

INVENTED SPELLING IN THE GREEK CONTEXT

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Abstract.

This paper attempts to present an overview of studies that have been conducted in Greece during recent years on the subject of emergent literacy and, more precisely, on preschoolers' acquisition of writing. Its aim is to present the studies focusing on the subject from an "invented spelling" perspective and to discuss the results obtained. Results seem to be in accordance with the results obtained by similar studies in other countries and in different languages, thus supporting the idea of the existence of a universal character to the ways preschool children conceptualise writing.

Keywords: emergent literacy, invented spelling, writing.

Abstract in Chinese

Translation Shek Kam Tse

論文摘要：本文嘗試總結，近年在希臘進行有關學前幼兒讀寫萌發，尤其探討幼兒習得寫作的研究。本文的目的，是想把有關「自創拼寫」的研究展示，並討論這些研究的成果。在希臘進行的研究，研究結果和其他地方或以其他語言所進行的類似研究，結果是一致的。由此可見，各地的學前幼兒把寫作概念化的過程上，似乎具有一些共同的特徵。

關鍵詞：讀寫萌發、自創拼寫、寫作

Dutch

Samenvatting. Translation Tanja Janssen

Samenvatting. In deze bijdrage wordt een overzicht gegeven van onderzoek dat de laatste jaren in Griekenland is verricht op het gebied van ontluikende geletterdheid, of preciezer gezegd: naar het verwerven van schrijfvaardigheid in de voorschoolse periode. De onderzoeken worden gepresenteerd en de resultaten worden besproken vanuit het perspectief van "verzonnen spelling". De resultaten lijken in overeenstemming met die van onderzoeken in andere landen, met andere talen. Dit duidt op het bestaan van een universele manier waarop kinderen in de voorschoolse periode schrijven conceptualiseren.

French

Résumé. Translation Laurence Pasa

Cet article présente les recherches des années récentes qui sont réalisées en Grèce, portant sur l'acquisition de l'écriture par les enfants de l'âge préscolaire. Son but est de mettre l'accent aux études qui adoptent la perspective de l'« écriture inventée » pour aborder ce sujet et de discuter les résultats obtenus. Cet effort montre que les études en question sont en accord avec celles, similaires, qui sont conduites à des pays différents et à des langues autres que le grec moderne, supportant ainsi l'idée de l'existence d'un caractère universel de la manière dont les enfants de l'âge préscolaire conceptualisent l'écriture.

German

Zusammenfassung Translation Irene Pieper].

Abstract: Der Beitrag bietet einen Überblick über Studien, die in den letzten Jahren in Griechenland zum Schriftspracherwerb durchgeführt worden sind, insbesondere über den Schreiberwerb von Vorschülern und –schülerinnen. Die Studien werden aus der Perspektive der Spontanschreibungen (invented spellings) diskutiert. Die Ergebnisse scheinen sich mit solchen ähnlicher Studien aus anderen Ländern und mit Bezug auf andere Sprachen zu decken, so dass die Hypothese Unterstützung findet, wonach die Art und Weise, wie Vorschüler und –schülerinnen das Schreiben konzeptualisieren, einen universellen Charakter hat.

Greek

Metafrase [Translation Panatoya Papoulia-Tzelepi].

Περίληψη. Αυτό το άρθρο παρουσιάζει την επισκόπηση των μελετών που έχουν πραγματοποιηθεί στην Ελλάδα τα τελευταία χρόνια για την απόκτηση της γραφής από παιδιά προσχολικής ηλικίας, στο πλαίσιο της θεωρίας για τον αναδυόμενο γραμματισμό. Στόχος του άρθρου είναι να παρουσιάσει τις έρευνες που εστιάζουν στο θέμα αυτό υπό το πρίσμα της έννοιας της «επινοημένης γραφής» και να συζητήσει τα αποτελέσματα που έχουν συγκεντρωθεί μέχρι σήμερα. Η προσπάθεια αυτή φαίνεται να καταλήγει στη διαπίστωση ότι τα αποτελέσματα των σχετικών ερευνών στην Ελλάδα συγκλίνουν με εκείνα των ερευνών που έχουν πραγματοποιηθεί με ανάλογη μεθοδολογία σε άλλες χώρες και σε διαφορετικά γλωσσικά πλαίσια, κάτι που ενισχύει την επιχειρηματολογία για την ύπαρξη ενός παγκόσμιου χαρακτήρα των τρόπων με τους οποίους τα παιδιά προσχολικής ηλικίας συγκροτούν εννοιολογικά την γραφή.

Polish

Streszczenie [Translation Elżbieta Awramiuk].

Niniejszy artykuł stanowi próbę zaprezentowania przeglądu prowadzonych w ostatnich latach w Grecji badań nad wczesnymi umiejętnościami czytania i pisania oraz – bardziej precyzyjnie – nad przyswajaniem umiejętności pisania w wieku przedszkolnym. Naszym celem jest przedstawienie badań traktujących ten temat z perspektywy "wymyślonej pisowni" i omówienie uzyskanych rezultatów. Wyniki wydają się potwierdzać rezultaty uzyskane w podobnych badaniach prowadzonych w innych krajach i nad innymi językami, co potwierdza pogląd o uniwersalnym charakterze sposobu konceptualizacji pisma przez dzieci w wieku przedszkolnym.

Słowa-klucze: wczesne umiejętności czytania i pisania, pismo małych dzieci, pisanie. Abstract in

Portuguese

Resumo [Translation Paulo Feytor Pinto].

Este artigo procura apresentar uma visão geral dos estudos levados a cabo na Grécia, nos últimos anos, sobre literacia emergente e, mais exactamente, sobre a aquisição da escrita no pré-escolar. O seu enfoque sobre a matéria baseia-se numa perspectiva de “ortografia inventada” e analisa os resultados obtidos. Estes resultados parece estarem de acordo com os obtidos em estudos similares noutros países e com outras línguas, reforçando assim a ideia de que há um carácter universal no modo como, no pré-escolar, as crianças concebem a escrita.

Palavras-chave: literacia emergente, ortografia inventada, escrita.

1. INTRODUCTION

The ways pre-school children deal with written language have been the focus of attention of researchers in many countries and, therefore, in many languages (Besse, 1989, 1991; Ferreiro & Gomez-Palacio, 1988; Fijalkow & Fijalkow, 1991, 1998; Papoulia-Tzelepi, 1995; Teberosky, 1990; Tolchinsky, 1986, 1990; Tantaros & Vamvoukas, 1999).

As a consequence, there has been considerable empirical evidence on this subject, mainly focusing on the notion of “emergent literacy”. The term “emergent literacy” refers to attitudes that preschoolers adopt towards reading and writing, which precede the children’s later ability on the aforementioned subjects. Children

develop personal “theories” towards written language simply due to continuous interaction with printed matter (Sulzby, 1991). Reading and writing are then considered to be inter-related processes following developmental phases whose occurrence differs, according to the specific characteristics of each child (Goodman, 1990). The emergent literacy concept has challenged the traditional notion of “reading readiness” regarding written language acquisition (Teale & Sulzby, 1986).

This paper focuses on the research on this subject that has been developed in Greece over the last ten years. Its main target is to present and discuss several aspects of the Greek research on writing, with the hope of portraying the current situation of research on this field. An elaborated discussion of emergent literacy lays outside the scope of this paper and may be found elsewhere (Tafa, 2001. Tafa & Papoulia, 2004. Tantaros, 1999).

