Carnegie-Mellon University, Pittsburgh, PA, and from the Max-Planck Institute for Psycholinguistics. I also thank Elisheva Baruch for her help in transcribing Sahar’s tapes. This transcription was funded by a grant from the School of Education, Tel Aviv University. Brian MacWhinney and Steven Gillis are to be thanked for their patient instructions on the use of CHILDES.  

1 Although it may be the case that it is only the negative pole that may be diminutivized (R. Berman personal communication).

2 Sometimes the suffix -it appears as -iya, originally as the result of backformation from plural -iyot, e.g., ugiya ‘cookie’, originally ugit ‘small cake’ from uga ‘cake’ (Ravid 1995).

3 Thought historically well-established, deriving from Mishanic Hebrew, spoken in the Second Temple era (Avineri 1964).

4 Reduplication in the verbal system is enabled in extracting consonantal skeletons from words and creating a new root by reduplicating the third and last consonant, e.g. root ?-v-r-r in ivrer ‘brought fresh air in’ from avir ‘air; root t-x-n-n in tixnen ‘planned’ from toxnit ‘plan’. The result is not diminutive, although the process originally carried a diminutive function (Sagi 1997).

5 The word savvyon refers to the flower ragwort, very common to the end of the winter in Israel.

6 The bound form of dov ‘bear’ is dub- as in dubim ‘bears’, which appears in Lior’s vocabulary at the same time.

7 This, however, can be explained on the grounds that nerot ‘candles’ are perceived as the basic form (see discussion in Ravid 1995).

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Stephany, U.
The Acquisition of Diminutives in Italian

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ABSTRACT

Italian has a rich morphopragmatic system of diminutives, elatives and augmentatives with suffixes and interfixes. The more productive suffixes are -ino, -etto, -uccio. Although the pragmatic value of diminutives and augmentatives is similar their semantic value is the opposite, [small] vs. [big]. Diminutives have both a semantic and a pragmatic value.

Diminutives are the only derivational pattern children acquire from the very early phase of language acquisition. This category is very productive in the adult language especially in child centered situations, i.e. used with children and towards children.

Our data are taken from a corpus of recordings of an Italian child (Matteo) in a period that goes from 1;4 to 3;4. Since the very beginning the child shows a consistent number of diminutives that parallels that of the mother. He plays with the suffixes creating words he never heard in the input showing examples of back formation from false diminutives like viola from violino.

Pragmatic meaning is the first to be acquired by the child, this is shown by the use of the same word both simplex and diminutive referring to the same object and by the prosody the accompanies its use. Only with the emergence of the augmentative he starts to acquire the semantic notion of smallness as opposed to its counterpart.

As the child reaches the morphological phase he starts to express speech acts through the means of diminutives and to acquire a metalinguistic competence in an adult-like fashion.
Our findings show that the process of acquisition is coherent with the feature of the morphological system of the language acquired and with the input provided by the caretakers.

1. Introduction

Diminutives are one of the first derivational pattern children acquire from the very early phase of language acquisition. This category is very productive in the adult language especially in child centered situations.

Our date are taken from a corpus of recordings of an Italian child (Matteo) in a period that goes from 1;4 to 3;9. Since the very beginning the child shows a productive use of diminutives playing with the suffixes showing examples of back formation from lexicalized diminutives.

Pragmatic meaning is acquired before semantic meaning by the child, this is showed by the interchangeable use of both simplex and the diminutive referring to the same object and by the prosody the accompanies its use. Only with the emergence of the augmentative he starts to acquire the semantic notion of smallness.

As the child reaches the morphological phase he starts to express speech acts through the means of diminutives and to acquire a metalinguistic competence in an adult-like fashion.

From a comparison with the adult’s production we notice a close parallelism in the development of diminutives, their variants and the categories which constitute their landing-sites.

2. Description of the adult language

Italian diminutives are included in the rich paradigm of augmentatives (-one), elatives (-issimo), pejoratives (-accio, -ucolo, -astro) and attenuatives (used with adjectives, -occio).
There are several suffixes forming diminutives: -ino, (with interfixes -ic-ino, -ol-ino-), -etto, -uccio, -ello with interfixes -ic-ello, -er-ello, -uzzo, -ic-uolo, -ucolo (with pejorative value), -otto, -occhio (with an endearing value). The most common and widely used diminutives are -ino and -etto. More than one suffix can be attached to a base: albergh-ett-uccio ‘hotel-dim-dim’.

After the application of a suffix is not always the case that the intermediate word is an existent word: cagna → *cagn-ol-o → cagnolino ‘dog-dim’.

Almost all categories can be diminutivized: nouns end adjectives are the most common bases used with diminutives but adverbs (except those ending in -mente as dolcemente ‘sweetly’) and some verbs can be diminutivized. Interjections can also be diminutivized to a certain extent. Some numerals can undergo diminutive formation: un miliarduccio, un milioncino ‘a billion -dim’, ‘a million -ino’.

The suffixes -ino and -uccio can be recursively attached to a base as in attimino-ino-ino, ‘moment-dim’.

One of the structural characteristics of diminutives is that they do not change the category of the base and its morphosyntactic features: an animate noun remains an animate noun [[giornale]N -ino ]N (‘magazine’), the same holds for the gender. They have nevertheless some head properties in that they can change the inflection class, i.e. nouns go from the irregular class of the masculine and feminine nouns to the most stable class of the masculine or feminine nouns: il poeta → il poetino ‘the poet’, la tribù → la tribuina ‘the tribe’. The can also take up word status: ne vorrei una fettina (di torta) proprio ina! (“I would like a slice (of cake) just dim”) (Dressler and Merlini 1994).

The only allomorphic rule is the insertion of the affricate /c/ before the diminutive suffixes -ino, -ello if the base ends with -one/a as in leone → leoncino ‘lion’, mascalzone → mascalzoncello ‘scoundrel’.

As to the productivity of the various suffixes, -ino and -etto are the most used ones. A recent quantitative research of the diminutives (and alteratives in general) in a corpus of 500.000 spoken words of the Italian language has registered the -ino suffix as the highest number of diminutives with the 63% of
3. Semantics and pragmatics of diminutives

The denotative meaning of diminutives\(^1\) can be derived by the notion of smallness although many authors have emphasized their connotative value with the meanings graciousness, tenderness, or rather with their emotional value.

