A Case of Language Delay: The Study of the D and EVFL Systems in the Language of a Hearing Impaired Child

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1. INTRODUCTION
This essay studies the case of a child acquiring Modern Greek (MG), Victoria, who due to her hearing impairment has fallen back in the acquisitional stages as she takes the same steps normally developing children take with a two-year lag. The focus is on the D[eterminer] and the INFL[ectitional] systems, which, according to scholars, are the most telling regarding the language development of hearing impaired children, since they seem to cause more troubles to them.

Before moving on with the specifics of this case study, it is worth mentioning what is meant with the use of the term 'language delay'. It is not held that Victoria starts from scratch—that is, the one or two-word stage. Even at the onset of this study Victoria had already started using functional categories; the main process that she followed is found to be a reflection of the development taking place in typical language development but at a much slower pace.

At the age of two and a half Victoria was diagnosed to be suffering from a sensori-neural hearing impairment the most probable cause of which is the absence of some or all of the fine structures in the cochlea. The audiogram that took place two months before the data collection started, showed an average loss of 70dB (averaging across 250 to 8,000Hz in the better ear—the left).

Victoria’s speech production was video taped for three hours per month over the course of one year and the data consists of spontaneous speech. After the analysis of the data three developmental stages have been delineated: in the first stage, Victoria was about 4 years & 7 months, in the second she was 4 years & 11 months, and in the third she was about 5 years & 6 months.

As for methodology, both correct and incorrect occurrences of each category were measured along with their omissions in obligatory contexts. It should be pointed out that Victoria’s utterances are characterised by a phonological peculiarity as during the study she used /t/ in place of /s/, while final /s/ was not produced until late in the third stage in the form of the sound /t/. Thus, whenever /t/ was uttered, the form produced was held to be
correct. Finally, it should be noted that certain examples of the appendix, where all examples and tables are to be found, may be wrong in more than one ways.

2. TENSE MARKING

As can be seen in table 2.1, which shows the correct and incorrect uses of the tenses along the three stages, Victoria seems to have acquired the tense category—something that is expected of a normally developing child of her age, as the most basic aspects of Tense are acquired by the age of 3 years & 2 months; there is a clear differentiation between the Present tense, which is the default tense, and the Past one.

Concerning the present tense, its correct entries increase over the three stages; an example of a correct entry can be seen in example (2.a). Regarding incorrect uses, these involve incomplete forms and uses of Past or Future in Present requiring contexts, as can be seen in examples (2.b) and (2.c) respectively. Another error is the use of the Unified Future Category types, that is, verbs the preceding particle of which is reduced to 'a' or is totally omitted so that we cannot say for sure if it constitutes the future particle (/θa/) or the modal particle of the Subjunctive (/na/). This kind of error is more dominant in the first stage, while it is dramatically reduced in the last two stages and is presented in example (2.d).

As for the Past, a similar line of development is attested since the percentages of correct entries rise as Victoria moves towards the third stage: (2.e) shows one such occurrence. Concerning the incorrect entries, these are small in number and are reduced as we move towards the final stage. The Present Tense is found in contexts of the Past as can be seen from example (2.f), while the Unified Future Category also appears in Past contexts as can be seen in (2.g). Similarly, in the second stage we encounter the case of the Future occurring in Past-adequate-contexts as example (2.h) reveals.

The Future tense was initially used in a smaller percentage, which was, however, used correctly in all necessary contexts in the third stage, without any wrong entries at all, an example of which is (2.i). As for incorrect entries, the Future tense has been used in contexts that required the Present tense in all three stages as example (2.j) shows. A common error regarding the Future tense is the omission of its particle /θa/, or its reduction to /a/ as in the case of examples (2.k) and (2.l). As for the Unified Future Category, which is related to both the subjunctive mood and the future tense, there is a gradual reduction in this category that implies a more consistent marking of the relevant categories. Katis (1984) notes that the relatively consistent marking of the two categories has its onset at around 3 years and 2 months. This indicates a delay of about 1 year & 9 months for Victoria, taking the second stage where this specific error is restricted as our onset. On
the whole, Victoria seems to be following the normally developing children in Tense marking but with much slower steps.

3. SUBJECT AGREEMENT.
As regards Subject Agreement, MG is a language with overt subject agreement morphology on the verbal paradigm: the number and person of the subject should agree with the verb's number and person, even in the cases of null subjects. Tables 3.1, 3.2 and 3.3 present us with the correct and incorrect entries for the 1st conjugational pattern, the use of the 3rd singular person, that is (/i-if) forms, since they are the most dominant, and, finally, the frequency of use of each person.

