

This article was downloaded by: [Swets Content Distribution]

On: 10 April 2011

Access details: Access Details: [subscription number 925215345]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Language and Education

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t794297816>

Defining and Classifying in Classroom Discourse: Some Evidence From Greek Pre-School Education

Marianna Kondyli^a; Christina Lykou^b

^a Department of Science of Education and Early School Education, University of Patras, Greece ^b

Department of English Language and Literature, School of Philosophy, National and Kapodistrian University of Athens, Greece

To cite this Article Kondyli, Marianna and Lykou, Christina(2008) 'Defining and Classifying in Classroom Discourse: Some Evidence From Greek Pre-School Education', *Language and Education*, 22: 6, 331 – 344

To link to this Article: DOI: 10.1080/09500780802152713

URL: <http://dx.doi.org/10.1080/09500780802152713>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Defining and Classifying in Classroom Discourse: Some Evidence From Greek Pre-School Education

Marianna Kondyli

*Department of Science of Education and Early School Education,
University of Patras, Greece*

Christina Lykou

*Department of English Language and Literature, School of Philosophy,
National and Kapodistrian University of Athens, Greece*

Subscribing to Systemic Functional Linguistics approach, this paper examines aspects of decontextualised language, such as classification and definitions, in Greek pre-school instructional contexts. Following the assumption that such decontextualised uses are considered critical to the transition from commonsense to educational knowledge, we attempt a lexicogrammatical analysis of taxonomic meanings occurring in these educational settings. The analysis of instances of classroom discourse in terms of identifying and attributive clauses has shown that classification and definitions, conceived as critical for educational knowledge development, seem to be a reiterated pattern by which teachers recontextualise commonsense meanings into educational knowledge. Different lexicogrammatical realisations of categorisation and definitions with respect to their meaning potentiality are discussed, and evidence of variation in lexicogrammatical choices regarding the continuum from common to uncommon experience is also illustrated. Another point worth mentioning is that social/abstract entities tend to be categorised and/or defined through saying verbs, while physical/concrete entities through being verbs. This variation appears to be a tendency in reproducing the paradigmatic distinction between physical and social science which characterises actual school discourse from very early school age.

doi: 10.2167/le765.0

Keywords: classification and definitions, educational knowledge, Greek pre-school, Systemic Functional Linguistics, uncommon experience

Introduction¹

Most research concerning school knowledge has focused on areas of mental processes, such as classification, generalisation and abstraction. This is due to the fact that entering formal education is considered crucial for children's development of 'higher mental functions' (Vygotsky, 1962), that is functions usually termed as 'abstract thought'.

The aim of the present paper is to investigate aspects of these decontextualised language uses, such as classifications and definitions, in interactions between teachers and children of early school age in Greek pre-school settings.

Following the framework developed by Hasan and Cloran (1990) and Painter (1999a, 1999b) concerning the semantics of educational knowledge, we attempt to illustrate how decontextualised language uses are lexicogrammatically realised in the discourse of Greek pre-school settings. Our linguistic analysis mainly focuses on the variable of *field* (Halliday, 2004), and we examine how categorisations and definitions about the 'description of the world' (taxonomic meanings) are realised. The lexical relations (hyponymy and meronymy relationships) by which entities of the world are classified, according to educational and scientific knowledge, are also examined.

Based on our evidence which showed the systematic presence of decontextualised uses, such as generalisation, definitions, taxonomies, hypothesis etc., mainly in teachers' discourse, we claim that the linguistic realisation of generalised categories and taxonomies can be revealing of the ways in which pre-primary teachers attempt to recontextualise commonsense meanings of children's experience into educational knowledge related to school literacy. Focusing on children's speech in our data, we found few realisations of such uses, despite previous works which have shown that decontextualised uses are part of children's discourse already in early ages (three years old) (Hasan & Cloran, 1990; Painter, 1999a, 1999b). This evidence in our data could be due to the asymmetrical communicative situation of the multi-membered school class, in contrast to the dual everyday interactions that aforementioned works investigate. Similarly, few realisations of such decontextualised uses were detected in a prior study based on Greek data as well, which dealt with school interactions between children aged five to six years and their teachers in Greek schools (Douka, 2003; Kondyli & Arxakis, 2004). Following Cloran's (1994, 1999) model, the study investigated the role that language plays in each instance of communication, i.e. the *mode* variable (Halliday & Hasan, 1985), throughout a continuum that is expanded from *ancillary* (near the material base of situation or contextualised) to the *constitutional* (away from the material base of situation or de-contextualised) role of language.

