The acquisition of Modern Greek
word order by adult L2 learners

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Abstract
This paper is concerned with the acquisition of word order (WO) patterns by adult second language (L2) learners of Modern Greek. The question addressed here is whether L2 learners transfer the WO of their native language (L1), especially during the early phases of L2 acquisition, or whether they follow the same developmental pattern, regardless of their L1. Comprehension, production data and results from an acceptability judgement test suggest that learners’ L1 not only affects the rate of acquisition but also consists the starting point of L2 acquisition.

Key words: case marking/markers, competence, Full Transfer/Full Access Model, free-Word Order language, performance, strict-Word Order language, syncretism, Universal Grammar

1. L2 acquisition of word order
1.1 Studies on word order
The acquisition of word order (WO) has been one the focus of a great number of studies and one topic of considerable debate in the L2 literature. With respect to the question of the accessibility of Universal Grammar (UG), the two extremes of the theoretical continuum seem to be the non-access hypothesis and the full access hypothesis.

Clahsen and Muysken (1986) studied the acquisition of German WO by adult L2 learners and compared the developmental stages of L2 acquisition with those found in L1. They claimed that L2 learners start with an SVO hypothesis,
which is gradually modified, whereas children realise from the very beginning the V-final character of German. This difference is due to the different means of acquisition: adult L2 learners “can only rely on general learning strategies”, whereas children “have access to the ‘move-alpha’ matrix” (: 93).

Their analysis and conclusions have been challenged by other studies, e.g., duPlessis, Slobin, Travis and White (1987), who showed that the L2 German patterns can be accounted for by a different analysis of German (namely Travis 1984, in Epstein, Flynn and Martohardjiono 1996) and that L2 data can be interpreted within a UG-consistent analysis.

From a different perspective, Schwartz and Sprouse (1994) looked at the acquisition of German V-placement by an adult Turkish learner. Their aim was to investigate the influence of the L1 structure on the acquisition of the L2. The difference from many previous studies is that they tried to analyse the L2 system on its one right, i.e. not in terms of match or mismatch with the target language. Their finding that the Turkish learner starts with SVO is explained by certain mechanisms that are related to the Turkish clause analysis. In subsequent developmental stages, the learner adds new mechanisms for Nominative case checking, not found in Turkish. Their conclusion is that the target-language data may not be sufficient to force retraction from the L1 system, but although the native speaker’s and the L2 learner’s linguistic knowledge may not be identical, they are nevertheless of the same type.

The problem is that studies like the above try to account only for V-placement. There is therefore a lack in the acquisition of WO, since such studies investigate only a part of a bigger issue. Moreover, research until now involved analysis of either production or comprehension data (or acceptability judgements). But in order to have a complete picture of the developmental route of WO acquisition, a combination of different kinds of data is required. The aim of this study is to sketch a more complete picture of the acquisition of WO by L2 adult learners with different L1s.

1.2 Greek word order

The target language in our study is Greek, an inflected language with fused (for case, gender and number) affixation on pro/nominals and adjectives. The fact that Greek is a free WO language has been seen as consequence of its inflected character. By free it is meant that all orderings (1-6) are grammatical — for a different point of view, see, e.g., Tsiplakou (1998)—, but each one may be more appropriate for certain contexts, depending on stress placement, which allows for different focus/topic interpretations.
(a) John loves Mary:
1. SVO: Ο Γιάννης αγαπάει τη Μαρία
   the-Yannis-NOM loves-3rdsg the-Maria-ACC
2. OVS: Τη Μαρία αγαπάει ο Γιάννης
3. VSO: Αγαπάει ο Γιάννης τη Μαρία
4. VOS: Αγαπάει τη Μαρία ο Γιάννης
5. SOV: Ο Γιάννης τη Μαρία αγαπάει
6. OSV: Τη Μαρία ο Γιάννης αγαπάει

In recent studies, Greek has been considered as a VSO language (Philippaki-Warburton 1985, Tsimpli 1990). There is also the view, within GB, that MG is a partially configurational language with no predetermined WO (Catsimali 1990). Statistically, the most frequent pattern is SVO, followed by OVS, followed by VSO (Lascaratou 1989).