Before any further discussion, some basic characteristics of the Greek written language may be presented so that the findings of the research conducted in Greece are better understood.

2. ASPECTS OF THE RESEARCH

The Greek language is alphabetic but differs considerably from Latin generated alphabets. These differences concern either the grammar and the syntax or the form and the shape of the written letters. The data collected so far on the acquisition of writing in the Greek context have shown that these differences do not seem to influence the way that children approach it: the developmental process described by Ferreiro seems to be the case in the Greek context too (Papoulia-Tzelepi, 1995; Tantaros & Vamvoukas, 1999). To illustrate this argument, this paper will present certain studies conducted over the past few years in Greece.

As has already been argued, when it comes to “emergent literacy”, one may find a considerable number of studies examining the ways in which young Greek children learn how to read and write (Yannikopoulou, 2002; Stellakis, 2001; Tafa, 2001; Papoulia-Tzelepi, 2001, 2006).

As far as writing is concerned however, there is not as much evidence, especially when it comes to “invented spelling” (Fijalkow J. & Fijalkow E., 1991). The latter refers to the writing efforts of children that have not yet learnt how to write and provides information on the ways in which they conceptualise written language.

The studies that have been conducted so far on Greek preschoolers’ acquisition of writing examine the role of different variables (mainly Ferreiro, 1988). One can discern among studies that examine the ways preschoolers distinguish between drawing and writing, or between the written language and other writing systems, some studies examining factors which influence invented spelling or studies that investigate the use that preschoolers make of the letters deriving of their first name.

Among the first attempts to investigate what really happens when a Greek child of preschool age, who does not know how to write, is asked to do so, is a study by Papoulia-Tzelepi (1995). The author attempted “ *a) to describe what the developmental steps of Greek preschoolers are in their effort to construct the*

representation of the Greek writing system, and to compare the findings with those already mentioned (Ferreiro, 1990); and b) to investigate whether the differentiations of the invented writing of Greek preschoolers are influenced by linguistic or semantic factors, or by both, and in what sequence the influences appear in the children's development of literacy" (Papoulia-Tzelepi, 1995: 45).

The children ($N=101$, divided into two groups with a mean age 4: 7 for the younger group ($N=28$) and 5: 5 for the older group ($N=73$)) were given two tasks: one that was phonetically loaded and one that was semantically loaded. The two tasks were included in a booklet with related drawings, separately for each child, who was tested once, in the middle of the school year. For each child, the researchers presented orally the pairs of words corresponding to each task and he/she had to write them on the booklet next to the drawings.

In the phonetically loaded task the children had to deal with five pairs of words that were accompanied by corresponding drawings. The pairs were the following:

- First pair: a monosyllabic word (Φως, light) and a phonetically and semantically related trisyllabic (Φανάρι, lantern).
- Second to fifth pair: the first word (bisyllabic, trisyllabic, tetrasyllabic, polysyllabic in ascending order) was contained in the second as a first part of a composite or derivative word (Σπίτι – Σπιτονοικοκυρά, house – landlady; Τραπέζι – Τραπεζαρία, table – dining-room; Παράθυρο – Παραθυρόφυλλο, window – windowpane; Εφημερίδα – Εφημεριδοπώλης, newspaper – newsagent).

In the semantically loaded task, six pairs of words were presented along with corresponding drawings. The pairs were the following:

- First pair: two polysyllabic words whose referents differed in size (Εφημερίδα – Οδοντόβουρτσα, newspaper – toothbrush).
- Second pair: two words with a length that was inverse to their respective size (Αυτοκίνητο – Τρένο, car – train).
- Third / fourth pairs: one cat – three cats (Γάτα – Γάτες) and two dogs – one dog (Σκύλοι – Σκύλος).
- Fifth / sixth pairs: a puppy – a dog (Σκυλάκι – Σκύλος) and a cat – a kitten (Γάτα – Γατάκι).

As far as the conceptual aspect was concerned, "...linguistic and conceptual features show the same direction of similarity at the beginning of the pair and differentiation at the end of the second word of the pair. [Moreover]... the conceptual features of the referents are very prominent and are dissonant with the linguistic features. More or bigger or older referents are of identical phonetic length or they are shorter. Linguistic and conceptual features show to the opposite direction" (Papoulia – Tzelepi, 1995: 47).

The results of this study have shown, for the first time in the Greek context, that "...a developmental course is identified... From non-pictoriality, to horizontality, to minimum-maximum quantity, to qualitative differentiation of writing for representing the different utterances ... to syllabic and alphabetic principles ... preschoolers progress in an orderly manner in their search to make sense of literacy" (Papoulia-Tzelepi, 1995: 51). This study has also shown that preschoolers

differentiate their writing in response to semantic or phonetic utterances. The author underlines the idea of the "...limited metalinguistic capacity on the part of the children, to view the word as an object of thought and scrutiny outside its communicative value...For children, ...it is only logical to take the more concrete, more easily accessible route of taking the referents' characteristics as differentiation criteria in their invented writings" (Papoulia-Tzelepi, 1995: 54).

This study was a very fruitful first attempt to explore the ways Greek preschoolers deal with the written language. It was the first to adopt a psychogenetic perspective that led to results similar to those of Ferreiro (1990) and other authors that were working on the same field at the time (Teberosky, 1990; Tolchinsky Landsmann, 1988; Pontecorvo & Zuccheromaglio, 1988), becoming a model for future studies.

A few years later, Tantaros & Vamvoukas (1999) proceeded to analyse the written productions of 232 (age 5) and 291 (age 6) children of different schools in Crete, following a methodology described in a study by Fijalkow J. & Fijalkow E. (1991). The researcher asks the child to write on a piece of paper four words and a phrase, the way he/she thinks they should be written. In the study by Tantaros & Vamvoukas (1999), the four words were: "*Dog*" (σκύλος), "*rat*" (ποντικός), "*butterfly*" (πεταλούδα), "*crocodile*" (κροκόδειλος); the phrase was: "*the dog eats bones*" (Ο σκύλος τρώει κόκκαλα).

These words were chosen following two criteria: first, they were common words belonging more or less to the vocabulary of the children and, second, they were not part of any kind of systematic instruction in school. The number of the syllables for each word varied from 2 to 4. The signified and the form of the signifier were differentiated in two cases:

- Between the second and the third word. The word "ποντικός" ("rat") has fewer syllables than the word "πεταλούδα" ("butterfly"), although it stands for an animal of a larger size.
- Between the third and the fourth word. The words "πεταλούδα" ("butterfly") and "κροκόδειλος" ("crocodile") have the same number of syllables but they represent animals of different sizes.

The presentation of the words was the same in all cases: it went from the smaller word to the phrase. Each child was examined separately. Before writing the word, the researcher asked the child about its meaning, in order to ascertain whether it was known to the child. Then he asked the child to write the word "as if he/she knew how to write". Children that did not want to participate returned to their class.

The results were identical to those found by Fijalkow & Fijalkow (1991). In their study, the researchers described different groups of children's written productions, formed on the basis of the origin and the number of letters used by them, as well as the ways they constructed the words and the phrase. Those groups were the following:

- "Ideo -signs"
- "Pseudo- signs"
- Mixed signs with a tendency of accomplishment
- Isolated letters

- Letter inflation
- Letter combinations
- Intervention of the oral
- Partial phonetic analysis (see Annex, fig. 1 - 9, for examples on each group).