As underlined by Dressler & Merlini (1994) diminutives can downgrade the dimensional properties of some adjectives and nouns like grandina ‘big-inna’, stradina ‘street-dim’, or it can indicate the poor value of something like in vinello ‘wine-dim’ which indicates that it is not a good quality of wine. Diminutives are also used to indicate the denotative meaning of reduction of precision like with noun of quantity as in kiletto ‘kilo-dim’, or oretta ‘hour-dim’, which can be used to mitigate a request because in fact the time of waiting can be much longer than the given one.

Dressler and Merlini (1994) elaborate and discuss a series of pragmatic meanings of diminutives assuming a general morphopragmatic meaning non-serious. This is a feature that is used as a strategy to downgrade or reduce the responsibility of the person in relation to a linguistic act (like an offer or a request) or its illocutionary strength: Potrei chiederti un piacerino? “Could I ask you a favor-dim?"

Another strategy of downgrading is used to express a sort of negative politeness in order to minimize the imposition on the addressee (Dressler and Merlini 1994). In a fruit shop that is about to close: ha qualche ciliegina rimasta? “Do you have any blueberry-dim left?” “where diminutive may contribute to expressing the speaker’s pessimism about obtaining the desired fruit” (Dressler and Merlini 1994).
Diminutives are mostly used in child centered speech situations or in love centered situations that have a metaphorical relation with the child world. The use of diminutives in the adult language is blocked by the presence of lexicalized diminutives as in *postina* ‘mail collector’ which cannot mean ‘little post office’.

4. Methodology

Data are from the boy Matteo from the age of 1;4 to the age of 3;9. Recordings were made once a week and later twice a month. Audiorecordings were made during interactions mainly with the mother and other caretakers (the father and a friend of the parents). Interactions consisted in daily routines: breakfast, play situations and reading picture books. The mother did not stimulate the production of the child in a specific way other than proposing situations for talking, therefore child’s production is entirely spontaneous. Diary notes were taken for the months lacking audiorecordings.

Transcriptions were done in Chat format. Elaboration with Clan and Morf were done with the help of the CNR of Pisa (Giuseppe Cappelli ran file checking). Transcripts were checked by the author of this paper both with the program and manually. For a better manipulation of the data recordings were divided per month.

5. Quantitative aspects

The quantitative aspects involve the onset of diminutive formation in relation to both the production of the simplex and the total number of word types. In other words a calculation of the total number of word types without diminutives and of diminutives occurring with the simplex and by themselves
Table 1. Matteo’s diminutives relative to total number of nouns and word types

<table>
<thead>
<tr>
<th>Age</th>
<th>Total number of diminutives relative to total number of nouns</th>
<th>Diminutive types relative to noun types</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nouns</td>
<td>% Dim</td>
</tr>
<tr>
<td>1;4</td>
<td>16</td>
<td>12.5</td>
</tr>
<tr>
<td>1;6</td>
<td>5</td>
<td>60</td>
</tr>
<tr>
<td>1;8</td>
<td>64</td>
<td>19.5</td>
</tr>
<tr>
<td>1;10</td>
<td>94</td>
<td>21.2</td>
</tr>
<tr>
<td>2;1</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>2;2</td>
<td>93</td>
<td>10.7</td>
</tr>
<tr>
<td>2;3</td>
<td>55</td>
<td>23.6</td>
</tr>
<tr>
<td>2;4</td>
<td>48</td>
<td>27</td>
</tr>
<tr>
<td>2;5</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>2;6</td>
<td>146</td>
<td>12.3</td>
</tr>
<tr>
<td>2;7</td>
<td>79</td>
<td>13.9</td>
</tr>
<tr>
<td>2;8</td>
<td>36</td>
<td>8.3</td>
</tr>
<tr>
<td>2;9</td>
<td>75</td>
<td>1.3</td>
</tr>
<tr>
<td>3;1</td>
<td>84</td>
<td>3.5</td>
</tr>
<tr>
<td>3;2</td>
<td>74</td>
<td>4</td>
</tr>
<tr>
<td>3;3</td>
<td>67</td>
<td>1.4</td>
</tr>
<tr>
<td>3;4</td>
<td>117</td>
<td>2.5</td>
</tr>
<tr>
<td>3;5</td>
<td>87</td>
<td>10.4</td>
</tr>
<tr>
<td>3;6</td>
<td>231</td>
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<tr>
<td>3;7</td>
<td>76</td>
<td>7.8</td>
</tr>
<tr>
<td>3;8</td>
<td>110</td>
<td>8.1</td>
</tr>
<tr>
<td>3;9</td>
<td>207</td>
<td>3.8</td>
</tr>
</tbody>
</table>

was run. Furthermore a comparison with the adult’s occurrences of diminutives has been analyzed.
As far as the development of diminutives is concerned, Table 1 and Figure 1 shows that in the very first period there are some tokens which increase around 1;10 and maintain constant except for the sessions that go from 2;9 - 3;4. The same picture is shown for the types, although we have to point out that the frequency of types is as important as the frequency of tokens for the evaluation of productivity. We have in fact a fairly high number of different types especially in the sessions that go from 2;2 to 2;7. From the diary notes we also notice that this is a period of major productivity in terms of types of diminutives, as we will see in the qualitative analysis.

As is shown in Figures 2a, 2b and 2c the relative low number of diminutives used along with their simplex until 2;6 (Figure 3) suggests that the child may not have acquired the semantic distinction of the diminutive from its base. But as we will show later the simple cooccurrence of both forms is not always a sign of acquisition of their semantic or pragmatic meaning. Despite the low number of cooccurrence of diminutive and simplex (e.g. in Figure 2c, age 3;8-3;9) we can definitely attest the acquisition of a metalinguistic awareness of many of the pragmatic strategic uses of diminutives by Matteo. Only with a qualitative analysis of the word forms used by the child we can elaborate hypotheses on the acquisition of meaning by the child.
Figure 2a. Matteo’s diminutive types, simplex types and both relative to total number of word types
Figure 2b. Matteo’s of diminutive types, simplex types and both relative to total number of word types
Figure 2c. Matteo’s diminutive types, simplex types and both relative to total number of word types.
Figure 3 shows the percentage of diminutive forms used by the mother and the child. Although the adult’s production is always higher than that of the child, starting from 2;2 to 2;7 it parallels that of the mother although in the other sessions diminutive production is not excessively below the adult’s level.