In the first stage, the frequency of use of the 1st person singular corresponds to 24.3% of the total use of all persons and the percentages of correct uses are considerably high in all stages as eg. (3.1.a) shows. All its incorrect entries refer to the use of the 3rd person singular in contexts requiring the 1st. An instance of this is example (3.1.b). On the whole, the 1st person singular does not seem to create considerable problems.

As for the 2nd person singular, this is quite problematic as it is with normally developing children since it develops last of all the singular persons. We should note here that 2nd singular imperatives have not been considered as most of their instances correspond to discourse markers such as 'ela'(: come). Its frequency of use starts with 6.6% of the total production, while its incorrect entries concern the use of the 3rd singular in its place. This type of error is considerably more common than the errors that are due to Victoria's inability to produce final /s/. Thus, the dominance of the 3rd singular forms in obligatory contexts for 2nd singular person cannot be questioned: for example, the verb /xorao/ (: fit) in the second singular is /xorás/ and in the third /xorài/; if Victoria's mere problem was the production of 's' then we would expect the form of /xorál/, but Victoria uses the third singular, /xorài/. The proportion of her inability to pronounce /s/ is very small in relation to the proportion of the 3rd, around 4% of the 88% of incorrect entries, and is observed in example (3.1.c). In the second stage, the incorrect entries for the 2nd singular person decrease and once again correspond to the use of the 3rd singular. Here, the production of a 't' in place of final /s/ emerges as example (3.1.d) indicates. On the other hand, in the third stage the incorrect entries for the 2nd person rise to 69.6% that again represents the use of the 3rd singular, but taking into consideration that the occurrences in the third stage have considerably increased from 13 to 66, the rise is not significant. In a nutshell, moving from the first to the third stage a significant decrease in the percentage of wrong productions has taken place along with a rise in the frequency of use of this person.
Moving to the third person singular, an extremely high percentage of frequency throughout the stages is observed. If we compare the initial and the last stages there is a slight decrease, as should be expected. Table 3.1.2 shows that there is a gradual decrease in the incorrect uses of /-i/ forms as we move on towards the third stage, which means that, on the whole, persons are used more appropriately. As for incorrect entries, these represent the lowest not only among other persons, but also among the three stages most probably due to its unproblematic nature in MG acquisition. Moreover, its slight decrease and the emergence of the full verb paradigm in the last stage (table 3.1.1) are similar to what is going on in typical language development.

As for the first plural, this shows a linear reduction of its incorrect entries. What is worth mentioning is the almost exclusive use of the 1st plural in the subjunctive in all stages, which is demonstrated in example (3.1.e). This is consistent with normally developing children, as Stephany (1997) observes that by the age of 2 years & 4 months the child uses the 1st plural much more frequently in the Subjunctive.

Concerning the 2nd plural, this emerges in the second stage. Although no obligatory contexts exist, it is used twice inappropriately—the one form appears in the place of the 1st plural (eg 3.1.f) and the other in the place of the 3rd plural represented in example (3.1.g). Of course the occurrences are few for anything conclusive to be stated, especially, when in the immediately following stage, all of its occurrences are correct, even though, again, these are few (3) and its percentage of frequency low (0.4%); an eg of a correct entry is shown in (3.1.h). This development is in line with the fact that the second plural develops last of all in normal language development, as it was observed by Stephany (ibid.): given the fact that the second plural emerges at about the age of 2 years and 4 months for normally developing children, in Victoria's case there is a delay of about 2 years and 7 months.

Finally, the third plural also shows a reduction in its incorrect entries. Most of the incorrect entries in the first stage are due to 3rd singular uses in plural contexts as is demonstrated in example (3.1.i).

In a nutshell, Victoria seems to be following the developmental stages expected but with much slower pace, especially in those areas that are the most problematic in MG.

3.2. Production of 'ine' (: to be)
It is worth mentioning here that the verb 'ine' was not taken into account, for its excessive use would be misleading as regards subject and verb agreement. However, we should note that Victoria's progressive development is also indicated by the reduction of the total number of its use as we move on. The verb /ine/ (: to be) is included in the light verbs of MG,
which, although they can stand on their own as main verbs do, are semantically underspecified in that they do not exactly map onto a concept, as main verbs do. It seems that whenever there is failure to access the appropriate verb Victoria resorts to the light verb /ine/ (to be). Example (3.2.a) shows such an instance. The same is observed with another light verb, /kano/ (do) as eg (3.2.b) shows but in a much smaller proportion. Finally, it should be noted that /ine/ is sometimes used by Victoria redundantly as it accompanies the appropriate for the context verb as we can see in example (3.2.c).