Along with Papoulia-Tzelepi (1995), the authors argued the existence of a developmental order in the appearance of the children's written productions: *"...it seems that after a phase of drawing ... the children create written signs that try to represent writing ..., then they use only letters for their writings ... to proceed finally to the creation of partially or totally correct writings, reflecting the influence of speech ..."* (Tantaros & Vamvoukas, 1999: 128).

Another finding of this study was the fact that Greek preschoolers, living in an environment that is characterised by the use of Latin letters along with the Greek ones (signs of any kind, labels on imported products, etc) tend to use both kinds of letters in their written productions. This fact has been considered by the authors as a possible obstacle to Greek preschoolers' effort to conquer the written language; they suggested further investigation on this very interesting finding.

2.1 Factors that influence invented spelling

The studies presented so far seem to reach similar conclusions. Greek preschoolers' acquisition of written language is a developmental process. This finding seems to be confirmed by other researchers too, in a rather constant way. Theodorakakou (2001), trying to investigate the influence of parental attitudes toward reading and writing, repeated the study of Tantaros & Vamvoukas (1999) with the addition of a questionnaire for the children's parents. Working with 37 preschoolers, she found the same groups of written productions ("Ideo-signs", "Pseudo-signs", etc). Among all the variables regarding parental attitudes that she tested, there were only two that were found to influence significantly the children's acquisition of writing: a) the parents' belief that reading and writing should be taught before the child enters the primary school and b) the fact that the parents teach their children how to write isolated letters or their name.

Along with parental attitudes, the influence of educational factors (i.e. instructional interventions) on the preschooler's acquisition of writing has been the focus of other studies. Educational interventions vary depending on the characteristics of the children's developmental stage as far as their understanding of writing is concerned. The main idea behind the studies on invented spelling that have adopted this approach is that, should psychogenetic variables be influenced by educational variables, then the acquisition of writing could be considered a psychosocio-genetic procedure (Fijalkow & Fijalkow, 1998). Among the multitude of "psychogenetic" variables regarding different moments of the children's development concerning the acquisition of writing there are two that have been adopted by the Greek studies so far:

- the distinction between drawing and writing (a distinction that Ferreiro (1990) puts first in developmental order).

- the number of letters belonging to the child's first name¹.

2.2 *The distinction between drawing and writing*

Later attempts to further investigate the distinction between drawing and writing in a more subtle way have been blocked by an unpredictable, yet interesting obstacle: the difficulty of finding preschoolers in Greek kindergartens drawing when they were asked to write (Tantaros, in press). This difficulty represents a very interesting finding so far that necessitates an explanation. This explanation could be the use of instructional stimuli from the Greek Ministry of Education that have been included in the kindergarten curriculum over the last few years, followed by the teacher's in-service seminars (by the Ministry) on the psychogenetic approach to writing acquisition.

There was an effort to find children who draw when asked to write among younger children (Verra, 2005). Fourteen preschoolers that satisfied this criterion (age = 3.5) in an invented spelling test (the one used by Tantaros & Vamvoukas (1999), were separated into two groups (experimental and control group) in a kindergarten in Greece. The experimental group (N = 7) was taught the writing of five words in a period of fifteen consecutive days. The control group (N = 7) followed the routine of the class. The teaching of each word was repeated for three consecutive days. The researcher taught the word "mama" (meaning "mother" in Greek). She talked with the child about his/her mother. Then she wrote the word on the board, read it aloud and asked the child to do the same: write the word on a piece of paper and read it. The words were the following: "mother" (μαμά), "wolf" (λύκος), "father" (παμπάς), "knight" (ιππότης) and "king" (βασιλιάς). The teaching was followed by a post-test on invented spelling.

The results of this work show that the majority of the children belonging to the experimental group switch to the use of letters of the taught words during the post-

¹ Ferreiro again (1988) refers to this developmental step of the children's acquisition of writing by discussing the kind of graphic representation of the child's first name, as well as the analysis of its parts. She distinguishes four levels in the procedure of the first name's graphic acquisition:

- the child does not differentiate the whole and its parts.
- the child begins to think that the whole can be divided to parts.
- the child takes into consideration oral and graphic sequences and
- the child interprets correctly all graphic parts of the first name (Ferreiro & Gomez-Palacio, 1988).

Since the work of Ferreiro, other studies attempted to examine the child's writing of his/her first name... These studies showed that half of the pre-school children examined follow ways of approaching their first name writing that correspond to Ferreiro's first level. There appears to be a certain phase in their development when they tend to reproduce a large number of letters from their first name. This tendency weakens as children develop ways of understanding of the written language (Besse, 1991). Studies conducted in France investigating the question of whether the usage of letters derived from the child's first name is a purely psychogenetic process or if it could be the result of learning after instructional interventions (Sarris, 1996) show findings that support the latter.

test (four children out of seven wrote only letters, one child wrote letters and drew, two children drew). Children belonging to the control group drew during the post – test, with the exception of two children who drew and wrote, but not for all words (see Annex, fig. 10 - 19, for examples).

The results of this study provide weak evidence that supports the idea of the psycho-socio-genetic character of writing, although they should be verified by studies on larger numbers of children.

2.3 *The child's first name*

The study of the use of letters deriving from the child's first name has supplied some interesting results also. Tantaros (2001), relying upon a methodology already tested by Sarris (1996), examined eighteen pre-school children of the same age (4.5 years) and socio-economic level, divided into three groups of six children each, formed on the basis of the appearance of letters belonging to the child's first name in a pre-test of invented writing. The three groups were the following:

- Experimental group 1 (teaching of the child's last name). This group was taught to write their last name. Each child was taught to write his/her last name, following the same sequence: the researcher writes the child's last name, he reads it and asks him/her to do the same; he then writes it and asks the child to write it too; then he asks the child to copy what he/she has written and, finally, shows the child the different letters that compose his/her last name. This sequence was repeated twelve consecutive times.
- Experimental group 2 (teaching of the child's first name). This group was taught to write their first name. The procedure and the time were the same as experimental group 1.
- Control group: these children stayed in the class, following the routine program.

The results of this research showed that the teaching of the last name (experimental group 1) seems to have an unexpected result. Instead of accelerating the development of the children, it seems to inhibit it. One would have expected an increase in the use letters from the child's last name after teaching; instead one can observe a relative decrease of the number of these letters. This can be equally observed for the number of letters coming from the first name.

The case may be similar as far as the experimental group 2 (teaching of the first name) is concerned. The excessive teaching of the first name seems to negatively influence the children of the group.

There is a slight increase of the number of letters from the last name that can be related to the results of the control group. For the control group, without the slightest intervention into every day's activities, one may observe a clear increase of the number of letters from the first and last name at the post-test. There is a slight decrease of the number of other letters.

These results seem to contradict other studies (Sarris, 1996) as far as Greek pupils are concerned. More specifically, if in French studies there is evidence supporting the psycho-socio-genetic hypothesis for the preschooler's acquisition of writing, this does not seem to apply in this study. Tantaros argues that it would be

rather premature to imply that the above hypothesis is not true in the Greek context. Furthermore, one should consider the difficulties created by the methodological problems that occur for such an attempt (Fijalkow J. & Fijalkow E. 1998).