The same parallelism is observed in the productions of the diminutive suffixes used by the mother and Matteo as shown in Figure 4. The most used suffix is -ino, which also the one that is generally preferred in the adult language (see section 1).

Comparing the categories of both the child’s and the mother’s language, in Table 2, we notice that there is a similar preference for the categories chosen as landing-site of diminutives. As Dressler and Merlini (1994) point out the landing-site is pragmatically motivated in that diminutives are generally attached to nouns referring to the child, his body parts or objects and toys belonging to the child (see also Stephany 1997). In this case we notice that the
mother makes large use of terms referred to toys (animals) and animals. The same holds for Matteo. From diary notes we also have more types referring to body parts. For the inanimate category, terms are often referred to the child world such as: *bacini* ‘kisses-dim’, *letterine*, a word that refers to a toy as well as an abstract entity like the letters of the alphabet; the same holds for *numerini* ‘numbers-dim’.

![Bar Graph](image)

*Figure 4. Percentage of the number of diminutive forms for Matteo and the mother*

<table>
<thead>
<tr>
<th></th>
<th>Matteo</th>
<th></th>
<th>Mother</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Types</td>
<td>Tokens</td>
<td>Types</td>
<td>Tokens</td>
</tr>
<tr>
<td>food</td>
<td>5</td>
<td>9</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>body parts</td>
<td>9</td>
<td>22</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>animals</td>
<td>25</td>
<td>124</td>
<td>24</td>
<td>79</td>
</tr>
<tr>
<td>inanimates</td>
<td>25</td>
<td>65</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>toys</td>
<td>20</td>
<td>52</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>humans</td>
<td>9</td>
<td>30</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>abstract</td>
<td>16</td>
<td>53</td>
<td>15</td>
<td>31</td>
</tr>
</tbody>
</table>

6. Qualitative aspects
As we have seen in the previous section diminutive use starts from the very beginning of the child’s production. Most of this diminutives are rote learned and are repetitions after the mother’s production. From 2;2 diminutive formation seems to be productive. The child begins to play with the suffixes and to overgeneralize its use: golfino (now a lexicalized form) → golhetto, which is never produced in the input. The same holds for guantino ‘glove-dim’, together with guantetto. Although he produces from this age onwards a relatively high number of diminutives he has not acquired the difference in meaning with the simplex yet. This is also very clear when we tested the child:

*MOT: Matteo come fa il cane grande?  
%eng:  Matteo how does the big dog do?  
*MAT: bau!  
%com: with a high tone of voice  
*MOT: e come fa il cane piccolo?  
%eng:  and the dog-dim?  
*MAT: 0  
%com: silence  
*MOT: e il cane piccolino?  
%eng:  and the small dog?  
MAT:  bau!  
%com: with an acute sound

This example shows that the child recognizes the meaning ‘small’ only when it is expressed with the analytic form.

Acquisition of diminutives is also shown by examples of backformation, i.e. the derivation of simplex from lexicalized diminutives: viola ← violino ‘violin’, or from opaque diminutives cagno (non-existent word instead of cane ‘dog’) ← cagnolino.
In this period he also uses diminutivized forms to refer to adults, as the word *manine* to refer to adult’s hands. As far as the pragmatic meaning is concerned we suggest that he begins to use diminutives with a sort of pragmatic meaning as it is shown by the intonations and the kind of gestures that accompany the production of diminutives meaning tenderness and endearment.

After 3;0 a higher number of diminutives occurs and he starts using augmentatives in opposition to the diminutives as following example shows:

*MAT: mamma quello è un barbone
%eng: Mummy that is a poodle-aug
*MOT: perché dici che è un barbone?
%eng: why do you say it is a poodle-aug?
*MAT: perché è un barboncino grande
%eng: because it is a big poodle

Actually the word *barboncino* ‘poodle’ is a false diminutive and the term *barbone* means ‘a beggar’ or ‘a long beard’ (although it is seldom used to indicate the same dog because the homonymy with the lexicalized term blocks its use). The child analyzes the word as *barba* plus -one the first time, and plus -ino the second time (the augmentative suffix), and he metalinguistically explains this difference of meaning.

For the production of the simplex along with the diminutives we start noticing a difference in meaning although he mostly uses the diminutivized adjective *piccolina* with the noun that perhaps adds pragmatic meaning to the noun phrase: *una lumachina piccolina* ‘a little-dim snail-dim’. We have to point out that it is very often the case that the mother uses this double diminutive.

From 3;8 onwards the child begins to produce diminutives in a wider range of situations very closely matching those of the adult, as in child centered speech situations (with the younger brother). For pragmatic reasons
he starts to diminutivize categories that are impossible to diminutivize in the adult language, such as some adverbs like *tuttino* ‘all-dim’, *moltino* ‘much-dim’, *semprino* ‘always-dim’. He also starts to reiterate the suffixes: *buon-in-ino* ‘good-dim-dim, or with two different suffixes: *piccol-ett-in-ino* ‘small-dim-dim-dim’.

As to pragmatic strategies he shows to have acquired the strategy of politeness (see session 3) in requests as in *puoi darmi quella pallina un attimino soltantino?* ‘can you give me that ball-dim just-dim a moment-dim’, when he asks a friend for a ball. (Note that the adverb *soltanto* cannot be diminutivized in adult language.)

7. Conclusion

As shown in previous research the acquisition of diminutives is one of the first morphological patterns children acquire. For Matteo this also holds: diminutives emerge in the very early phases (1;4) although they are systematically and spontaneously used starting from 1;8-1;10 and start to be productive from 2;2.

From our data the semantic meaning of smallness seems to emerge later than the pragmatic meaning (see Ceccherini et al. 1997, Dressler 1994). Words like *acquetta* ‘water-dim’, *mammina* ‘mother-dim’ or *bagnetto* ‘bath-dim’ are not compatible with a semantic interpretation of smallness. In addition we found prosodic elements important in evaluating the pragmatic meaning of diminutives.