The conclusion that can be drawn is that there is controversy among theories with respect to the grammaticality of certain patterns and the basic WO. The fact is that all patterns (1-6) are attested in corpus studies (Lascaratou 1989, Tzanidaki 1995), with some being more frequent than others. What is the relevant for L2 acquisition is the fact that learners not only need to realize the flexibility of Greek WO, but they will also need to acquire in which context each pattern is more or less acceptable, the role of clitics and accent placement. Moreover, the role of morphology should not be overlooked. In Greek, syncretism is a very frequent phenomenon. In cases where morphology does not allow for the identification of the syntactic role of constituents, their position in the construction makes that identification possible. Previous research on the acquisition of Greek WO (Muganou 1997, Mangana 1999) indicated that L2 elementary learners of Greek rely on position of the NPs in the sentence in order to decode their syntactic role.

The question posed here is whether L2 learners transfer their L1 configuration and characteristics from the very start and, whether their L1 affects the acquisition process.

2. Research hypotheses

We do not question UG-availability: we presuppose that UG is operand in adult L2 acquisition. The hypothesis to be tested is whether L1 is the starting point of L2 acquisition. Within this hypothesis, and taking into account the nature of the target language, certain predictions can be made about differences and similarities in the developmental patterns of learners with different L1s, at different phases of the acquisition process.
2.1 The rigid-stage hypothesis

Given the complexity of Greek morphology (see Figure 1), it is more than a hypothesis that L2 learners are facing a difficult acquisition task, that of identifying grammatical relations from morphological markers.

![Figure 1. Case (gender and number) endings of Modern Greek.](image)

Our first hypothesis, which could be called the rigid-stage hypothesis, is that elementary learners will not be able to achieve a target — or an L1-like performance. During production, even learners with a free-WO L1 will use a rather rigid WO, because their knowledge of the L2 morphology is incomplete. We also assume that in comprehension elementary learners will not be able to identify syntactic function of moved elements.

2.2 The effect of the L1 on the rate of acquisition

The rigid-stage hypothesis holds for all L2 learners, regardless of their L1, which may also have a rich morphological system, like for example Russian, because L2 learners can not transfer their L1 case-markers. Nevertheless, learners with such languages should be more sensitive to morphological realisations of syntactic relations, and this is why we hypothesize that such learners can overcome the initial rigid-stage faster, i.e. the L1 structure will have an effect on the rate of acquisition. We expect, therefore, to find that learners with a flexible-WO language start using other patterns before learners whose L1 is a rigid-WO language.
2.3 Performance vs. competence

With respect to acceptability judgements, we could assume that learners of all developmental stages may accept constructions that are not found in their oral production data. Their intuitions will become clearer and more native-like at the later stages of the acquisition process. A question to be answered is whether L1 influence remains apparent at the advanced level. A discrepancy between production and acceptability judgements could mirror the distinction drawn between performance and competence.

3. Pilot study

The results presented in this paper come from a pilot study that was run in Athens University in April 1999, with adult L2 learners.

3.1 Method

The two independent variables are the learners’ L1 and their level of proficiency in the target language. With respect to the L1, the following five languages are involved in the study: Albanian and Russian, languages with overt case on nouns and free WO; Spanish, a language without overt case on articles and nouns, and basically VSO; Italian, without case morphology on articles and nouns, its basic order being SVO; French, which does not exhibit overt case and has SVO as its basic order; and, finally, German, which exhibits overt case mainly on articles, and is a V-second/ V-final language.

3.2 Participants

Fifty-seven (57) people participated in the research. They could be divided into two groups: (a) 49 L2 learners of Greek, students in the University of Athens; mean age 24.49, (b) 8 native speakers of Greek with different occupations (3 teachers, 1 housewife, 1 insurer, 1 musician, 1 nurse, 1 salesman); mean age 26.

The number of participants per language is as follows: 12 Albanian, 10 Russian, 9 Spanish, 5 Italian, 9 German, 4 French, 8 Greek. L2 speakers could also be subcategorized in terms of their level of proficiency in the target language: elementary (19), intermediate (14), advanced (16).