Based on a different approach but having the same purpose (i.e. studying preschoolers' knowledge about the letters in their names and the way they write these down), Tafa (2003) examined 95 preschoolers with an age mean of 63.5 months.

During the first phase, in order to examine if the children knew the letters of the Greek alphabet, children had to recognize, say the name and pronounce the sound of every capital letter, which were presented to them on cards of four letters each. The same procedure was followed with lower case letters.

During the second phase of this study, aiming to examine if the children knew the name and/or the sound of their first name's first letter, sixty-nine children were chosen, whose first name started with the letters *α, ε, μ, σ, γ, κ* (the choice of these letters was made because the majority of the children's names began with them). These children were shown two cards with the above letters in a random order, the first in capitals and the second in lower case. Once again, the children had to recognize, say the name and pronounce the sound of each letter.

Finally, during the third phase of this study, aiming to examine if the children used the first letter or the first letters of their first name, they were asked to write their name.

The results showed that:

- 1) Children recognized capital letters more readily. For Tafa (2003), this is a common finding, independent of the language that children speak (McCormick & Mason, 1986: 96; Smythe, Stennett, Hardy & Wilson, 1970-71, cited in Tafa, 2003).
- 2) Children recognized more readily the sounds of capital and lower case letters than the names of these letters. The author discusses the difference between this finding and the results of other studies in this field (McBride-Chang, 1999; Treiman & Broderick, 1998, cited in Tafa, 2003). The author speculates that the reasons for the findings could be:
 - The different writing experiences that young children have during their first efforts.
 - Greek parents or teachers insisting on pronouncing the sound of letters instead of the letter's name.
 - Children may not know the name or the sound of their first name's first letter, but nevertheless, they use it when they write. Tafa argues that this result is in accord with the results of studies in the English context, showing that it is the first letter of the child's first name that is more frequently recognized and used during the child's first attempts to write (Harste, Woodward & Burke, 1984: 94; Treiman & Broderick, 1998; cited in Tafa, 2003).
 - Finally, children seem to write their first name using the first letter or some of the first letters of it – a finding that confirms the results of the studies mentioned earlier (Tafa, *ibid*).

2.4 The role of the kindergarten

While these studies try to investigate what happens with educational variables from a rather “experimental” perspective, other studies set out to examine the knowledge of Greek preschoolers about written language in a more communicative context.

Stellakis & Kondyli (2004), in an attempt to “...compare literate performances (writing and reading) across two different text types (namely list and message)” and to “...examine to which extent the attendance of a pre-school year affects literate performances” (Stellakis & Kondyli, 2004: 131), analysed the written productions of 172 children divided into three groups according to their age and years of kindergarten attendance.

The authors created a communicative task of the type: “problem, to be discussed, find a solution and compose a specific text (list or message)”. Their data were collected through two sessions, a week apart. During the first session, the children had to reply to a letter from the mayor (read to them by the authors) asking for their suggestions on the kind of toy he could buy for children of their age, whose parents could not afford toys. During the second session, after hearing a story concerning a castaway on an island, the children participated in a role play and decided to write messages for help. Each session closed with the children’s reading to the class their written productions.

Discussing their results, the authors argue that “...they (the children) seem to understand the symbolic nature of written language; that is the difference between language and drawing. ...their written texts provide evidence that early on – before formal teaching – they test different hypotheses about the visual or graphic semiotic aspects such as directionality, letter forms and spacing between the words...They possess considerable knowledge of communicative functions and formats of the most common text types” (Stellakis & Kondyli, 2004: 139 – 140).

As far as the relationship between reading and writing is concerned, the results seem to “strengthen trends towards more holistic approaches to literacy development. The authors suggest more activities “creating contexts where speaking, reading and writing can occur for real and meaningful purposes” (Stellakis & Kondyli, 2004: 140) to be embedded in kindergartens. Although, “...Greek kindergartens have begun to embed literacy activities in the daily program to prepare children to learn, read and write as a key priority ...” (Stellakis & Kondyli, 2004: 140), the role of kindergarten teachers should be “to create a classroom environment that facilitates children’s participation in literacy activities through play” (Stellakis & Kondyli, *ibidem*).

2.5 The distinction between the written language and other writing systems

Greek preschoolers’ written productions are characterized by the appearance of letters coming not only from the Greek alphabet but from the Latin too. For Tantaros & Vamvoukas (1999) this represented a possible source of confusion for the children. A few years later (2001) though, Yannikopoulou showed that this idea was not confirmed. She asked 504 Greek preschoolers to distinguish messages (the titles on the covers of the videotapes of known films for children) that were written in

Greek from messages that were written in Latin letters, to find that “... *they* [the children] *can distinguish with success the two writing systems that dominate the printed environment in Greece and separate messages written in Greek from others written in Latin*” (Yannikopoulou, 2001: 89). On the other hand, this seems not to be the case when it comes to the recognition of separate alphabets in logos. This is the result of a recent research by the same author (Yannikopoulou, 2006), who examined 493 preschoolers in Greece through personal interview. The children were asked to read five logos (two of which were in Greek and three in Latin alphabets) and to say in which alphabet each logo was written, justifying their opinion. The results indicated a difficulty for the children in recognizing the alphabet of the logos, with a tendency to recognize the Greek more readily. In any case, this co-existence of the two alphabets in the Greek printed environment seems to be a very interesting field for future studies.

Another interesting study (Kalabassis & Yannikopoulou, 2005) has examined the distinction that Greek preschoolers make between the written language and the symbols of mathematics. The authors examined 209 Greek preschoolers through personal interview. During the first phase of this study the children were asked to distinguish letters from numbers among a) a list of names, b) a list of phone numbers and c) a list of dates. During the second phase, children had to write a text or a phone number following a short story that was given to them. The results showed that if the children did not have any difficulty distinguishing letters from numbers, they did have difficulty using the distinction when it came to writing. When they had to write the text or the phone number, they tended to use letters more frequently (31.6%), even for numbers. The percentage of numbers used within the texts was very low (11.4%). The authors argue that this should be attributed to:

- 1) the differences that exist between the number of the alphabet's letters in the alphabet and the first ten numbers that are used by preschoolers and
- 2) the influence of the kindergartens.

They suggest more research on this subject.

3. DISCUSSION

The studies on the invented spelling of Greek preschoolers described so far seem to provide evidence strong enough to conclude that the acquisition of the written language is a developmental process. In fact, the results obtained by Greek studies in this field are in accord with the results of studies conducted in different languages and contexts.

One has the same feeling of accord when it comes to the specific factors related to preschoolers' acquisition of the written language. These concern either the different groups of written productions that appear when children are asked to write (ideosigns, etc) or the recognition and the use of the letters of the child's first name in these written productions. Studies conducted in Greece find the same results as research administered in other countries.

There is a difference, though, in the use of Latin letters in children's written productions. Greek preschoolers, living in an environment that is full of stimuli

coming from both alphabets, manage to separate them and find their way to the Greek written language in a rather interesting way. It would be a very interesting study to compare Greek preschoolers' attitudes towards a foreign alphabet with those of preschoolers coming from other countries that do not use the Latin alphabet² and to see what the results would be.

It is also interesting to observe the range of variables in Greek studies on preschoolers' acquisition of the written language. Different variables, studied through different methods in multiple levels, underline the very serious effort made during the last ten years in Greece to study this subject. Many studies adopt the traditional methodology of this kind of research, which is to ask a child to write down a word or a phrase without knowing how to do so. Other studies try to put children's written activities in a more communicative context, and give the impression of an experiment in which the child is "obliged" to participate or of a test which he/she should pass. In either case, the results are encouraging and point to further research.