Diminutives and simplicia are used interchangeably without any difference in meaning in the early stages of language acquisition. Later on we have noticed that a sort of pragmatic meaning is attached to the diminutivized words and that this represents a general attitude the child shows towards his interlocutor (especially the mother). He feels he is the center of the mother’s
world and diminutives are the way through which he underlines the affectionate and emotional character of the interaction.

The semantic meaning of smallness emerges with the acquisition of the semantic meaning of augmentation. In this case we observed a pertinent usage of diminutives and their simplex, the first being applied to semantic denotation of smallness or child-centered situations.

Another important factor that we analyzed is the influence of the input on child’s production of diminutives. The data show a parallelism between the child’s and the mother’s production. This parallelism can be noticed in the development of diminutives and their variants which reflect those of the mother. A look to the categories as landing-sites of diminutives shows that Matteo’s production as well as that of the mother is pragmatically motivated by situations and objects directly related to the child and his world.

Notes

1 As Dressler and Merlini (1994) point out some adjectives do not diminutivize their dimension such as corto 'small'. Their diminutivized counterpart does not convey the meaning of less short instead of 'shorter'.

2 For a detailed description of the morphopragmatic uses of diminutives see Dressler and Merlini (1994) and De Marco (1998).

3 Children do not necessarily relate difference of form to difference of meaning as stated by Clark (1993).

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Pre- and Protomorphological Fillers in Greek Language Acquisition

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ABSTRACT

The function of fillers in two Greek acquisition corpora (children: Christos 1;9 - 2;2 and Sofia 2;0-2;9) is traced and their relation to the development of grammatical morphemes and functors (like modal particles, negation particles and definite articles) is investigated. There is a period in the development of both children during which they use reduplication first as a mechanism for rendering trisyllabic words and then as a filler for the preverbal modal particle *na* for some of the subjunctive functions (sometimes for negation and for the definite article also).

The data favor an integrating analysis (Veneziano and Sinclair 1996) of word external and word internal fillers for a certain period in children’s development since both children employ the same mechanism of reduplication for filling both word external and word internal syllables in successive - and for a while overlapping - periods.

The findings support a distinction between a premorphological phase and a protomorphological phase, in agreement with the position of Dressler and Karpf (1994) and Kilani et al. (1998) since there are clear indications for the development of one and the same mechanism is first exploited as word structure preserver (premorphology) and later exploited as a formal sign (instead of the modal particle *na*) for certain morphosyntactic functions (subjunctive, function of request) besides the prosodic ones (transition/protomorphology).
1. Introduction

In this paper we trace the function of fillers in two Greek acquisition corpora (children: Christos and Sofia) and investigate their relation to the development of grammatical morphemes (i.e. negation particles, definite articles and mainly modal particles), as well as their relevance to the theoretical framework of Dressler and Karpf (1995).

According to Kilani-Schoch et al. (1998) “fillers are means of replacing unanalyzable grammatical material of adult speech such as articles, determiners, clitics, auxiliaries and other function words in children who first rely on prosodic and phonological structure to build grammatical hypotheses.”

Although fillers are discussed at length in the literature, the approaches to this phenomenon differ considerably. Peters and Menn (1993) assign primitive grammatical awareness to the use of fillers from the moment of their appearance, assuming that there is a kind of systematicity in what they fill, i.e. they fill grammatical morphemes; in Peters (1996) the fillers that are analyzed stand for ‘catenative verbs’.

Kilani-Schoch et al. (1998) also claim that fillers replace “unanalysable grammatical material” but, according to Dressler and Karpf (1995), they differentiate between a pre- and protomorphological (and later a modularized) phase, drawing a line between a rather phonological mechanism of prosody structure preservation, on the one hand and the emergence of a kind of grammatical systematicity, on the other, as far as the use of fillers and their function is concerned (see also Kilani-Schoch and Dressler 1997).

Veneziano and Sinclair (1997) avoid the term ‘filler’ and speak of additional (word - external) vs. non- additional (word - internal) elements that replace either a monosyllabic functor before a monosyllabic word or the first syllable of a disyllabic word. They argue that in the early stages of language acquisition there should be no differentiation between elements that replace
adult-like functors and elements, which replace syllables of adult-like plurisyllabic words (cf. Kilani-Schoch and Dressler 1997).

If we correctly understand the authors mentioned above there are some common points between Kilani-Schoch et al. (1998) and Veneziano and Sinclair’s (1997) assumptions, since both emphasize the discrimination between a period in which fillers have a mere prosodic function (cf. premorphology in Kilani-Schoch et al, see also Dressler and Karpf 1995) and a period in which fillers have a grammatical (morphological/syntactic) function (cf. protomorphology in Kilani-Schoch et al. where in the third phase of modularized morphology fillers occur rather rarely). On the other hand, Peters and Menn (1993) deal in particular with children’s rendering of grammatical morphemes (or ‘catenatives’ in Peters 1996) and in Kilani-Schoch et al. (1998), no evidence of word internal fillers is presented - i.e. both works do not examine parallel filler-strategies for replacing the first syllable of a word - in order to preserve the prosodic structure - besides word external elements, whereas Veneziano and Sinclair do. Kilani-Schoch and Dressler (1997) also use the term ‘lexical fillers’ for the fillers that stand for the first syllable of a word.

1.1. Reduplicative fillers

Our Modern Greek data (henceforth MG) favor the integrating approach of Sinclair and Veneziano (1997) (see also Kilani-Schoch and Dressler 1997, and Christofidou and Kappa 1997), since we also have strong indications that Christos and Sofia employ in rather successive periods, the same filler mechanism, viz. reduplication, as replacement i) of both word initial, non-grammatical syllables and ii) of word external/grammatical monosyllabic morphemes.

The elements considered as fillers in the literature are mostly vocalic elements (cf. Kilani-Schoch et. al 1998); in some cases they are also realized as consonantal elements (cf. Peters 1996) and rarely as CV-structures (cf. Kilani-
Schoch and Dressler 1998). As mentioned, Christos and Sofia realize fillers mostly as a CV-structure and specifically as a CV reduplicative structure which leads to a rather differentiated picture of fillers in MG.