4. ARTICLES
4.1 Definite Article
Definite articles are used in all obligatory contexts by age 5 in MG, which means that Victoria would be expected to have control over them. Based on Stephany's data, Victoria starts with a quite high percentage of correct uses of the definite article as table 4.1 (87%) shows which is equivalent to that of the majority of the children in Stephany's data at the age of 2 years and 4 months; this means that there is a lag of 2 years and 3 months with respect to Victoria's observed first stage. The last two stages manifest high percentages of correct uses, as well as small numbers of omission. Hence, the linear development throughout the stages enables us to claim that full control will be easily attained.

As for the incorrect uses of the definite article, these involve uses of definite articles in the wrong case, represented in example (4.1.a), wrong gender or wrong number which are demonstrated in examples (4.1.b) and (4.1.c), respectively.

4.2 Indefinite Article
In contrast to definite articles, indefinite ones are always applied when necessary as it can be observed in table 4.2, in which case Victoria parallels children developing normally. As for incorrect uses, the definite article is sometimes used instead of the indefinite one, while in other cases the accusative is used in the place of the nominative, in which case, however, it is not clear whether this is a case error or an articulatory one as example (4.2.a) shows. Stephany observes that due to the open vowel /a/ the production of /sl/ or /l/ immediately after it requires more effort, and its possible omission is substantiated; Victoria's articulatory problem seems to aggravate the above mentioned tendency; this along with case problem in typical development up to about the age of 4 years and 1 month seems to explain the persistence of such an error in Victoria's case.

5. PERSONAL PRONOUNS
5.1. **Strong Personal Pronouns**  
As for Personal pronouns, starting with the strong ones, table 5.1 shows that no serious problems arise. We observe that although a reduction of the proportion of incorrect entries takes place, as Victoria moves from the first to the third stage, there is a considerable increase in the end as regards the 1st person, but this is due to the respective higher number of occurrences.

More specifically, in the first stage, all of the incorrect entries of the 1st person involve the use of the accusative form, /emena/ (me), instead of the required nominative, /eyó/ (I) as is shown in (5.1.a). In the second stage, /eyó/ (I) is used successfully in all cases, but there are two cases where the exactly opposite of what happened in the first stage takes place as we can see in (5.1.b). It appears that /emena/ carries heavy emphasis for Victoria. Here, it is interesting to mention Radford's claim that the accusative form /emena (me) is phonologically default and morphologically unspecified for case (1990); Stephany (1997) observes that by the age of 2 years and 10 months most of the children in her study correctly used first singular nominative and oblique forms, and we can say that Victoria does so in the third stage, in which case there is a delay of about 2 years. Regarding the employment of the 2nd person, /esi/ (you), this poses no difficulties to Victoria whatsoever; nevertheless, its singular oblique form /eséna/ appears only once in the second stage. Concerning gender agreement, Stephany observes that gender of the 3rd person singular is quite problematic by pointing that at the age of 2 years and 4 months the child still struggles with gender agreement and it is at the age of 2 years and 10 months that children start to improve (ibid.). Since normally developing children have difficulty in this area, it is only natural for Victoria to need more time to master the relevant person and its gender agreement. As for case, not many errors occur, which is more likely due to the overuse of the neuter singular 3rd person (/afto/: this) that shows no distinctions in nominative-accusative contexts and which in most cases is taken to refer to the semantically unspecified neuter noun /prayma/ (: thing). Example (5.1.c) shows how the neuter is used. Thus, although Stephany observes that in the third person number is acquired earlier than gender and gender is acquired earlier than case (ibid.), we cannot be sure about this, since Victoria's case system in this area does not seem to produce problems due to the overuse of the neuter gender.

Finally, the plural is not used by Victoria except for some occurrences in the first and the third person. There is one instance of the plural nominative form of the 1st person pronoun /emis/ (we) in the second stage, but this emerges without the final /s/ which is presented in example (5.1.d). However, it appears in the third stage, this time with /l/ in the place of /s/ an instance of which is seen in example (5.1.e). In Stephany's data only one child at 2 years & 4 months produces /émis/ (we), while for the others
the plural emerges around 2 years and 10 months. Hence, there is roughly a
delay of about 2 years and 7 months in Victoria. As for the third person
plural, only the neuter form /afta/ (these), either in the nominative or
accusative, occurs: this is also observed in Stephany’s children who start
using these from the age of 1 year and 10 months; it is only one child about 2
years and 10 months that starts to develop gender distinctions in the plural
(ibid.). Victoria seems to follow the rest children in that she does not show
any gender distinction up to the third stage.