Finally it is necessary to take seriously under consideration the crucial role of the new curriculum for kindergartens (and the instructional interventions it anticipates) vis-a-vis the acquisition of the written language by children of preschool age. With the evidence gathered so far, it looks as if recent reform of the kindergarten curriculum will prove a very interesting field for research and discussion.

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² Russian preschoolers learn the Cyrillic alphabet and may be a good example for such a study.

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ANNEX: EXAMPLES (FIGURES 1-19)

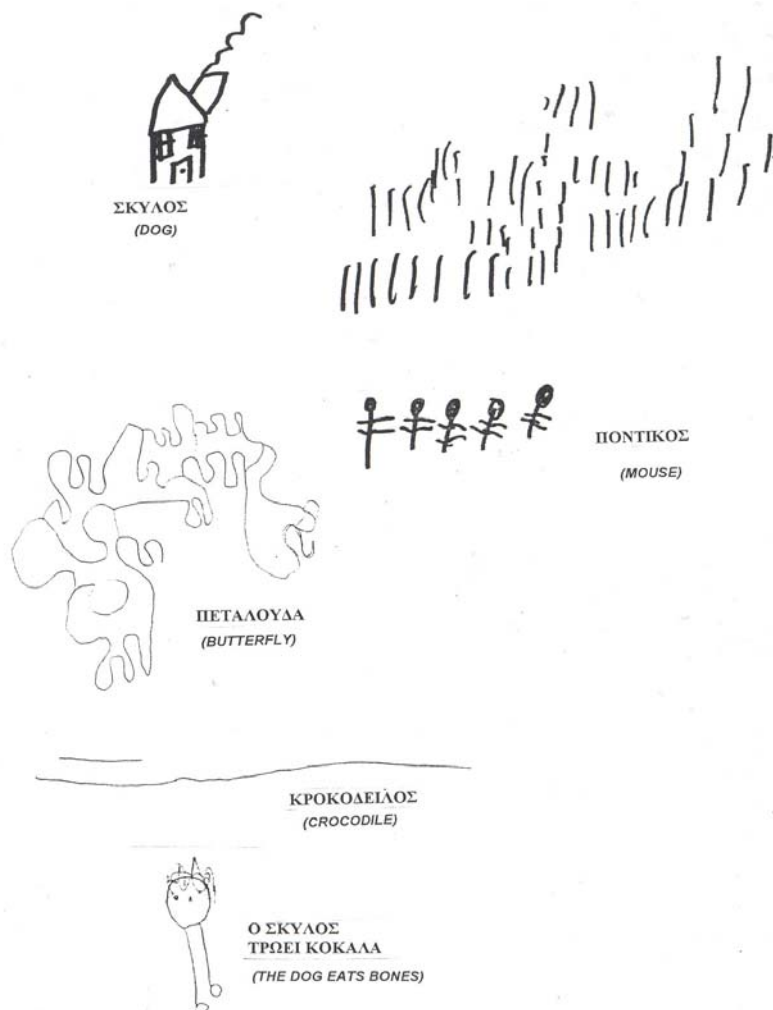


Figure 1. "Ideo-signs"



Figure 2. "Ideo-signs"

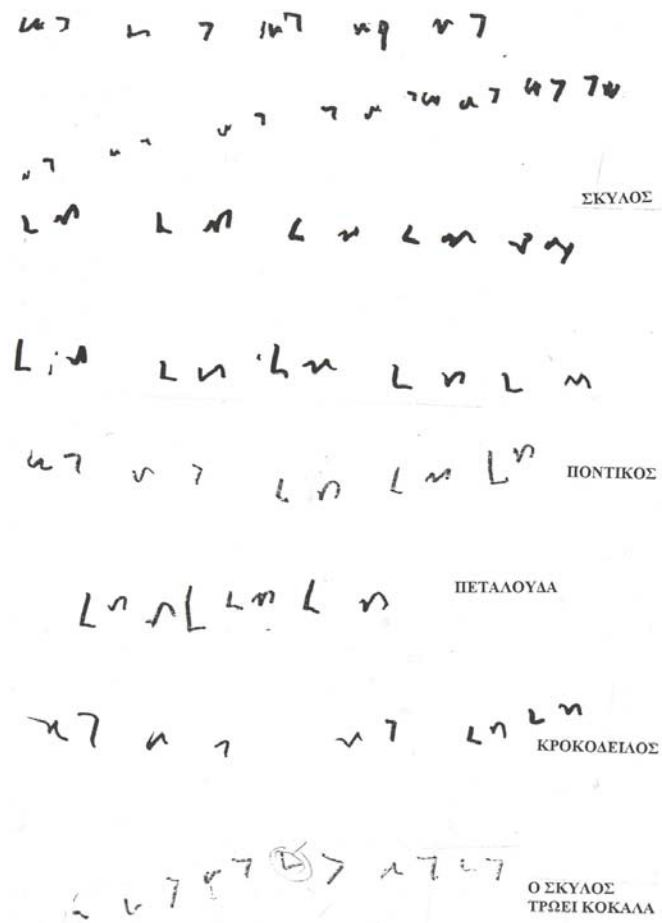


Figure 3. "Pseudo-signs"