According to Dressler and Karpf (1995:102f.), reduplication belongs to extragrammatical operations (like blends, truncations, etc.), which appear already in the premorphological phase of acquisition. The child often uses reduplication for referring to an object by imitating its characteristic noise, for instance in MG [tu-tu] instead of aftokinito, ‘car’. In our corpus it will be shown that reduplication is also used as a filler. Later, schwa fillers also appear, but they stand only for word external morphemes.\(^1\)

In our opinion the following arguments allow us to consider the reduplicative CV-structure as filler preceding a word or in word initial position:

i) It appears that in Greek child language the CV-syllable structure is highly respected and is always preferred to the V-syllable structure, thus onsetless syllables are avoided. Greek children ‘repair’ onsetless syllables by filling in the empty onset position by copying the consonant of the syllable which follows, for instance Sofia (see Kappa 1997) produces the adult word [eDo] ‘here’ as in (1).

(1) Sofia 2;0
SOF: dedo
phon: dedo
mor: ADVledho
eng: here

Reduplicative syllables serve as a mechanism of prosodic/syllabic structure preservation of the adult form, by Christos (2). The child realises a trochaic foot (for the purposes of the Greek stress system) and tries to preserve the rest of the syllabic shape of the adult form by means of reduplication. Sofia
employs the same mechanism as Christos and sometimes uses a repetitive reduplication in order to render the structure of the adult word (3).

(2) Christos 1:11.0
*CHR: mamano
%phon: mamano
%mor: Niaeroplano-NEUT:SG
%eng: airplane

(3) Sofia 2:0
*SOF: pepepeta
%phon: pepepeta
%mor: Nipetaludha-FEM:SG
%eng: butterfly

ii) The reduplicative fillers in MG seem to behave like other kinds of fillers, as far their distribution and function is concerned, i.e. they occur in the same positions (preverbal/prenominal and in word initial position) and exercise the same functions (word-structure preservation, placeholders for grammatical morphemes etc.).

Our data also favor Dressler and Karpf’s (1995) distinction of pre- and protomorphology, since the function of fillers in our corpus can be differentiated according to their occurrence in the premorphological or protomorphological phase, exactly like the vocalic fillers in data from other languages (see Kilani-Schoch and Dressler 1997, Kilani-Schoch et al. 1998).

2. Presentation of data

Our data are based on the recordings (and diary notes) of two Greek monolingual children, Christos and Sofia. Christos has been recorded from the
The collection of Sofia’s data began when she was 1;10 (diary notes and recordings) and is still ongoing at present (April 1998). The period which concerns us is from 2;0 till 2;9.15.

We analyze these two corpora together because of the similarities they exhibit in the development of fillers and their strong tendency to reduplicate.

Similarities between the two children:

i. They try to preserve the number of syllables of an adult word. They do not seem to have problems with disyllabic words, but for trisyllabic/plurisyllabic they employ reduplication for a certain period.

ii. For a certain period in the acquisition they use, quite systemically, reduplication for rendition of the modal particle *na*.

2.1. Christos

From 1;9.24 to 1;10.9 Christos uses reduplication as a strategy in order to preserve the trisyllabic structure of adult words. He preserves the trochaic foot (the unmarked case in MG) and uses reduplication to fill in the unstressed syllable position, i.e. the first syllable of the adult word, provided it is unstressed. It seems that this kind of reduplication is prosodically motivated.

Out of 80 words Christos uses during this period, 24 are target trisyllabic words (43 tokens) and 2 words with 4 syllables (2 tokens). Out of these 26 plurisyllabic words he realizes 11 of them with a truncated first syllable (18 tokens) and 5 of them show reduplication (8 tokens). Five of them are realized as trisyllabic (more adult-like in 10 tokens) and 5 words are realized as trisyllabic words exhibiting consonant harmony (in 9 tokens). Target words with more than three syllables are also realized as trisyllabic via the same mechanisms (4).
(4) Period A: 1;9.24 - 1;10.9

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
<th>Realization</th>
</tr>
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<tbody>
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<td>80</td>
<td></td>
</tr>
<tr>
<td>trisyllabic</td>
<td>24/80</td>
<td></td>
</tr>
<tr>
<td>tetrasyllabic</td>
<td>2/80</td>
<td></td>
</tr>
<tr>
<td>truncation</td>
<td>11/26</td>
<td>43%</td>
</tr>
<tr>
<td>reduplication</td>
<td>5/26</td>
<td>19%</td>
</tr>
<tr>
<td>consonant harmony</td>
<td>5/26</td>
<td>19%</td>
</tr>
<tr>
<td>adult-like</td>
<td>5/26</td>
<td>19%</td>
</tr>
</tbody>
</table>

From 1;10.18 till 1;11.10 Christos uses 92 words, 37 of which are target trisyllabic words (60 tokens) and 8 are tetrasyllabic (14 tokens). Of these 45 plurisyllabic words he realizes 5 via truncation of the first syllable (in 5 tokens) and 16 via reduplication (in 25 tokens). Twenty are realized as trisyllabic (more adult-like in 40 tokens) and 4 words are realized as trisyllabic via consonant harmony (in 4 tokens). The reduplicative realizations take precedence over the truncated ones: reduplications increase from 19% to 35.5%, while the truncations decrease from 43% to 11% (5).

(5) Period B: 1;10.18 - 1;11.10

<table>
<thead>
<tr>
<th>Type</th>
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</tr>
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<td></td>
</tr>
<tr>
<td>trisyllabic</td>
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<tr>
<td>tetrasyllabic</td>
<td>8/92</td>
<td></td>
</tr>
<tr>
<td>truncation</td>
<td>5/45</td>
<td>11%</td>
</tr>
<tr>
<td>reduplication</td>
<td>16/45</td>
<td>35.5%</td>
</tr>
<tr>
<td>consonant harmony</td>
<td>20/45</td>
<td>9%</td>
</tr>
<tr>
<td>adult-like</td>
<td>4/45</td>
<td>44.5%</td>
</tr>
</tbody>
</table>

For a short while during the period from 1;10.24 till 1;11.10, Christos uses reduplication for rendering the definite article. This happens only with 4 types
(4 tokens). Thus we assume that the strategy is rather phonologically driven without any grammatical awareness involved and soon Christos abandons this effort. It is of interest, however, that for the first time Christos uses reduplication as a filler in order to render word external syllables, i.e. prenominal functors, (see (6)).