5.2 Clitics (Weak Personal Pronouns)
Moving on to Clitics, these are much more problematic. First, however, it
should be noted that they were analysed without the inclusion of formulaic
expressions such as /pos to lene?/: (‘What’s his/her name?’), and /mu
aresi/m’aresi/: (‘I like it’), as well as without enclitics since they do not pose
any problems in the case of both Victoria and normally developing children.
As we can see from table 5.2, the third person is there from the start of our
observation. Most of its incorrect entries involve its use in the wrong gender,
and to a lesser extend wrong number; moreover, in the first stage we have a
considerable percentage of omissions, which, however, gradually decreases.
Instances of correct proclitics are shown in examples (5.2.a) and (5.2.b).

Now as regards 1st and 2nd person proclitics, in the first stage there
was one obligatory context for each, but none was provided with a proclitic.
In the second and third stage, there was no context demanding one of the
two. However, what should be noted is that the third stage is the only one
during which the 2nd singular proclitic /se/ appeared in the formulaic
sentence of example (5.2.c). Moreover, the appearance of the enclitic
singular form of the 1st person is also worth mentioning, which is
represented in example (5.2.d). Stephany notes that the 1st and 2nd persons
were first attested only in two of the children at the age of 2 years and 4
months, while it took others longer to acquire them; for some the stage of
acquisition was much later than the age of 2 years & 10 months Thus, the
emergence of the two enclitics at the third stage, and the absence of
proclitics in these two persons are somehow substantiated in Victoria’s
slower language development.

What should be noted is the predominance of the 3rd person neuter
singular which is also encountered in typical situations of acquisition, as it is
the first to emerge (Stephany, 1997). Victoria also uses the 3rd person neuter
plural, /ta/, which is actually the first number opposition taking place in
clitics as regards number. It is at the age of 2 years & 10 months that the
other genders start to show up in MG, but not in high percentages; Victoria
also uses the feminine and masculine 3 person clitics, /tin/ (:her) and /ton/
(:him), respectively, from the first stage of our observation, but not as
frequently as the neuter type. Thus, there seems to be a delay of about 2 years.

Regarding the case of genitive clitics, as is predicted by their status according to Tsimpli (1999b), production is much better than it is with object clitics, since genitive clitics are held to be part of a nominal functional projection bearing case features. No serious problems are detected during the three stages of our observation as you can see in table 5.3. All contexts are provided with a genitive clitic when necessary (there are no omissions). In the first stage, the rather high error percentages in the 3rd person are due to the omission of /s/ in the feminine genitive clitic /lisi/ (her) due to Victoria's articulatory problem that seems to have a worsening effect on the case problem; an example of this is (5.2.e). Furthermore, what is worth mentioning is the absence of plural forms for all persons, with the exception of the third stage where one such form occurs: it is the 1st person plural, /mas/ (our), which is the only responsible for the incorrect entry since the /s/ of the clitic /mas/ was not uttered as (5.2.f) shows. Victoria has already acquired the singular genitive types of all persons, but the plural does not appear in the 2nd and 3rd persons, and it certainly does not occur in abundance where it emerges: it is interesting to note here that /mas/ (our) in Victoria's case does not emerge at the same stage that /emis/(we) emerges, as was observed in Stephany's children (at the age of 2 years and 4 months), but a stage later (at the third).

6. WH-WORDS
Wh-words are used by Victoria in almost all contexts requiring one as can be shown in table 6. As for wrong uses these involve a very small amount of wh-words placed in the place of other wh-words, while a much larger one involves wh-words without the final /s/, as in /pos/ (: how). As we can see from the table presenting occurrences, there does not seem to be a great problem, as in almost cases a wh-word is provided. In the first stage, it was in 8 out of 56 obligatory contexts that /ti/ (: what) was omitted, but this was compensated for, with a rising intonation pattern, while in the second and third stages it was used in all obligatory contexts. The rising intonation pattern in place of the missing wh-word also appears in the case of /jati/ (: why) in the second stage when it first appears as well as in the case of /pos/ (: how) again in the second stage as you can see in example (6.a) [ ] ti lene? (: [How] do they call her?).

7. CONCLUSION
In view of the foregoing, it can be held that Victoria presents us with a case of language delay and not one of disorder. Victoria takes the same steps
normally developing children take a few years later—on average, there is about a 2-year lag.