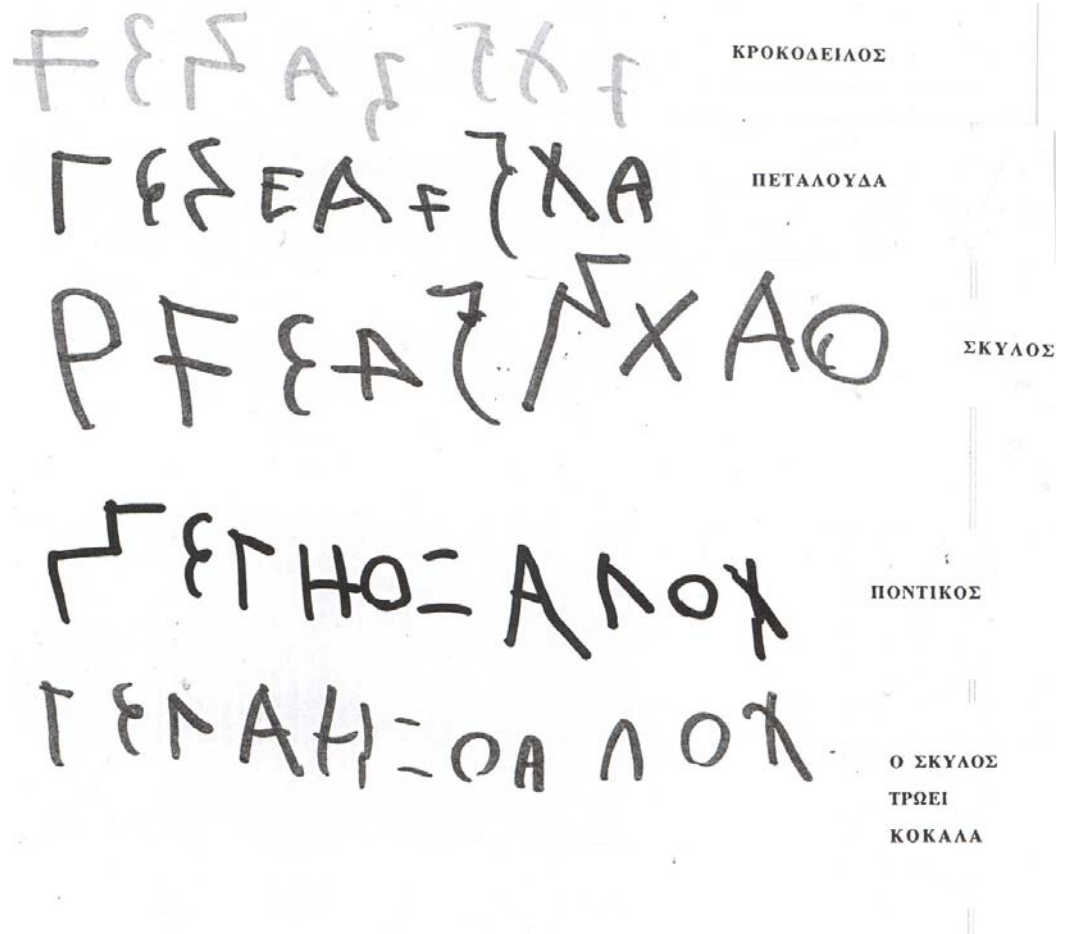


Figure 4. Mixed signs with a tendency for accomplishment

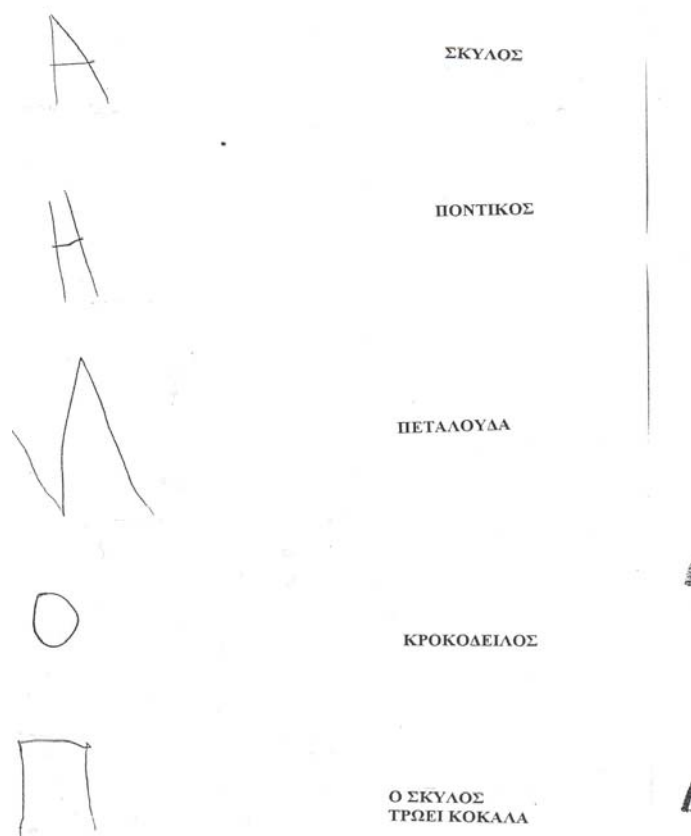


Figure 5. Isolated letters



Figure 6. Letter inflation

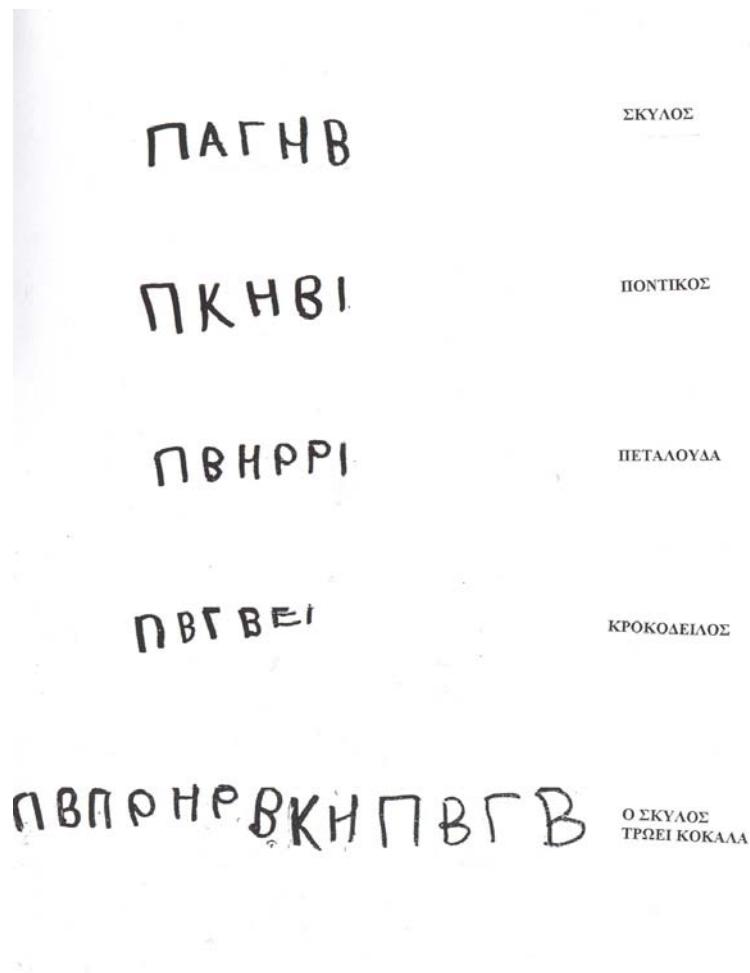


Figure 7. Combinations of letters

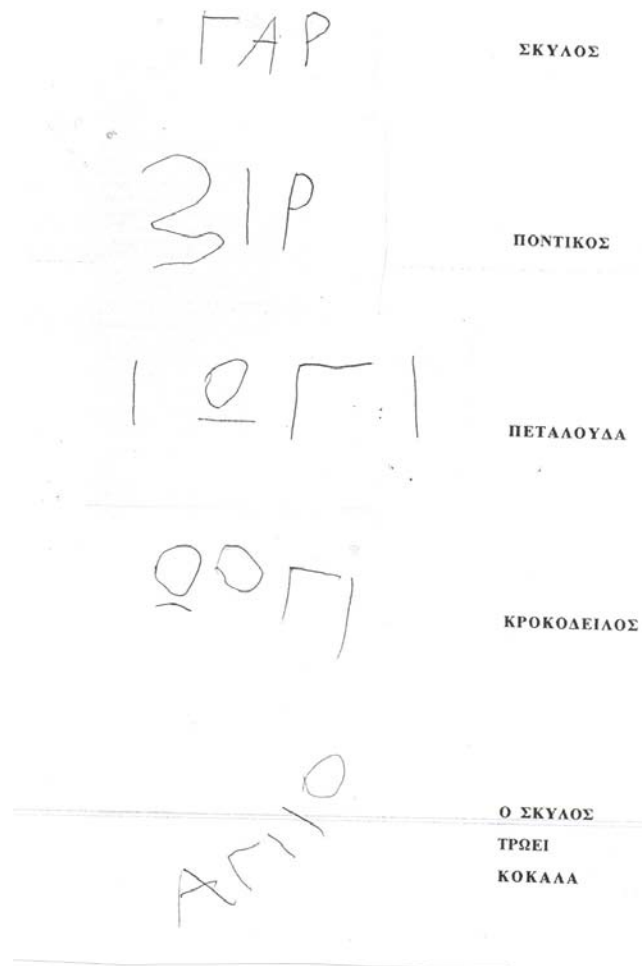


Figure 8. Intervention of the oral

ΣΚΛΟΣ	ΣΚΥΛΟΣ
ΠΟΤΙΚΟΣ	ΠΟΝΤΙΚΟ
ΠΕΤΑΛΑ	ΠΕΤΑΛΟΥΔΑ
ΚΡΟΚΟΔΙΛΟΣ	ΚΡΟΚΟΔΕΛΟΣ
ΟΡΚΙΛΟΡΟΙΚΑΛΑ	Ο ΣΚΥΛΟΣ ΤΡΩΕΙ ΚΟΚΑΛΑ

