bekommen haben, besuchen Sie uns doch in unserer Manufaktur in Bergl. (13) _____ Sie die Gelegenheit, (14) _____ einer Verkostung teilzunehmen. Wir (15) _____ Sie dabei in die Kunst der Schokoladenherstellung ein.

Greek cloze test

Παχυσαρκία
Η Ελλάδα διεκδικεί την πρώτη θέση (1) _____ παιδική παχυσαρκία. Τα παιδιά τρώνε λιγότερο υγιεινά, αλλά και αθλούνται λιγότερο. Αυτό συμβαίνει κυρίως στις μεγαλουπόλεις, (2) _____ υπάρχει περιορισμένος χώρος. Ο (3) _____ του σχολείου είναι πολύ σημαντικός για την ενημέρωση των παιδιών. Η περιορισμένη άσκηση σε (4) _____ με την κακή διατροφή δημιουργούν τη βάση (5) _____ καρδιοαγγειακές παθήσεις, ήδη από την παιδική ηλικία. (6) _____ τα παιδιά και τους εφήβους που δεν αθλούνται, ούτε οι ενήλικες αθλούνται συστηματικά. Δεν υπάρχουν υποδομές (7) _____ ασκηθούν συστηματικά και τα προβλήματα της καθημερινότητας είναι πολλά. Τα προβλήματα αυτά (απαιτητικά ωράρια εργασίας, δυσκολίες στη μετακίνηση, η αίσθηση κόπωσης μετά τη δουλειά) έχουν ως (8) _____ την ελάχιστη ή μηδενική συμμετοχή σε (9) _____ είδους αθλητική δραστηριότητα. Η συχνότητα της άσκησης (10) _____ και η διάρκειά της παίζουν πολύ σημαντικό ρόλο επίσης. Παγκόσμιες έρευνες δείχνουν ότι η κατάλληλη (11) _____ για χαλαρή άσκηση είναι πέντε φορές την εβδομάδα ή τρεις φορές την εβδομάδα για (12) _____ άσκηση. Εναλλακτικά, μπορούμε να (13) _____ τη χρήση του αυτοκινήτου και να περπατάμε ή να χρησιμοποιούμε το ποδήλατο για να (14) _____ μικρές αποστάσεις. Μπορούμε ακόμη να (15) _____ τις σκάλες για να φτάσουμε σπίτι μας ή να αθλούμαστε στο γυμναστήριο. Λύσεις υπάρχουν αμέτρητες, αλλά δυστυχώς αυτό που λείπει είναι η όρεξη και η κρατική μέριμνα.

Table 1 – German and Greek c-test

4. RESULTS

We will present below the results that emerged in the proficiency testing in German and Greek, with regard to both the reading task with multiple choice questions and the cloze test.

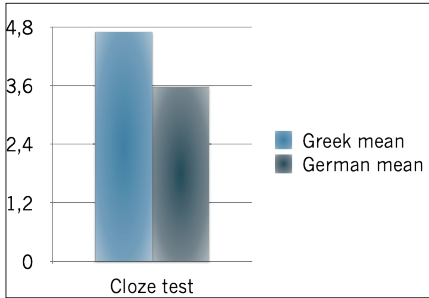


Table 2 – Multiple-choice test results

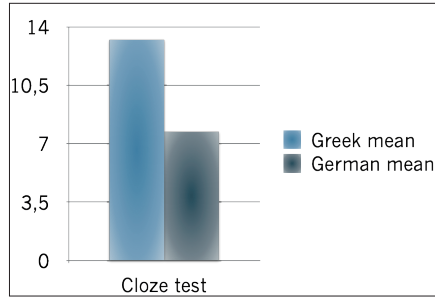


Table 3 – Cloze test results

As we can see, in both proficiency tests performed by the participants the results are better in Greek, i.e. in their L1. To verify this difference, a two-tailed t-test was performed, which confirmed the presence of a statistically significant difference between the results in Greek and German ($p < 0.05$). This difference in proficiency manifested itself in both tests but the most striking results were in the cloze test, where we observed a difference in correct answers of about 50%. This result prompted us to further analyse the data at our disposal, both from a quantitative and a qualitative point of view. The purpose of this further analysis was to determine which the most frequent errors in the German cloze test were and then provide some explanatory examples. We then divided the errors made by the participants into the various lexical categories (nouns, adjectives, verbs, conjunctions etc.) and also divided them into content words and grammar words. Since this analysis did not provide significant results – the discrepancies between the various types of errors did not seem to lie in the lexical categories – we decided to use the error categories of cloze tests proposed by Schmid (2004).

