MORPHOSYNTACTIC ABILITIES IN GREEK DEAF UNIVERSITY STUDENTS

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Abstract

Recent research shows that deaf subjects encounter difficulties in the development of their writing abilities. In particular, the major conclusions which can be drawn by the existing data reveal that deaf subjects display poor performance in syntax, in vocabulary and in various aspects of written language. Given that Modern Greek exhibits complex morphological patterns and its word order is relatively free, the goal of the present article was to compare the performance of Greek deaf adults in the areas of morphology and syntax compared to that of their hearing counterparts. Towards this goal, two different groups of the same age were formed. The first group consisted of ten deaf adults (with hearing parents), whereas the second group consisted of ten hearing subjects. Our subjects were requested to write a short essay (up to 500 words) on the results of the economic crisis experienced in Greece. All texts produced by deaf subjects showed certain morphosyntactic deviations from Standard Modern Greek norms compared to the ones produced by their hearing counterparts. The results of our study are in line with the findings of existing literature regarding the written abilities of deaf adults.

INTRODUCTION

Theory and practice suggest that deaf subjects experience certain difficulties in their writing and reading skills (Domínguez and Alegria 2010). Most specifically, deaf people produce shorter sentences and less complex syntactic structures compared to their hearing peers, their lexicon size is smaller and they face problems when it comes to the production of relative, subordinated and nominal clauses. Moreover, their difficulties are more evident in grammatical morphology, in that they omit, substitute and or add morphemes (e.g. Anderson 2006; Ajello, Marotta, Mazzoni and Nicolai 2002; Blamey 2003; Paul 2001).

In addition, they usually rely on stereotypical language and they use more nouns, determiners and verbs than people with normal hearing (e.g. Maxwell and Falick 1992). These conclusions are drawn mainly from studies which investigated the writing deficits of deaf English subjects (e.g. Paul and Quigley 1994). English is a language with simple morphology compared to other languages, such as Turkish, which exhibit more complex morphological patterns (Lardiere 2006). Nevertheless, similar findings are detected in studies with a focus on languages with rich morphology, such as Italian (e.g. Fabbreretti, Volterra and Ponntecorvo 1998).

To the best of our knowledge, thus far no experiment was carried out, so as to study the morphological and syntactic abilities of Greek deaf adults. Modern Greek is a highly inflectional language, that is to say, the basic word forms listed in a dictionary are modified in various ways according to their syntactic function in a given context (Holton, Mackridge and Philippaki-Warburton 1997). Taking into account that mastery of morphology can facilitate vocabulary acquisition (e.g. White, Power and White 1989) and that deaf students have difficulty with syntax and vocabulary (e.g. Antia, Reed and Kreimeyer 2005), the primary goal of the current study was to examine the morphosyntactic deviations of Greek deaf subjects compared to their hearing counterparts.

METHOD

Subjects

The subjects of the study were 10 hearing students (5 males and 5 females) and 10 deaf students (with hearing parents) (6 males and 4 females) from various departments of the University of Thessaly. Their mean age was 21 years old. The 10 deaf students were prelingually, profoundly deaf with hearing losses greater than 90 dB, none of them reported to wear hearing aids and they were active members deaf communities. The sociocultural status of both hearing and deaf subjects could be defined as low to middle.

Procedure

Our subjects were divided into two groups, the first one consisting of the 10 hearing students and the second one consisting of their 10 deaf peers. The experimenters for the study were a deaf native signer of the Greek Sign Language and a hearing graduate student. The experimenters began the study by describing the rationale of the experiment and the task. In particular, our subjects were asked to write an essay related to a current news event, namely the results of the economic crisis on the Greek society. The length of the essay was determined up to 500 words. The essays were all written on computers, but the students were not allowed to use the word processor's spell checker. Our subjects were given two hours to complete their essay.

Results and Discussion

During the analysis of our results we have selected certain areas of both syntax and morphology to focus on. More specifically, in the domain of syntax we drew our attention to the number of sentences, the use of articles, the word order, the punctuation and finally the use of prepositions.

Firstly, we calculated the number of sentences of the texts produced by both groups. This task was straightforward for the hearing subjects, but difficult for the deaf ones. The difficulty arises from the fact that the written language produced by deaf people is far from standard norms (Fabbreretti, Volterra and Ponntecorvo 1998). Therefore, in order to avoid subjective judgments and in cases where there was a disagreement by the two researchers we asked a third examiner to classify the sentences of the texts by the deaf subjects as acceptable or non acceptable based on the syntactic rules of Modern Greek. On a total of 1.200 sentences in the 10 essays written by the 10 deaf subjects, 75% were classified as acceptable and written according to Greek language syntactical rules. On the other hand, the sentences written by the hearing subjects were all accepted. In this group of essays 895 sentences were identified. This finding shows that the deaf subjects produced longer texts which has previously been found by other researchers too (e.g. Fabbreretti, Volterra and Ponntecorvo 1998).

Secondly, we considered the use of articles. Modern Greek has two articles, definite (ο, η, το 'the") and indefinite (ένας, μία/μια, ένα "a/an"). Both articles are declined for case and gender (Holton, Mackridge and Philippaki-Warburton 1997). Hearing subjects faced no problems with regard to the acceptable distribution of both articles. On the other hand, deaf subjects tended to overuse the definite article while avoiding the indefinite. This finding is similar to the one reported by Channon and Sayers (2007), who attribute this finding to the fact that definite articles occur far more often in language.