3.3 Tasks

3.3.1 Magnitude estimation of linguistic acceptability (Bard, Robertson and Sorace 1996)
By means of an overhead projector, participants were presented with 30 sentences in total, 18 fillers and 12 tokens of 6 sentence types: VSO, VOS, SVO, OVS, SOV, OSV.

3.3.2 Oral production tasks
Participants were first shown a picture that they had to describe; then, they were given another picture that was slightly different from the previous one and they had to tell the difference using only one sentence. There were 7 pairs of such pictures. Each interview lasted 20-30 minutes, it was tape-recorder and then transcribed.

3.3.3 Comprehension task
Learners were asked 2 VOS questions related to different pictures from the previous task. NPs were clearly marked for case (i.e. either masculine or feminine). From their responses we concluded whether they had understood that the first NP was not the Subject.

3.4 Analysis and results
3.4.1 Magnitude estimation
Numbers were turned to logarithms; means for each sentence type were calculated; ANOVA was run on these means. The main effect of the L1 was found to be statistically significant [F(5,41)=3.284; p=0.014], as well as the main effect of Level [F(2,41)=9.754; p=0.001]. The interaction L1*Level was insignificant [F(1,7)=0.568; p=0.778].

In Figures 2, 3, 4, and 5 we see the mean judgements of each group.

![Figure 2. Magnitude estimation: Elementary learners’ judgements.](image)
Figure 3. Magnitude estimation: Intermediate learners' judgements.

Figure 4. Magnitude estimation: Advanced learners' judgements.

Figure 5. Magnitude estimation: Native speakers' judgements.
3.4.2 Oral Production

All sentences [i.e. V+two arguments (S, O)] were counted and numbers were turned into percentages. As we see in Figures 6-9, SVO is the dominant pattern in all participants’ production. Apart from SVO, Russian elementary learners use also VSO, VOS and OVS; Albanian learners VOS and they are the only group with one case of OcliticVS; Spanish learners use VSO and VOS; German learners use VOS, and French learners use VSO.

**Figure 6. Elementary learners’ oral production data (Brackets: +/-clitic)**

**Figure 7. Intermediate learners’ oral production data (Brackets: +/-clitic)**

At the intermediate level, Albanian, Russian and Spanish learners increase their uses of the VSO, VOS and OVS patterns, whereas German and Italian learners use SVO exclusively.
At the advanced level, there is a clear difference between Albanian, Russian (and Spanish, although the size of the sample is small) on one hand, and Italian, German groups on the other. The former groups achieve a native-like performance whereas the latter groups are still far from the target (Figure 9).

3.4.3 Comprehension

In Table 1 we see the results from the comprehension task. Learners from an inflected language like Albanian and Russian seem to be more sensitive to morphological markers and start noticing the differences among case endings before learners from the other groups.
Table 1. Comprehension of the VOS questions (numbers indicate participants; letters learners’ L1)

<table>
<thead>
<tr>
<th>Elementary</th>
<th>yes</th>
<th>no</th>
<th>Intermediate</th>
<th>yes</th>
<th>no</th>
<th>Advanced</th>
<th>yes</th>
<th>no</th>
</tr>
</thead>
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<tr>
<td>Albanian 1</td>
<td>✓</td>
<td></td>
<td>Albanian 5</td>
<td>✓</td>
<td></td>
<td>Albanian 9</td>
<td>✓</td>
<td></td>
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<td>A2</td>
<td>✓</td>
<td></td>
<td>A6</td>
<td>✓</td>
<td></td>
<td>A10</td>
<td>✓</td>
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<td>A3</td>
<td>✓</td>
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<td>A7</td>
<td>✓</td>
<td></td>
<td>A11</td>
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<td>←</td>
<td>A8</td>
<td></td>
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<td>Russian5</td>
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<td>R6</td>
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<td>←</td>
<td>R9</td>
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<td>R7</td>
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<td>←</td>
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</table>

4. Discussion

The assumption that learners start with their L1 structure as their null hypothesis seems plausible, since in the data presented here, learners with different L1s perform differently and have different intuitions with respect to the WO combinations of Greek. Where the effect of the L1 is more apparent is on the rate of development: learners whose L1 is closer to the target language achieve faster a native-like performance; their intuitions, nevertheless, remain more L1-oriented even at the more advanced levels of L2 proficiency.