Regarding tense, the Present-Past distinction is there when the study started, and in the three stages of our study we follow her way towards mastering the Future tense, and controlling the employment of the modals /na/ and /θa/. Katis (1984), points that a relative consistent marking of Future appears at about 3 years and 2 months; this roughly indicates a lag of about 1 year and 9 months for Victoria.

Persons of the 1st conjugational pattern also emerge in the sequence expected on the basis of normal acquisition. The singular forms are the first to emerge of which the 3 person is the most dominant, while the plural forms are the last to emerge—the 2nd plural being the last of all at about the age of 4 years and 11 months, which implies a delay of 2 years and 7 months. As we move on, the application of the 3rd singular in contexts requiring other persons is restricted, and the plural forms appear to have a higher frequency of use than previously. Moreover, the 2nd plural appears, while at the same time the use of frequency and the correct entries of the 2nd singular person increase.

Furthermore, as far as indefinite and definite articles are concerned, Victoria’s production parallels that of younger children; Victoria seems to improve, especially with respect to the latter category as this is the most troublesome for young children. The first stage of our observance seems to correspond to the language state of a 2-year-and-4-month-old child—the lag is estimated to be that of 2 years and 3 months.

As for personal pronouns, strong pronouns do not show any particular problems; Victoria seems to have mastered all persons of strong pronouns, and the employment of case does not pose particular problems during the last two stages; this is also what is observed in children aged 2 years & 10 months—thus, there is a difference of 2 years. Clitics seem to be more difficult in acquisition, as is the case with normal acquisition. The 3rd person singular is there from the start of our observation, while the 1st and 2nd persons appear only at the end, but in inadequate contexts. These appear for the majority of children at about the age of 2 years and 10 months and, so, there is again a 2-year delay.

Finally, wh-words are employed from the beginning, except for a few cases, where there is an intonation rise to compensate for the absence of the wh-word. Given the unproblematic nature of these words in normal acquisition and the delay characterizing Victoria’s case, it is not surprising that these appeared from the very beginning with high percentages of occurrences and correct uses.
So despite the caution that should characterize all case studies, Victoria's case seems to be interesting in that it is a pure case of language delay.

REFERENCES


APPENDIX

2. Tense Marking

<table>
<thead>
<tr>
<th></th>
<th>Stage I (4;7)</th>
<th>Stage II (4;11)</th>
<th>Stage III (5;6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct</td>
<td>Incorrect</td>
<td>Correct</td>
</tr>
<tr>
<td><strong>Present</strong></td>
<td>225 (94.6%)</td>
<td>13 (5.4%)</td>
<td>411 (8.6%)</td>
</tr>
<tr>
<td><strong>Past</strong></td>
<td>44 (93.7%)</td>
<td>3 (6.3%)</td>
<td>83 (94.4%)</td>
</tr>
<tr>
<td><strong>Future</strong></td>
<td>21 (56.8%)</td>
<td>16 (43.2%)</td>
<td>76 (98.2%)</td>
</tr>
<tr>
<td><strong>UFC</strong></td>
<td>39.9%</td>
<td></td>
<td>22.6%</td>
</tr>
</tbody>
</table>

2.a 'Đen ponki to moro'
not hurt-IPFV, PRES,3SG the baby
'the baby isn't hurting'

2.b 'na pai *kritis[na kritis]' to go-IPFV, PRES,3SG hide-IPFV,PAST,3SG'
go and hide

2.c 'fasa torsi'
to eat-IPFV,FUT,3SG now
'It is going to eat now'

2.d 'kopi xarti [xarti]'
cut-IPFV,3SG paper
'he'll cut a piece of paper'

2.e 'epeti [i buja] kato' (epete kato)
fall-IPFV, PAST,3SG down
'It [the coloured pencil] fell'.

2.f 'i mama ke o bahé piyení ti títata'
the mum and the dad-go-IPFV,PRES,3SG to sea
'Mummy and daddy go to the beach'

2.g 'pári ti títata (pári ti țalassa)
take-IPFV,3SG to the sea
'We take it at the beach'

2.h 'tha páo sto aftókinito'
to go-IPFV,1SG to the car
'I'll go to the car'

2i 'Ba péton' (: Θ a peson [ta molivia])

2.j 'tha vlepit [vlepis] ellinopoúla?' will see-IPFV,FUT,2SG Greek girl/dancer
Will you be seeing the Greek girl/dancer?