The present paper has also a second aim: The transition towards commonsense knowledge seems to privilege a distinction constructed between the discourse of physical science and that of social science (Christie, 1999; Martin & Veel, 1998). This distinction, which could be glossed as *technicality* in physical science and *abstraction* in social science (Wignell, 1998), presupposes a discourse' variability realising the reshaping of experiential meaning. Therefore, we are equally interested in investigating how this distinction between physical and social order applies to our corpus, which deals both with physical world things (animals, objects etc.) and social world entities (abstract meanings, attributes etc.).

Methodology of the Study

Regarding children's mental development towards ways of meaning relevant to educational knowledge, such as categorisation and generalisation, there are two different approaches: The first one claims that children cannot conceive the principles of semantic hierarchies (Nelson, 1979: 66). However, research based on a different methodology and on data derived from non-experimental

circumstances, such as the interactions of English-speaking children of pre-school age with adults, shows that children are able to generalise and classify from an earlier age, specifically from the pre-school period (see, e.g. Cloran, 1994; Hasan & Cloran, 1990; Painter, 1999a, 1999b).

For example, Macnamara's observations (1982) can be useful in order to bridge the gap between the above seemingly controversial approaches to children's taxonomic understandings. He claims that young children are able to shape categories based on characteristics directly observable through perception, and therefore they cannot be considered as scientific, since directly observable data do not constitute appropriate criteria of categorisation. This distinction between observable and non-observable data enlightens the general claim that the direct non-mediated perception is not capable *per se* of constructing generalised and universally recognisable criteria for shaping categories and notions. This approach allows us to focus on the aspects of *abstract thought*, which is constructed within sociocultural contexts, especially those of formal or informal education.

In particular, concerning the social psychology of Vygotski (1962; see also Wertch, 1984), the processes of generalisation and abstraction ('classified or abstract thought') are one of the main issues of educational discourse, since they constitute critical steps for the development of the so-called 'higher mental functions'. However, following Hasan's suggestion (Hasan, 2005), instead of the rather biased term '*higher mental functions*', in order to refer to the types of mental functions which are associated with the impact of apprenticeship on the thought of learners, we will use the term 'specific semiotic mediation'.

According to this perspective, children's classifications and generalisations can be considered as 'mental achievements' associated more or less with the educational processes, that is with children's transition from everyday/commonsense to scientific/uncommonsense knowledge. This transition is associated with the interrelated relationship between family–society–education–culture discussed in the sociology of school knowledge by Bernstein (1996) and is further developed in the Hallidayan sociosemiotic perspective of language. Moreover, research that highlights the development of pre-school-aged children's decontextualised meanings (see Cloran, 1994 for a detailed analysis) allows us to consider them as practices of *emerging literacy* (Christie, 2004; Hasan & Cloran, 1990; Makin & Diaz, 2002; Painter, 1999a, 1999b).

Specifically, adopting the above sociosemiotic approach to language, we do not focus on the psychological procedures of thought but on the linguistic uses which realise meanings in everyday interactions between children and adults. Systemic Functional Linguistics, making use of a 'recontextualized Vygotsky' (Hasan, 1996, 2005), but mainly of Bernstein's theory, focuses upon ways of using language that are considered to be 'linguistic preparation for learning educational knowledge' (Painter, 1999a: 84).

The framework to which we subscribe is based on the assumption that commonsense knowledge and meaning – which is implicit, unconscious, unstructured and is learnt through causal conversation – are an interpersonal endeavour construed through the everyday interaction with adults. But new systems of meaning relevant to school knowledge – which are universal and abstract, distant from the everyday experience, based on semiotic representation and on written language, conscious, systematic and logically represented – are not

likely to be learnt in the same way as commonsense experience (Painter, 1999a). Therefore, the institutional setting of education is considered to be appropriate for specific semiotic mediation associated to more systematic and compartmentalised knowledge, which 'is dealing with technical meanings understood in terms of explicitly defined relationships to each other and realized through written language' (Painter, 1999a: 68).²

Thus, the transition from the common to uncommon knowledge requires a different meaning construction of the world, which is based on a correlation of entities different from the one that is compatible with everyday meaning construction. The systematic taxonomy and classification of the events/things according to universally recognised criteria, the symbolic representation of entities and the understanding that written language refers to a different order of reality, which does not correspond to the perceptually conceived reality, constitute the main characteristics of this uncommon knowledge (Halliday, 1998). Consequently, the generalisation implying definitions, classifications, taxonomies (=decontextualised uses of language) is a specific mode of semiotic mediation associated with the emergence of the uncommon knowledge, and constitutes the particular prerequisite for the transition to school literacy.