(6) Christos 1;11.0
   *CHR: popota
   %phon: popota
   %mor: DEF*i-FEM:SG N|focia-FEM:SG
   %eng: the seal

   Between 1;10.24 and 1;11.0 two forms with vowel lengthening appear in order to express the subjunctive function of request and then disappear (i.e. the forms koopi and kooni instead of na kopi ‘to cut’, na sikoni ‘to get up’ (3 tokens). This blind alley (see Kilani-Schoch et al. 1998, cf. “false start” in Peters and Menn 1993) is soon abandoned but it seems to be the precursor of another not adult-like strategy that Christos begins to employ systematically during period C (9), (see (13)) in which reduplication is used quite systematically to render the modal particle na.

(7) Christos 1;11.0
   *CHR: koopi (porto)kali
   %phon: koopi kali
   %mor: MDL|*na V|kovo-PFV:SUBJ:*2S N|portokali-NEUT:AKK:SG
   %eng: (I would like you) to cut the orange

   Vowel lengthening appears once as well for rendering the article between 1;10.24 and 1;11.10. Christos tries to render the form i focia ‘the seal’. He first makes up the form voota (8) and immediately afterwards uses the reduplicative form popota (see 6). The same pattern - vowel lengthening first and
reduplication later - is applied systematically to render the subjunctive functor ‘na + verb’ in period C (see 9).

(8) Christos 1;11.0
   *CHR: voota
   %pho: vota
   %mor: DEF*I-FEM:SG N|focia-FEM:SG
   %eng: the seal

From 1;11.13 till 2;0.16 Christos uses 42 target trisyllabic words (occurring in 70 tokens) and 10 target words with more than 3 syllables (in 25 tokens). Of these 52 plurisyllabic words he realizes 14 via truncation of the first syllable(s) (in 22 tokens) and 5 via reduplication (in 10 tokens). Twenty eight of them are realized as trisyllabic words (more adult-like in 50 tokens) and 3 tetrasyllabic target words are realized as tetrasyllabic words (adult-like) for the first time (in 3 tokens). Two trisyllabic words are realized as trisyllabic words via consonant harmony (in 2 tokens). During this period the more adult-like realizations increase from 44.5% to 59.5% (i.e. 54%+5.5%) and take precedence over the reduplicative realizations which decrease from 35.5% to 9.5%. Truncation increases once more (27%), apparently owing to the large number words with more than 3 syllables (see 9). The disyllabic forms with truncation amount to 9.5% and the trisyllabic forms with truncation amount to 17.5%.

Between 1;11.13 and 2;0.16 Christos uses, for the first time, reduplication for rendering the subjunctive functor na in order to achieve the function of a request (one of the target subjunctive functions, see (10), (11)). In our opinion this is the main reason of the decreased use of reduplication as a structure preservation mechanism. This happens predominantly with disyllabic verbs. Only once does the trisyllabic verb form petsume appear instead of na pekube ‘let’s play’, i.e. without any marker for na, but in all occurrences of the subjunctive form of pezo ‘I play’, Christos henceforth employs once again the
tetrasyllabic reduplicative form i.e. *pepetsume*. The token *anicio* instead of *n’anikso* ‘to open’ remains trisyllabic regardless of whether or not it appears in subjunctive with the particle *na*, since the onset is vocalic.

(9) Period C: 1;11,13 - 2;0,16

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>adult words</td>
<td>52</td>
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<tr>
<td>trisyllabic</td>
<td>45/52</td>
</tr>
<tr>
<td>tetrasyllabic</td>
<td>10/52</td>
</tr>
<tr>
<td>realizations</td>
<td></td>
</tr>
<tr>
<td>truncation</td>
<td>14/52</td>
</tr>
<tr>
<td>reduplication</td>
<td>5/52</td>
</tr>
<tr>
<td>consonant harmony</td>
<td>2/52</td>
</tr>
<tr>
<td>adult-like</td>
<td>28/52</td>
</tr>
<tr>
<td>tetrasyllabic (adult-like)</td>
<td>3/52</td>
</tr>
</tbody>
</table>

(10) Christos 1;11,13

*CHR: kakani Niko
%pho: kakani niko
%mor: MDL|*na V|kano-PFV:SUBJ:*2S
PROP|Nikos-MASC:AKK:SG
%eng: (I would like you) to draw Nick

(11) Christos 1;11,13-2;0,16

5 types: *(kakani, nanicio, kakatsi, pipi, pepetsume)*,
(‘to do’, ‘to open’, ‘to sit’, ‘to get in’, ‘to play’)
18 tokens / 22 RED, 82%

3 types: *(kani, peciume, anicio)*, (‘to do’, ‘to play’, ‘to open’)
4 tokens / 22 Ø+Verb, 18%
Meanwhile, at the age of 1;11.27-2;0.4, for a short time during period C (9), Christos sporadically employs again fillers for definite articles: four types (7 tokens) occur with schwa as filler (12a) and 1 type (2 tokens) occurs with a prenasalised consonant as filler (12b). This shift to fillers happens due to the systematic and exclusive use of reduplication for the form *na* and its subjunctive function of request.

(12a) Christos 1;11,27
*CHR: *∂mics
%pho: ∂mics
%mor: DEF|*o-MASC:NOM:SG
%eng: (the) Mickey

(12b) Christos 2;0,4
*CHR: Nbala
%pho: Nbala
%eng: (the) ball

Between 2;1.2 and 2;1.22 Christos gradually achieves more adult-like forms of *na*. The data in (13) show the competition between different forms/fillers and adult-like renditions for *na* (and sometimes the future particle *tha*):

(13) Christos 2;1.2-2;1,22
1/19 ta +reduplication+Verb: (1 type), (*ta petsume ’(us) to play’), 5%
1/19 a+Verb: (1 type), (*apeci ’to play’), 5%
4/19 na+Verb (2 types), (*na petsume ’(us) to play’) 21%
1/19 a+RED+Verb (1 type), (*atatani ’to do’) 5%
7/19 reduplication (6 types), (*papali ’to take’) 38%
2/19 cons. harmony (1 type), (*papetsume ’(us) to play’), 10,5%
2.2. Sofia

The collection of data on Sofia started when she was 1;7.10 (diary notes and recordings) up to the present. Sofia (2;0-2;5) also uses reduplication as a strategy to preserve the trisyllabic structure of the adult words. She preserves the trochaic foot (unmarked case in MG) and uses reduplication to fill in the unstressed syllable position, in this case the first unstressed syllable of the adult word. Thus reduplication seems to be prosodically motivated. At the age of 2;0 - 2;5 Sofia uses 93 words. Fifty one are target trisyllabic. Thirty five of these 51 words are produced by the child as trisyllabic by means of reduplication, 16 are produced as disyllabic truncated forms with realization of the last 2 syllables. Adult words with more than 3 syllables are produced as trisyllabic employing her favorite pattern of reduplication: 14 out of 15 adult plurisyllabic forms are realized as trisyllabic, and 1 word as plurisyllabic employing a repetitive reduplication (pepe’peta ~ pe’peta = petaluDa) (14).