2. k 'ta peðšja kimisí [θa kimišun']
the little children sleep-PPFV,3SG
'the little children will sleep'

2. l '*[s]a fái banána'
reduced Future Particle eat-IPFV, FUT,3SG, banana
'It will eat a banana'
3. Subject Agreement

3.1. 1st Conjugational Paradigm

Table 3.1.1: Subject Agreement

<table>
<thead>
<tr>
<th></th>
<th>Stage I (4:7)</th>
<th>Stage II (4:11)</th>
<th>Stage III (5:6)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Correct</td>
<td>Incorrect</td>
<td>Correct</td>
</tr>
<tr>
<td>1st Singular</td>
<td>67 (88.2%)</td>
<td>9 (11.8%)</td>
<td>86 (90.6%)</td>
</tr>
<tr>
<td>2nd Singular</td>
<td>3 (12%)</td>
<td>22 (88%)</td>
<td>6 (46.2%)</td>
</tr>
<tr>
<td>3rd Singular</td>
<td>152 (97.5%)</td>
<td>4 (2.5%)</td>
<td>277 (97.9%)</td>
</tr>
<tr>
<td>1st Plural</td>
<td>27 (93.2%)</td>
<td>2 (6.8%)</td>
<td>41 (97.7%)</td>
</tr>
<tr>
<td>2nd Plural</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3rd Plural</td>
<td>11 (63.7%)</td>
<td>4 (36.3%)</td>
<td>29 (69.1%)</td>
</tr>
</tbody>
</table>

Table 3.1.2: Correct vs Incorrect uses of -i-form

<table>
<thead>
<tr>
<th></th>
<th>Stage I (4:7)</th>
<th>Stage II (4:11)</th>
<th>Stage III (5:6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>97.5%</td>
<td>97.9%</td>
<td>97.7%</td>
</tr>
<tr>
<td>i-form in 3SG contexts</td>
<td>29.2%</td>
<td>21.2%</td>
<td>20.9%</td>
</tr>
<tr>
<td>i-form in other contexts</td>
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<td></td>
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Table 3.1.3: Total Frequency of Use of Each Person

<table>
<thead>
<tr>
<th></th>
<th>Stage I (4:7)</th>
<th>Stage II (4:11)</th>
<th>Stage III (5:6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Singular</td>
<td>24.3%</td>
<td>20.1%</td>
<td>23.8%</td>
</tr>
<tr>
<td>2nd Singular</td>
<td>6.6%</td>
<td>3.1%</td>
<td>10.8%</td>
</tr>
<tr>
<td>3rd Singular</td>
<td>50.4%</td>
<td>56%</td>
<td>48.1%</td>
</tr>
<tr>
<td>1st Plural</td>
<td>4.1%</td>
<td>7.6%</td>
<td>3.4%</td>
</tr>
<tr>
<td>2nd Plural</td>
<td>—</td>
<td>0.3% (2 inapp. uses)</td>
<td>0.4%</td>
</tr>
<tr>
<td>3rd Plural</td>
<td>3.6%</td>
<td>9.1%</td>
<td>7%</td>
</tr>
</tbody>
</table>

3.1. a ‘utego vlepo’ (utcy o vlepo)
   nor I see-IPFV, PRES,1SG
   ‘I don’t see either’

3.1.b ‘*telо na fiyo’ [referring to herself, not to somebody else]
   want-IPFV,PAST,1SG to go-PFV,3SG
   ‘I want him/her to go’

3.1.c ‘bori?’
   can-IPFV,PRES,3SG
   ‘Can s/he?’

3.1.d ‘jiati to espa?’ (jiati to espas?)
   why it-ACC,SG break-PFV, PAST,2SG
   ‘Why did you break it?’

(target: ‘*telо na fiyo’)
   want-IPFV,PAST,1SG to go-PFV,1SG
   ‘I want to go’

(target: ‘bori?’
   can-IPFV, PRES, 2SG
   ‘Can you?’)
3.1.e "pu na váume stokinīto? (pu na váume to afokinīto?)
where to put-IPFV, 1PL car
"where should we put the car?"

3.1.f "na pame ti kirīfīkete" (target: na pame na kiriftume)
to go-IPFV, 1PL hide-IPFV, PAST, 2PL
"Let's go and hide"

3.1.g "vāpīte" (vāfete)
paint-IPFV,PRES,2PL
"You are painting"

3.1.h "θa kolībīste" (θa kolibistete)
will swim-IPFV,2PL
"You will swim."