Figure 9. Partial phonetic analysis

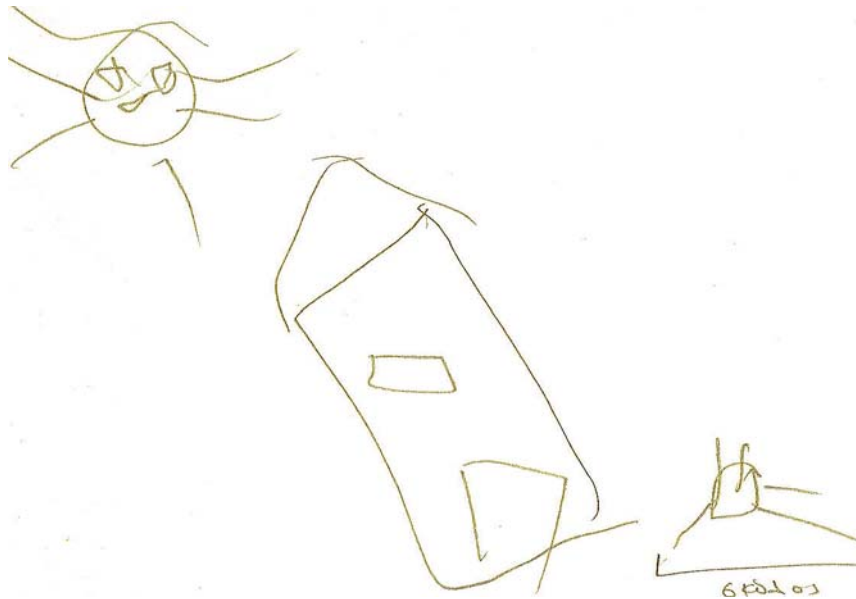


Figure 10. Zoe, pre-test, "Dog".



Figure 11. Zoe, post-test, "Dog".

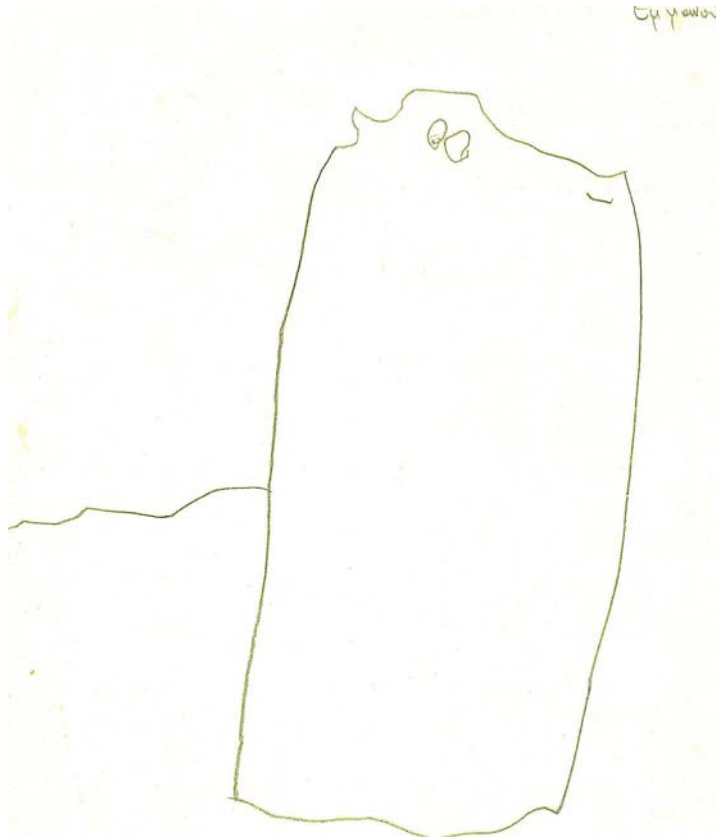


Figure 12. Emmanuel, pre-test, "Rat"



Figure 13. Emmanuel, post-test, "Rat"



Figure 14. Tasos, pre-test, "Butterfly"

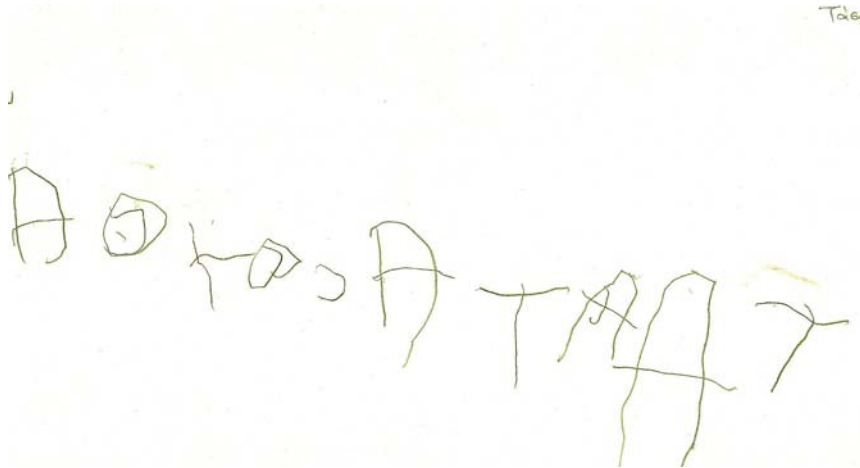


Figure 15. Tasos, post-test, "Butterfly"

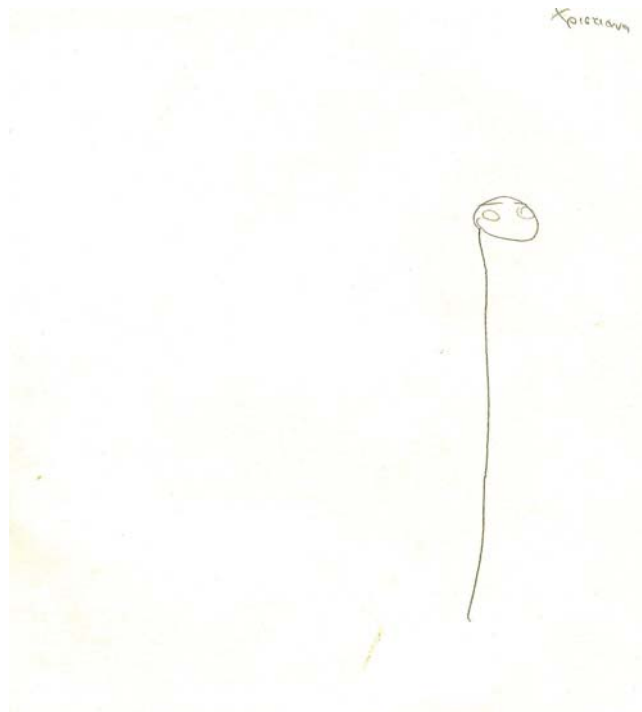


Figure 16. Christiana, pre-test, "Crocodile"