(14) Period A: 2;0 - 2;5

<table>
<thead>
<tr>
<th>adult words</th>
<th>93</th>
</tr>
</thead>
<tbody>
<tr>
<td>trisyllabic</td>
<td>51</td>
</tr>
<tr>
<td>tetrasyllabic</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>realizations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>truncation</td>
<td>16/51</td>
</tr>
<tr>
<td>reduplication</td>
<td>35/51</td>
</tr>
<tr>
<td>plurisyllabic as trisyllabic</td>
<td>15/15</td>
</tr>
</tbody>
</table>

In the same period 2 types (6 tokens) are attested, in which the child possibly expresses a subjunctive function, that of ordering, but there is no emergence or sign of the subjunctive marker. Since this function occurs only 4
times (just one type) we assume that the use of subjunctive is not yet systematic, see (15).

(15) Sofia 2;5,23
*SOF: pini cheli
%pho: pini çeli
%mor: MDL*[na VplenopFV:SUBJ:*1S Nlcheri-NEUT:AKK:SG
%eng: (I am going to) wash (the) hand

Between 2;5 and 2;6.21 Sofia continues to preserve the trisyllabic structure of most target words. 107 words are attested, 58 of which are trisyllabic. Sofia uses reduplication in 37 of these 58 words. Eighteen words are truncated and are realized as disyllabic and only 2 words are realized as trisyllabic without reduplication (see (16)). Sofia’s - unlike Christos’ - use of reduplication decreases (only slightly) from 70% to 64%, and the number of truncations does not decrease at all.

(16) Period B: 2;5 - 2;6.21

<table>
<thead>
<tr>
<th>adult words</th>
<th>107</th>
</tr>
</thead>
<tbody>
<tr>
<td>trisyllabic</td>
<td>58</td>
</tr>
<tr>
<td>tetrasyllabic</td>
<td>-</td>
</tr>
<tr>
<td>truncation</td>
<td>18/58</td>
</tr>
<tr>
<td>reduplication</td>
<td>37/58</td>
</tr>
<tr>
<td>consonant harmony</td>
<td>-</td>
</tr>
<tr>
<td>adult-like</td>
<td>2/58</td>
</tr>
</tbody>
</table>

In the same period Sofia, like Christos, uses reduplication for replacing grammatical morphemes for the first time. In the case of Sofia reduplication is used in order to render the subjunctive particle na for the function of request (17a) or object clause (17b). Four types (10 tokens) are attested between 2;5
and 2;6.21 with subjunctive function (see (17)). The use of reduplication as a filler for the subjunctive marker *na may explain the decrease of reduplication for rendering trisyllabic words in period B (16), (cf. Christos’ Period C (9)). The verbs in these sentences are disyllabic or monosyllabic.

(17a) Sofia 2;6.21
*SOF: ela didis titines
%pho: ela didis titines
%mor: Vlerchome-IMP:2S MDL]*na Vlvepo-PFV:SUBJ:2S
Nmurtina-FEM:AKK:PL
%eng: come to see (the) curtains

(17b) Sofia 2;5.23
*SOF: telo pao titina
%pho: telo pao titina
%mor: Vthelo-IMPF:PRES:1S MDL]*na Vlpao-PFV:SUBJ:1S
PROPIAthina-FEM:AKK:SG
%eng: (I) want to go (to) Athens

During the same period reduplication occurs also as a filler for the negation particle *dhen (‘not’), in 3 types (3 tokens) (18).

(18) Sofia 2;6
*SOF: mimime
%pho: mimime
%mor: NEGI*dhen Vlme-IMPF:PRES:1S
%eng: (I) am not

After the age of 2;7 Sofia gradually abandons reduplication as a filler-mechanism: out of 40 adult words, 26 are target trisyllabic. Five of them are produced via reduplication as trisyllabic (these are actually 5 ‘old’ words), 2 as
trisyllabic without reduplication, and 19 ‘new’ words, as disyllabic truncated forms without reduplication. Reduplication decreases considerably (from 64% to 20%) in favour of truncation. In this period the child retains only the disyllabic trochaic foot of the adult word in her effort to produce the most adult-like form as in (19) period C.

(19) Period C: 2;7 - 2;9.15

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
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<td>40</td>
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<td>-</td>
</tr>
<tr>
<td>adult-like</td>
<td>2/26</td>
<td>8%</td>
</tr>
</tbody>
</table>

Sofia, unlike Christos, seems to abandon the mechanism of reduplication as filler for *na*, and schwa fillers emerge (after the age of 2;7). Eight types (10 tokens) are attested with subjunctive function (see (20)). Six of these tokens emerge schwa as filler for *na* (see (21)). In two tokens schwa occurs in alternation with the reduplication strategy of the previous period (see (22)). Two tokens exhibit neither schwa nor reduplication.

(20) Sofia 2;7

10 tokens (8 types):

6/10 schwa as filler for *na* (60%)
2/10 reduplication as Filler (20%)
2/10 neither schwa nor reduplication (20%)

(21) Sofia 2;7
3. Discussion

3.2. Premorphology

We assume that period A (in (4) and (14)) represents the premorphological phase (see section 1), since reduplicative fillers are motivated strictly prosodically in order to preserve the structure of a plurisyllabic word. Further supporting evidence in favor of our data classification is the absence of systematic use of any morphological markers/or fillers i.e. the children do not seem to exhibit morphological awareness. (see also the analysis of Christos’ data in Kilani-Schoch et al. 1998, cf. Kilani-Schoch and Dressler 1997).

3.2. Transition

According to our analysis period B (in (5), (16)) represents the transitional phase between pre- and protomorphology.