3.1.i "ta maliā mu xālate"
the hair my is messed up-IPFV, PAST,PASV,3SG
"the hair my is messed up-IPFV, PAST,PASV,3PL
"My hair is in a mess"

3.2 Production of 'inc' (be-IPFV, PRES, 3SG)

3.2.a C: 'ti kāni to pedāli?' (What is the child doing?)
V: 'fine bīzu'
be-IPFV,3SG sweater
"It is a sweater"

3.2.b 'kiiria popi kāni ta páramišia'
the mrs popi do-IPFV, PRES,3SG the fairy tales
"Mrs Popi reads tales"

3.2.c "pu inie tragudai?"
where be-IPFV,PRES,3SG sing-IPFV,PRES,3SG
"Where does she sing?"

4. Articles
4.1. Definite Articles

Table 4.1.1: Definite Articles: Nominative & Accusative

<table>
<thead>
<tr>
<th>Stage</th>
<th>Correct</th>
<th>Incorrect</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>254 (87%)</td>
<td>38 (13%)</td>
</tr>
<tr>
<td>II</td>
<td>201 (91.4%)</td>
<td>19 (8.6%)</td>
</tr>
<tr>
<td>III</td>
<td>339 (96.3%)</td>
<td>9 (3.7%)</td>
</tr>
</tbody>
</table>

4.1.a "ti katerina de ta riti? (ti katerina de ta riti?)
the-ACC katerina not will come-IPFV,3SG
Worl't Katerina come?

4.1.b "ji jajā ti lavudāki to kōpsi"
the graney-NOM the-FEM bunny is-NEUT cut-IPFV stem,3SG
"The graney will cut the bunny doll"

4.1.c "to vururākia épesan"
the-NOM,NEUT,3SG pigs- NOM,NEUT, PL fall-IPFV,PAST,3PL
"The pigs fell"
4.2. Indefinite Articles

Table 4.2.1: Indefinite Article

<table>
<thead>
<tr>
<th></th>
<th>Correct</th>
<th>Incorrect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage I</td>
<td>22 (75.9%)</td>
<td>7 (24.1%)</td>
</tr>
<tr>
<td>Stage II</td>
<td>21 (70%)</td>
<td>9 (30%)</td>
</tr>
<tr>
<td>Stage III</td>
<td>17 (85%)</td>
<td>3 (15%)</td>
</tr>
</tbody>
</table>

4.2.a C: ‘pjo as aferos?’ ‘Who’s that?’

V: ‘ena kirio’
a-ACC, NEUT, SG man-ACC, MASC, SG
(target: ‘enas kirios’
a-NOM, MASC, SG man-NOM, MASC, SG)

5. Personal Pronouns

5.1. Strong Pronouns

Table 5.1.1: Subject & Object Strong Pronouns

<table>
<thead>
<tr>
<th></th>
<th>Stage I (4:7)</th>
<th>Stage II (4:11)</th>
<th>Stage III (5:6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct</td>
<td>Incorrect</td>
<td>Correct</td>
</tr>
<tr>
<td>1st Person</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Person</td>
<td>31 (83.8%)</td>
<td>6 (16.2%)</td>
<td>51 (94.5%)</td>
</tr>
<tr>
<td>2nd Person</td>
<td>11 (100%)</td>
<td>0%</td>
<td>18 (100%)</td>
</tr>
<tr>
<td>3rd Person</td>
<td>90 (88.1%)</td>
<td>16 (15%)</td>
<td>99 (86.1%)</td>
</tr>
</tbody>
</table>

5.1.a ‘xemn imf oí’
me be-IPFV, PRES,1SG this-NOM,FEM
(target: ‘eyó ìm afí’
I be-IPFV, PRES,1SG this-NOM,FEM
‘This is me’)

5.1.b ‘evo de mi arés to karúzi’
I not my like-IPFV,PRES,3SG the watermelon
(target: ‘emné de mi arés to karúzi’
me not my like-IPFV,PRES,3SG the watermelon
‘I don’t like watermelons’)

5.1.e ‘affó ðélo’
this-NEUT,NOM,SG want
‘I want this’

5.1.d ‘éxum édó *emi’ (talking about women’s hair)
(target: ‘éxum édó emís’
have-IPFV,PRES,1PL here[head] we
‘We have hair here [on the head]’)

5.1.e ‘den imf to kalókairoi emit afí’
not be-IPFV, PRES,3SG the summer we these
(target: ‘emí den to forúmí afí to kalókairoi’
we not them wear-IPFV,PRES,1PL these the summer
‘We don’t wear these [winter clothes] in the summer’)