Error category	Description
0	Empty space
1	Incorrect lexical stem and incorrect word class
2	Incorrect lexical stem but correct word class
3	Correct lexical stem but incorrect word class
4	Odd solution
5	Acceptable variant with spelling error
6	Incorrect spelling error
7	Acceptable variant

Table 4 – Schmid's categorization of cloze test errors

This method of categorising errors starts with a zero score, corresponding to a blank space and arrives, following a scale from very serious to less serious errors, at an acceptable variant. Below are the errors recorded in the German c-test using this coding method.

Error type	Number of errors	Percentage
Empty space	142	27.63%
Incorrect lexical stem and incorrect word class	49	9,53%
Incorrect lexical stem but correct word class	221	42.99%
Correct lexical stem but incorrect word class	8	1.56%
Odd solution	28	5.45%
Acceptable variant with spelling error	1	0.19%
Incorrect spelling error	4	0.78%
Acceptable variant	61	11.87%
Total n. of errors	513	100%
Total n. of correct answers	431	
Total n. of answers given	945	

Table 5 – Mistakes in German c-test

Let's also take a look at the breakdown of errors in the Greek c-test in order to understand what the differences were in the results of the same exercise in L1 and L2.

Error type	Number of mistakes	Percentage
Empty space	26	8.87%
Incorrect lexical stem and incorrect word class	18	6.14%
Incorrect lexical stem but correct word class	42	14.33%
Correct lexical stem but incorrect word class	7	2.39%
Odd solution	77	26.28%
Acceptable variant with spelling error	3	1.02%
Incorrect spelling error	28	9.56%
Acceptable variant	92	31.40%
Total n. of errors	293	100.00%
Total n. of correct answers	652	
Total n. of answers given	945	

Table 6 – Mistakes in Greek c-test

A very clear trend emerges from this categorisation, showing that the most serious mistakes were made in the German c-test. Whereas in Greek the errors are predominantly acceptable variants (31.4%) or odd solutions (26.28%), in German the participants showed problems with lexical stems (42.99%) and word classes (27.63%). This subdivision also allowed a recalculation of errors, going beyond

the simple right solution-wrong solution distinction. However, even when comparing the number of completely correct answers (score 9/9 in Schmid's grading scale), we obtain a statistically significant difference between German and Greek ($p < 0.05$).

	Greek	German
Mean	7.76	5.36
SD	2.42	3.81

Table 7 – Recalculation of mistakes in c-test

Having now a clear picture of which language proved to be the dominant one in this task, let us look at five examples for each frequent error category in the German c-test, again following the categorisation of errors proposed by Schmid (2004) and adopted in this part of the study.

Error type	Examples
Incorrect lexical stem and incorrect word class	<i>zu</i> instead of <i>gerecht</i> (gap 5) <i>neues</i> instead of <i>zählt</i> (gap 11) <i>zeigen</i> instead of <i>gerecht</i> (gap 5) <i>Marke</i> instead of <i>trifft</i> (gap 9) <i>Schokolade</i> instead of <i>steht</i> (gap 4)
Incorrect lexical stem but correct word class	<i>diesen</i> instead of <i>denen</i> (gap 2) <i>bringen</i> instead of <i>führen</i> or <i>laden</i> (gap 15) <i>untersuchen</i> instead of <i>gehen</i> (gap 3) <i>bringen</i> instead of <i>setzen</i> (gap 10) <i>eingeschlossen</i> instead of <i>gerecht</i> (gap 5)
Odd solution	<i>Appetit</i> instead of <i>Interesse</i> (gap 12) <i>enthält</i> instead of <i>führt</i> (gap 6) <i>hält</i> instead of <i>führt</i> (gap 6) <i>ist</i> instead of <i>steht</i> (gap 4) <i>seitdem</i> instead of <i>da</i> (gap 7)
Spelling error	<i>ungefer</i> instead of <i>ungefähr</i> <i>interesse</i> instead of <i>Interesse</i> <i>je weils</i> instead of <i>jeweils</i> <i>halt</i> instead of <i>hält</i> <i>warnimmt</i> instead <i>wahmimmt</i>
Acceptable variant	<i>weil</i> instead of <i>da</i> (gap 7) <i>hat</i> instead of <i>führt</i> (gap 6) <i>wirbt</i> instead of <i>steht</i> (gap 4) <i>Dort haben</i> instead of <i>Nutzen</i> (gap 13) <i>wichtig ist</i> instead of <i>zählt</i> (gap 11)