4.1 The rigid-stage hypothesis

There seems to be a stage during which all learners perform neither target — nor L1 — like. This can be seen in the case of Albanian and Russian elementary learners, who behave similarly with German, French and Spanish learners, despite the expected difference that a Full Transfer Hypothesis would predict. SVO is nearly the exclusive pattern in all learners’ production. Nevertheless,
this should not be interpreted as evidence of a non-transfer alternative: our explanation is that learners at this stage have incomplete knowledge of the morphological system of the target language. Moving constituents around without using different case markers for the Subject and Object would result in ambiguous sentences.

Although the size of the sample is very small, it is worth noticing the fact that Spanish learners, for example, use VOS patterns but have problems comprehending them, even at more advanced stages. This, I believe, is an indication that such constructions are part of their interlanguage grammar, but they lack the means, i.e. knowledge of morphological markers, to understand such constructions (cf., a.o., Lardiere 1998).

4.2 The effect of the L1 on the acquisition process

Our results show that learners whose L1 is closer to the target language, i.e. Albanian, Russian, start using and understanding other, non-SVO, patterns faster than learners whose L1 differs from the L2, i.e. German. Learners whose L1 exhibits overt case on nouns, i.e. Albanian, Russian, are more sensitive to morphological realizations of syntactic relations and start understanding VOS sentences before learners whose L1 does not have case markers, i.e. Spanish, Italian.

4.3 Discrepancy between competence and performance

As it was our hypothesis, elementary learners accept other patterns apart from SVO. In the case of Russian, Spanish and French learners SVO is not even their favorite order. An interesting finding is that Albanian elementary learners consider OVS to be the least acceptable pattern, but they use it in their production. On the other hand, they accept SOV, but never use it in their production. This discrepancy holds true for other groups of learners and WO patterns too. Spanish learners, for example, accept SOV but never use it.

L1 influence is apparent in German learners’ judgements: they prefer SVO and their second best is VSO; VOS and OVS are judged to be worse than the V-final patterns.

Intermediate and advanced learners’ judgements are neither very different between groups of the same L1 nor statistically significant. They are not, nevertheless, as flat as native speakers’ judgements.

In fact, our results for the native group contradicts Keller and Alexopoulou (in press), who found that native speakers of Greek in null context conditions prefer SVO, with the difference SVO > {SOV, OSV} being statistically signif-
icant. This difference between the two sets of data could be a result of quantitative and qualitative differences between the two samples (number of participants; age, profession), and/or of the differences in the instructions, the means of presentation, as well as to differences between the sentences used in the two experiments.

5. Conclusions

The results of this pilot study allow us to give some preliminary answers to the research questions: There seems to be an early stage at the acquisition process where learners do not apply their L1 configuration due to their incomplete knowledge of the morphological markers of the target language. There are indications, nevertheless, that learners with a free-WO language use non-SVO orderings, despite their incomplete knowledge of the target language.

Thus, our data give support to the hypothesis that learners’ L1 affects the rate of acquisition: learners from a free-WO language start using other WO patterns earlier than learners with a more strict-WO L1. L1 interference is mirrored in the differences among groups of learners (e.g., German learners accept the V-final patterns more than Albanians) as well as in the similarities among groups (e.g., Spanish and Russian learners’ judgements).

Albanian and Russian learners are more sensitive to overt case, they start identifying case markers relatively early and their oral production is comparable to native speakers’. Spanish learners seem to be in the middle of this continuum: their oral production is native-like too but they seem to lack the morphological sensitivity that Russian and Albanian learners have. German and Italian learners remain under the SVO-dominance for a longer time, and even at the advanced levels have problems understanding VOS patterns.

With respect to judgements, what is of great importance is that the discrepancy between judging and producing sentences is ‘bi-directional’: learners accept sentences that they do not use and use sentences that they do not accept. And this, I believe, strengthens the view that different kinds of L2 data are needed in order to have some valid conclusions about L2 development.

References


Clahsen, Harald and Pieter Muysken (1986). “The availability of universal grammar to adult