5.2 Clitics (Weak Personal Pronouns)

Table 5.2.1: Object clitics in non-formulaic contexts (proclitics)

<table>
<thead>
<tr>
<th></th>
<th>Stage I (4:7)</th>
<th>Stage II (4:11)</th>
<th>Stage III (5:6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct</td>
<td>Incorrect</td>
<td>Correct</td>
</tr>
<tr>
<td>1st Person</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2nd Person</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3rd Person</td>
<td>44 (86.3%)</td>
<td>7 (13.7%)</td>
<td>22 (88%)</td>
</tr>
<tr>
<td></td>
<td>56 (91.5%)</td>
<td>5 (8.1%)</td>
<td></td>
</tr>
</tbody>
</table>
5.2.a  'na to do' \( (\text{na to } \delta \varepsilon o)\)
   to-ACC.NEUT.SG see-IPFV,1SG\(\text{Let me see it}\)
   'Let me see it'

5.2.b  'et to tpate\(\text{t} [\text{es to } \delta \varepsilon p\text{ases}]\)'
   you-ACC.NEUT.SG break-PPFV.PAST.3SG
   'Did you break it?'

5.2.c  'po te le\(\text{ne}?'
   how you-ACC.SG say-IPFV.PRES.3PL
   'What's your name?'

5.2.d  '\(\text{a}\)se me'
   let-IMPER.2SG me
   'Let me go'

| Table 5.2.3: Genitive Clitics in Noun Phrases (enclitics & proclitics) |
|-----------------------------|-----------------------------|-----------------------------|
|                             | Stage I (4:7)               | Stage II (4:11)             | Stage III (5:6)               |
|                             | Genitive        | Correct | Incorrect | Correct | Incorrect | Correct | Incorrect |
| 1\text{st} Person           | 28 (93.4%)     | 100%    |           | 100%    |           | 25 (96.2%) | 1 (3.8%)  |
| 2\text{nd} Person           | 10 (100%)      | 0%      |           | 3 (100%) | 0%        | 7 (100%)  | 0%        |
| 3\text{rd} Person           | 3 (60%)        | 2 (40%) |           | 7 (87.5%)| 1 (12.5%) | 11 (91.7) | 1 (8.3%)  |

5.2.e  'ine ti m\(\text{a}\)n\(\text{a} \text{\(\text{a}\)}\)'
   be-IPFV,PRES.3SG the-ACC,FEM, SG mummy-ACC,FEM, SG her-dACC.SG

(target: 'ine ti m\(\text{a}\)n\(\text{a} \text{\(\text{a}\)}\)'
   be-IPFV,PRES.3SG the-GEN.FEM, SG mummy-GEN.FEM,SG her-GEN.SG
   'It's her mother's.')

5.2.f  'to dik\(\text{o} \text{ m\(\text{a}\)s afo\(\text{k\(\text{a}\)}\)n\(\text{a}\)}\)'
   (target: 'to dik\(\text{o} \text{ m\(\text{a}\)s afo\(\text{k\(\text{a}\)}\)n\(\text{a}\)}\)'
   the-NOM, NEUT,SG own our—GEN,PL car—NOM,SG
   'Our own car')

6. Wh-words

| Table 6.1: Correct vs. Incorrect Uses of Wh-words |
|-----------------------------|-----------------------------|-----------------------------|
|                             | Stage I (4:7)               | Stage II (4:11)             | Stage III (5:6)               |
|                             | Correct | Incorrect | Correct | Incorrect | Correct | Incorrect |
| Ti                           | 34 (100%)   | 0%        | 11 (100%) | 0%       | 17 (100%)   | 0%        |
| Pu                           | 68 (98.6%)  | 1 (1.4%)  | 24 (100%) | 0%       | 48 (100%)   | 0%        |
| Pjos                         | 8 (100%)    | 0%        | 4 (100%)  | 0%       | 15 (100%)   | 0%        |
| Pos                          | 0%         | 10 (100)  | 0%       | 7 (100%)  | 0%         | 26 (100%)  |
| Pjani                        | 0%         | 1 (100)   | —        | —        | 4 (100%)    | 0%        |
| Puntes                       | 8 (88.9%)   | 1 (11.1%) | —        | —        | 4 (56.7%)   | 2 (33.3)  |
| Jati                         | —          | —         | 8 (100%) | 0%       | 3 (100%)    | 0%        |

6a  '[] ti le\(\text{ne}?'
   [ ] her—ACC.SG call—IPFV,PRES.3SG
   'How do they call her?'