Data and Units of Analysis

Our analysis focuses on nine video-recorded lessons from Greek pre-school settings.³ Each lesson started with the teacher reading a fairy tale, which was the starting point for 'discussion' and 'elaboration' in the class. This early literacy event, widely practiced also in Greek pre-schools, is based on joint book reading in order to intrigue children's interest so as to introduce them not only to new forms of print but also to induce them into acquiring knowledge in various fields. In text objects things named and referred to are physical entities of the immediate environment and also of the context of situation constructed by written texts. Thus, entities, either tangible and visible or abstract and distant, are employed in order to facilitate the later learning of educational knowledge. Consequently, this early literacy event becomes simultaneously a means for becoming familiar with the written language and for transmitting organised information concerning the world.⁴

The corpus of our analysis consists of instances of 'decontextualized language uses' (Cloran, 1994, 1999) associated with the constitution of *categories* of entities with generalised and universally recognised characteristics. According to our hypothesis, the 'instructional field' (Bernstein, 1990) constitutes an important area of school knowledge, whose main characteristics are definitions and classifications that teachers attempt to introduce to children. In an attempt to investigate *in vivo* this assumption, in the analysis of interactions between teachers and students in pre-school settings we focused mainly on the lexical relations and the relational processes, and in particular, on their experiential meaning and their realisation.

From the linguistic analysis of the corpus, the lexicogrammatical realisation of the instructional field either by material or relational clauses emerged.⁵ A total of 330 clauses were analysed in respect of their experiential meaning.

We will briefly outline key aspects of units of analysing the *field* of discourse. The clause, which is considered as a representation of the constructed 'reality' and is lexicogrammatically realised in the transitivity system, will be the unit of our analysis. The transitivity system consists of events [processes], the interrelated entities [participants] as well as the circumstances (Halliday, 2004). Processes constitute the core of the transitivity system as they express actions and events that realise the external and internal experiences, as well as the interrelation of various participants at a symbolic level. More specifically, the meanings of the everyday experience of the child, i.e. those more contextualised (=near the material basis of situation) uses, can be realised more congruently by *material* and *mental* processes (Halliday, 2004; Painter, 1999b). However, the re-shaping of the immediate experience in order to conceive the non-immediately perceivable taxonomic relations among entities as well as the constitution of categories (identification of an entity, attribution, placement of an entity in a broader category) require particular meanings, typically realised by *relational* processes.

Relational processes are of three main types: *intensive* (x is a), *possessive* (x has a), *circumstantial* (x is at a), each of which comes in two distinct modes of *being*: by identification (identifying processes) or by class-membership (attributive processes). The more typical lexicogrammatical realisation of relational processes seems to be through clauses of *being*. But frequent realisations in discourse are also through verbs such as *become*, *turn into*, *remain* etc., as well as *express*, *define*, *mean*, *consider*, *symbolise* etc. Nevertheless, there are often cases of relational processes realised through metalinguistic verbal processes (*say*, *we say*, *we call* etc.) (Halliday, 2004; Halliday & Martin, 1993; Painter 1999a).

Example of a relational identifying process in our data:

Άμυαλος είναι κάποιος που κάνει πράγματα που δεν πρέπει
Unintelligent is someone who does things he shouldn't

[Token] [relational process] [Value]

(The person who does things s/he shouldn't do is identified with the notion 'unintelligent')

Example of relational attributive process in our data:

Η χιονονιφάδα είναι άμυαλη
A snowflake is unintelligent

[Carrier] [relational process] [Attribute]

(A snowflake belongs to the category of unintelligent)

The difference between the two kinds of relational processes mentioned above lies in the fact that while in the first example the two participants coincide (*Unintelligent* [=Token] – *is* [=Process] *someone who does things he shouldn't* [=Value]), in the second example the Carrier is positioned in a *category* [Attribute]. So, the identifying processes are typical of *definitions*, while the attributive processes are typical of *categorisations* and *classifications* (Painter, 1999b; Wignell, 1998).

Concerning classifications, the lexical coherence of the text should also be taken into account by means of hyponymy and meronymy, that is the general-specific and the part-whole relationship between entities (Egins, 1994: 101–103; Halliday & Hasan, 1976, Ch. 6; Painter, 1999b: 87–92).

Example of hyponymy/ hyperonymy relationship in our data:

Ολύκος είναι ζώο του δάσους

The wolf is a forest animal

[Carrier] [attributive/intensive] [Attribute]

(The wolf belongs to the class of forest animals)

Example of meronymy relationships (relations between characteristics)

Αυτό τοπουλί έχει πολλά φτερά

This bird has many feathers

[Carrier] [attributive /possessive] [Attribute]

(A basic attribute of a bird is that it has feathers)

Definitions and Classifications in our Data

The analysis of our data has shown a high frequency of definitions and classifications representing persons and things, which are realised by relational clauses. In particular, we detected that definitions and generalisations are mainly constructed in teachers' discourse through relational identifying clauses, whereas classifications are realised mainly through relational attributive.