Table 8 – Examples of errors in German c-test

As can be seen in the examples, the errors committed by the participants reflect a variety of proficiency levels, from a very high level of severity down to minor imperfections or acceptable variants. Participants with a very low proficiency level filled in very few spaces and/or made very serious errors; we even encountered tests with no answers provided. On the other hand, participants with a strong L2 showed that they could cope with this task and even, in some cases, proposed possible solutions that demonstrated their proficiency in the German language. Doing the maths, however, we can see that on average the gap between Greek and German remains strong, an element that prompts reflection regarding further experiments and analyses in the future.

5. CONCLUSION, LIMITATIONS AND FURTHER RESEARCH

In conclusion, we can say that the number of errors recorded in the cloze test is significantly higher for the German part (L2). This result was registered both after the initial approach, where we divided the participants' answers into completely right or completely wrong answers, and after the second analysis of categorising errors on a scale of 1 to 9 according to severity. It should also be emphasised, by way of conclusion, that the result of the L2 cloze test does not reflect what the participants had stated in their self-assessment (can-do scale) with regard to their German skills. This aspect, however, was then analysed by means of a statistical correlation with surprising results. Finally, we would like to reiterate that the most frequent types of errors are different in the two languages: in Greek, errors are generally less serious, whereas in German, serious errors, i.e. those indicating partial or no comprehension of the text or an inability to complete the task, are the most frequent. It is certainly difficult to establish the level of proficiency on the basis of a few linguistic tasks that refer, among other things, only to the written use of the language. It is precisely for this reason that the next parts of this study will extend to spoken language, with regard to both German, and Greek, in order to detect possible attrition-related features in the participants' L1 oral production.

REFERENCES

- Bylund E. & Díaz M. (2012) "The effects of heritage language instruction on first language proficiency: A psycholinguistic perspective", *International Journal of Bilingual Education and Bilingualism*, 15:5, pp. 593-609.
- Gürel A. (2004) "Selectivity in L2-induced L1 attrition: A psycholinguistic account", *Journal of neurolinguistics*, 17, pp. 53-78.
- Karayayla T. & Schmid M. (2019) "First language attrition as a function of age at onset of bilingualism: First language attainment of Turkish-English bilinguals in the United Kingdom", *Language Learning*, 69, pp. 106-142.
- Köpke B. & Schmid M. (2004) "First language attrition: The next phase", in *First language attrition: Interdisciplinary perspectives on methodological issues*. Ed. by M. Schmid, B. Köpke, M. Keijzer & L. Weilemar, Amsterdam/Philadelphia, John Benjamins, pp. 1-43.
- Lambert R. D. & Freed B. F. (1982) "The Loss of Language Skills", Rowley, MA, Newbury House Publishers.
- Ribes Y. & Angels L. (2015) "First language attrition: The effects of acculturation to the host culture", *Procedia - Social and Behavioral Sciences*, 173, pp. 181-185.
- Schmid, M. S. (2004) "A new blueprint for language", in *First language attrition: Interdisciplinary perspectives on methodological issues*. Ed. by M. S. Schmid, B. Köpke, M. Keijzer & L. Weilemar, Amsterdam/Philadelphia, John Benjamins, pp. 349-363.