Thirdly, we considered the word order violations. In Modern Greek, the position of the main constituents of the sentence (i.e. verb, subject and object) is very flexible and various combinations are allowed, so as to produce well-formed sentences (Holton, Mackridge and Philippaki-Warburton 1997). For this reason, only truly ill-formed sentences were considered. Thus, in the essays written by the hearing subjects where 895 sentences were identified, only 5 were classified as

ungrammatical, whereas in the essays of the deaf subjects this number raised to the 25 sentences. Therefore and given that in 900 sentences (75% of the 1.200 sentences of the essays written by the deaf subjects) only 25 were ill-formed it can be concluded that word order violation is not an issue in the syntactic development of the Greek deaf people.

Next, we examined the punctuation of the essays written by both groups. The commonest types of punctuation are the full stop (.) and the comma (,). In the essays produced by the hearing subjects there was a consistent misuse of the comma, except from the cases where it is easily predictable (such as the separation of two sentences joined by *αλλά* "but" or separation of words where these serve the same syntactical role. This reflects the lack of knowledge for the acceptable environments of the appearance of the comma, a fact which is often criticized by many school teachers. On the other hand, in the essays written by the deaf subjects, it was noticed that full stops and commas were avoided more often than overused. This finding is also reported by Channon and Sayers (2007), who found that commas and other types of punctuation are more likely to be substituted by full stops than the reverse tendency and words like *and* or *because* are also substituted by full stops.

Fourthly, we examined the use and distribution of the prepositions. In Modern Greek, two are the basic prepositions, namely *από* "from, since, by, than, made of" and *σε* "at, in, on, to, into, on to" (Holton, Mackridge and Philippaki-Warburton 1997). The hearing subjects faced no problems with the acceptable use and distribution of the above mentioned as well with other Greek prepositions. On the contrary, the deaf subjects overused prepositions more than they avoided them and they also changed one preposition for another. Hanson (1993) and Channon and Sayers (2007) report similar findings. Various researchers attribute such finding to the assumption that the ability to use grammatical morphology may depend on phonological processes which in turn may be difficult for deaf people to master effectively (e.g. Hanson 1991; Volterra and Bates 1989).

Moving on to morphology and vocabulary, it should be noted that Modern Greek uses a historical orthography instead of a phonetic one. This means that words that derive from Ancient Greek are spelled the same way as they were written in ancient times. Moreover, it is worth mentioning that there are many variations in spelling which are due to different educational practices when the Greek speakers were at school (Holton, Mackridge and Philippaki-Warburton 1997). In addition to this, Modern Greek until recently experienced a diglossic situation, where the spoken variety (δημοτική) competed an artificial linguistic form (καθαρεύουσα) restricted to the written speech. The language question ceased to exist in 1976 when the spoken form (i.e. δημοτική) was recognized as the official language of education and administration (Moschonas 2009).

The major patterns of morphological and lexical deviations, which were found in the essays of both groups are omissions (i.e. absence of a linguistic item in a compulsory context), additions (i.e. presence of a linguistic item in a context that is not required), substitutions (i.e. substitution of an expected item or form by another one) and spelling mistakes. In particular, the hearing subjects produced only spelling mistakes attributed to the historical orthography and hence the problematic knowledge of a word's spelling. At this point, it should be noted that a very common mistake made by the hearing students was the confusion between the 2pl. (=second person of the plural number) of the Indicative of the Present tense, which ends in *–τε* (pronounced as "te") and the 3sg. (=third person of the singular number) of the Indicative of the Passive Present tense, which ends in *–ται* and is pronounced the same way as the 2pl ending.

In contrast, the deaf subjects made errors of all the categories mentioned above, namely, omissions, additions, substitutions and spelling mistakes. For instance, Modern Greek exhibits many consonant clusters with three or more consonants in a row, such as *–χθρ-, -στρ-* and so on. Deaf subjects tended to omit

almost consistently one out of three consonants. Additionally, they added linguistic items, such as articles in a context that was not required or they added more articles than just one before a noun or an adjective. Finally, the deaf subjects substituted both prepositions and words with others non suitable for the given context. For example, instead of using the preposition *κατά* “in” in the noun phrase *κατά τη γνώμη μου* “in my opinion”, they used the preposition *για* “for”. Moreover, they used nonstandard words instead of the standard ones. By way of illustration, a deaf subject mentioned the fact that due to the economic crisis the number of suicides has increased. He concluded his point by using the noun *χάσιμο* instead of *απώλεια* in the noun phrase *Αυτό το χάσιμο ανθρώπων* “This loss of people”. Both words stand for “loss”, but the noun *χάσιμο* is more colloquial than the noun *απώλεια* which is mainly used in more formal contexts. This nonstandard substitution may be relevant to the language question mentioned above and the lack of knowledge that certain contexts and registers require the presence of certain lexical items.

To sum up, our study replicated previous findings with regard to the writing abilities of adult deaf subjects. The examination of their abilities was directly compared to the ones demonstrated by their hearing peers and showed that deaf subjects have difficulty with syntax, morphology and vocabulary. Nevertheless, our conclusions should be treated as tentative ones, since our research is in its initial phase. Hence, more analysis is needed in order to explore in a more detailed manner the full range of writing abilities of the deaf adults in Greece. Future directions should include a larger population and focus on more aspects of the written speech, such as the mastery or not of the function words, their vocabulary depth and lastly the coherence of their writing.

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