In the case of Christos we observe that reduplication as filler of the initial unstressed syllables of a word is still preferred but during the same period the
reduplication strategy is also used for replacing the article. Nevertheless, this phenomenon is very limited and represents a very short interval (2 recordings 1;11 and 1;11.10). It signals, however, the onset of the reduplication strategy as a filler for a word external element and not for the initial syllable of a word. Since there are only 4 tokens of that kind, we assume that they could be the precursors of some grammatical awareness related to prenominal positions, namely the definite article.

At 1;11.0 just before he transfers the reduplication mechanism from structure preservation to the replacement of the particle *na*, Christos uses the subjunctive for the function of request using - instead of the adult-like particle *na* + verb - vowel lengthening in the verb-internal position i.e. *koopi* ‘to cut’ and *kooni* ‘to get up’, but that happens only in one recording and only with two types (there is also one type definite article + noun). It seems that although the child, during this period, already has the need to express request, he employs another strategy for the period during which reduplication is used for the structure preservation of trisyllabic words. Nevertheless, Christos seems to take the first steps toward becoming aware of the functions and forms of the Greek subjunctive.

Sofia also employs reduplication as a strategy to render the word external functors, such as the particle *na* and the negation particle. We assume that there is a sign of morphological awareness, since she applies the strategy in the proper contexts, i.e. subjunctive function of request/object clause or negation. Since the number of occurrences in both cases is rather limited we assume that neither the use of the subjunctive nor that of negation is systematic as yet. However they seem to signal some awareness of grammatical morphemes, of their syntactic positions and possibly some of their adult-like functions. In this transitional period the first three-word utterance occurs.

3.3. **Protomorphology**
As soon as Christos manages to utter the majority of trisyllabic words without the help of reduplication he transfers his favored strategy of reduplication to the replacement of word external grammatical morphemes, that is he uses reduplication for functor na for the subjunctive function of request. It is of interest that he does this mostly with disyllabic words, which become trisyllabic with the addition of the monosyllabic na-functor via reduplication of the first syllable of the verb which follows. But he soon applies reduplication as well to the trisyllabic verb peksume, forming pepetsume. Nevertheless, this is the only type (but in many tokens) consisting of a functor plus a trisyllabic word. In this period C (in (9), (19)) no reduplication as filler for articles occurs. Perhaps the function of request was more important to the child than the definiteness, so he opted to delay the rendition of an article to the rendition of subjunctive (function of request) since Christos does not make use of other kinds of fillers at this point. Only later (1;11.27-2;0.4) Christos uses vocalic fillers for a short time in this period as precursors of the adult-like article.

Sofia gradually abandons reduplication strategy and the new words are realized as disyllabic truncated forms. Schwa appears in order to render the subjunctive marker na. Thus it seems that Sofia moves from her undifferentiated reduplicative fillers to more adult-like realizations and seems to become aware of the morpheme boundaries. Unlike Christos, she differentiates her ‘tools’, employing schwa fillers for the subjunctive functor na and the truncation for trisyllabic words. The child retains only the disyllabic foot of the adult word in her effort to produce the more adult-like form.

As expected, the transition from reduplication to schwa is gradual and we often find alternating forms in the same recording (for instance, tola didis ~ tola’ dis in (22)). One widely accepted hypothesis is that the older forms are already stored in the child’s lexicon and are slower to change, whereas new forms are subject to analysis and hypothesis testing and the new parameters are likely to be applied immediately to new words. It seems that the child is first testing a new setting before fixing it. Nevertheless, this is not the case with
Christos, who has the tendency to apply his new patterns gradually but to both old and new forms.

According to our analysis we assume that the use of reduplication by Christos and schwa by Sofia during this period is morphosyntactically / grammatically motivated, in contrast with the clearly prosodically motivated reduplicative fillers in the place of the initial unstressed syllable of a trisyllabic word, in the premorphological period (period A). Thus we consider this period as protomorphological (see also the analysis of Christos’ data in Kilani et al, 1998).

Summarizing: In both children appears a quite extended use of a formal filler mechanism, that of reduplication, for the structure preservation of trisyllabic words and later for specific grammatical forms/functions before - mostly- disyllabic words.

There are differences in the periods and the functions for which the means of reduplication and/or schwa are used. Christos’ protomorphological and systematic rendering of na is realized via reduplicative fillers, whereas Sofia’s protomorphological and systematic rendering of na is realized via schwa fillers.

4. Conclusion

Our data favor an integrating analysis of word external and word internal fillers for a certain period in a child’s development since both children employ the same mechanisms for filling both word external and word internal syllables in successive (only slightly overlapped) periods.

Our findings support also a separation of a premorphological phase from a protomorphological one, in accordance with the position of Dressler and Karpf (1995) and Kilani-Schoch et al. (1998), since there is clear indication of the development of one and the same mechanism being first exploited as word structure preserver (premorphology) and later (in both children) exploited
rather as a formal sign for certain morphosyntactic functions besides the prosodic ones (transition/protomorphology). In protomorphology appear also schwa or $\varnothing$ (Sofia) and $a$ or $ta$ (Christos) as alternative fillers for $na$.

The differences between our data and those of other languages are the following:

i. the nature of fillers is not vocalic but reduplicative. Reduplication by nature does not represent a standard form but its form depends on the syllable which follows (very rarely in Christos’ data does partial reduplication occur)

ii. the word external grammatical fillers first appear in the transition from premorphology to protomorphology. The small number of such occurrences does not allow us to assume any systematicity but nevertheless it should signal the emergence of grammatical awareness.

Thus there is a contrast to the previous literature: In our data, at the time that fillers for functors appear, there are also signs of their correspondence to certain functions. In the premorphological period prosodically triggered fillers appear only for the structure preservation of trisyllabic words, i.e. no fillers in the position of functors are attested. This results in a slightly differentiated picture of the development of fillers as in data from other languages reported by Kilani-Schoch et al. 1998, Veneziano and Sinclair (1997), Peters and Menn 1993, Peters 1996 for French, English, and German. Since our data are based upon the material collected from only 2 children, we would not like to claim at this point that these differences are language specific. In order to exclude the possibility of individual differences more data and research will be necessary.
Notes

To our knowledge no filler analysis has been applied to other corpora of Greek child language.

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