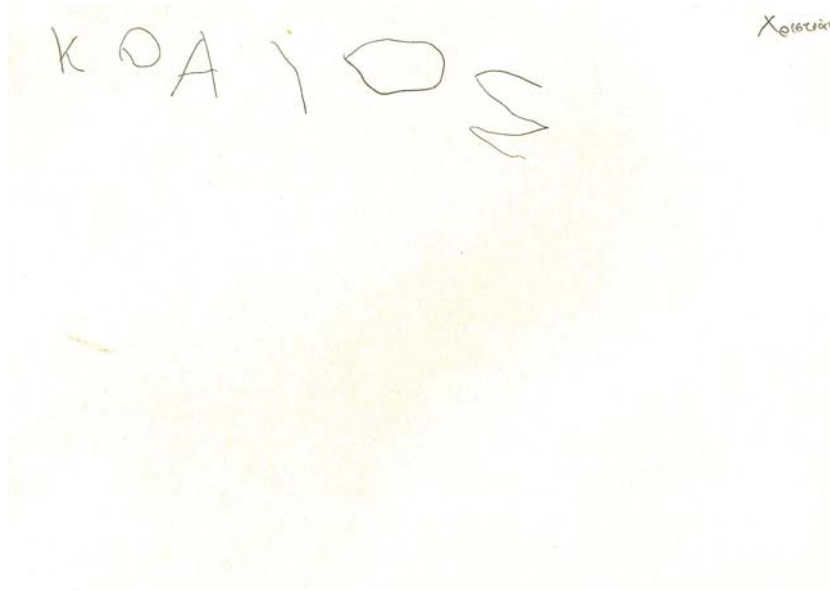
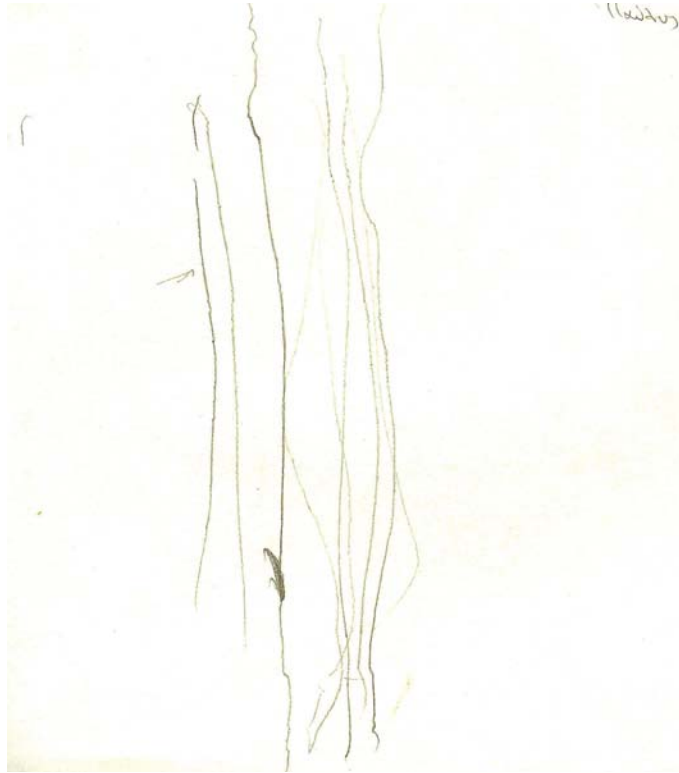


Figure 17. Christiana, post-test, "Crocodile"



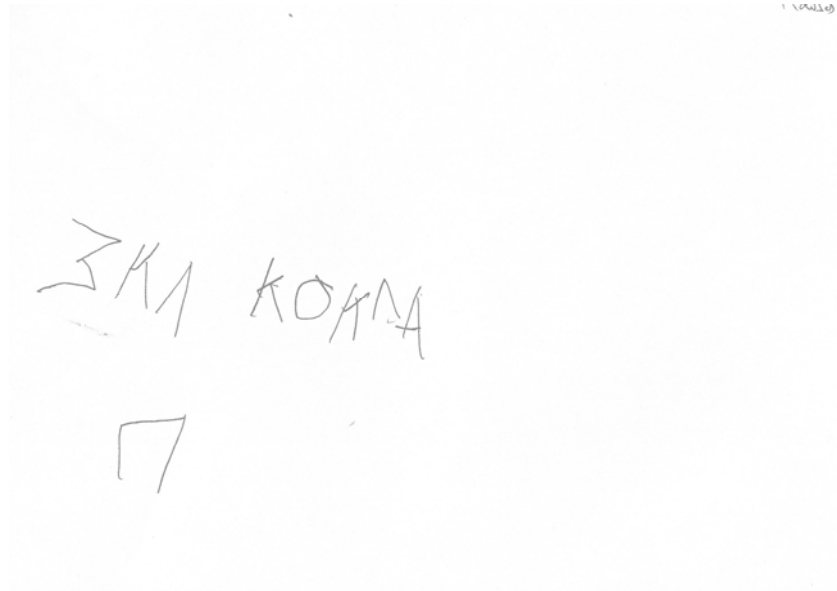


Figure 18. Paul, pre-test, “The dog eats bones”

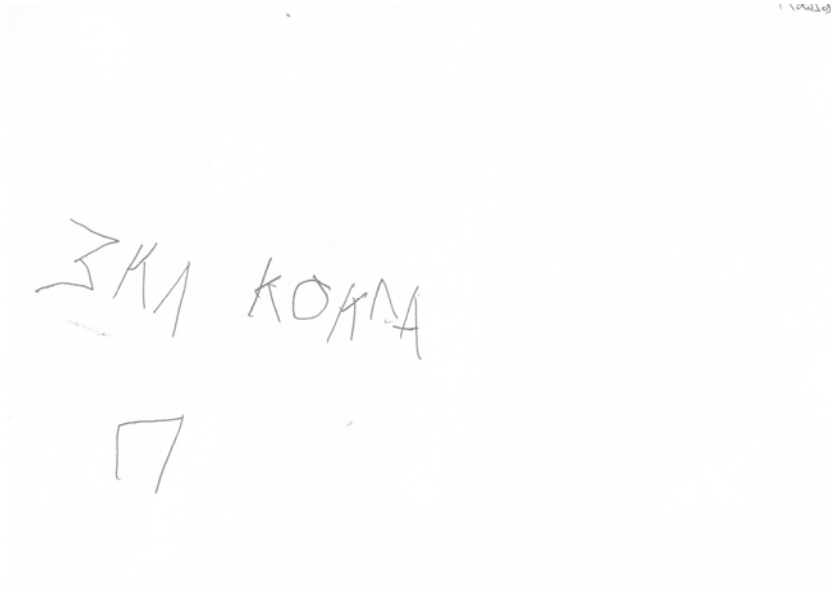


Figure 19. Paul, post-test, "The dog eats bones"