Identifying clauses

The identifying clauses are realised by either intensive, possessive or circumstantial clause types or by metalinguistic relational clauses.

The following examples constitute typical realisations of intensive identifying:

[N refers to teacher's talk, while n, n1 refer to children's talk]

1. N: *ποιους λέμε άκαρδους;*

N :Who do we call heartless?

ποιους.. σε ποιον λέμε είσαι άκαρδος;

who ... to whom do we say you are heartless?

δεν έχει καρδιά, δεν λυπάται κανέναν

he doesn't have a heart, he doesn't feel pity for anybody

(Some exchanges follow during which the teacher does not manage to elicit the entity)

N: *Άκαρδος είναι λοιπόν κάποιος*

Heartless therefore is someone [identifying]

[[που δεν στενοχωριέται να κάνει κακό σε κάποιον]]

[[who doesn't feel sorry hurting someone else]]

In this example (see also example 7 below), the Value is realised by a nominal group (*someone*) as Head with a rankshifted embedded clause as Qualifier (*who doesn't feel sorry hurting someone else*). These cases of defining are considered as grammatical metaphors (see Painter 1999b: Ch. 4.3).

2. N: *Τι είναι η άποχη;*

N :What is a fishing-net? [identifying]

ν : Ένα καλάμι μ' ένα διχτάκι.

n: a fishing-rod with a little net

3. N: *..αδράχτι,*

... spindle,

που όπως είδαμε είναι μια βελόνα μυτερή μπροστά

that as we have seen is a needle sharp in the front [identifying]

4. N: Χιονονιφάδα τι είναι;

N: What is a snowdrift? [identifying]

v: Χιόνι

n: snow

N: Και το χιόνι?

N: and snow?

v: νερό

n: water

N: και το νερό;

N: and water?

v: γίνεται κρύσταλλο

n: it becomes crystal

N: Τι είναι ο πάγος;

N: What is ice? [identifying]

v: νερό

n: water

5. (N reads the fairy tale)

«...και είχε τρία κυνηγόσκυλα που ήταν εκπαιδευμένα να ξετρυπώνουν τα θηράματα»

'...and he had three hunting dogs that were trained to smell out the quarries.'

Θηράματα ήταν τα σκοτωμένα ζώα

Quarries were the shot animals [identifying]

6. N: Τι είναι το δάσος; (..)

What is a forest? (...) [identifying]

ποιος θα μου πει; (..) τι είναι το δάσος

who will tell me? (...) what is a forest?

Πώς το σκέφτεστε εσείς (..)

What do you think it is?

v1: Είναι ένα δάσ, δάσος που μένουνε

n1: It is a for, forest that live

v2: ταζώα

n2: the animals

N. Εγώ δεν είπα ποιος μένει στο δάσος όμως (..)

N: I didn't say who lives in the forest though (...)

Είπα τι είναι δάσος (..)

I said what is a forest [identifying]

Μια πόλη, είναι ένα μέρος με δέντρα, είναι ένα μέρος με θάλασσα,

Is it a town, is it a place with trees, is it a place with sea,

είναι ένα μέρος με βουνό;

is it a place with a mountain?

Τι είναι το δάσος;

What is a forest?

v. Είναι το δάσος που έχει δέντρα

n: It is the forest. . that has trees [attributive or identifying]

N. Είναι ένα μέρος με δέντρα

N: It is a place with trees [identifying]

Example 6 is indicative of the teacher's attempt to lead the children to a typical definition of the concept *forest*. The typical intensive identifying process (*what is a forest*) fails to do so. The teacher repeats with emphasis the above clause and the student (n) attempts to give the required definition by using a possessive attributive or identifying process (*It is the forest... that has trees*), followed by the corrective intervention of the teacher (*It is a place with trees*), who uses an identifying process (she identifies a place with trees as a forest). It should be noted that in cases such as the above, which are communicatively ambiguous, there is difficulty in deciding whether the process is identifying or attributive. (For cases of not easy distinction between identifying or attributive clauses, see Halliday, 1994: 132; Martin et al., 1997: 124).

In our data, definitions are often realised through metalinguistic *verbal processes* that play the role of identifying, as in examples 7, 8, 9 and 10. In relation to these processes, a point that is worth mentioning in our data concerns the different realisation of definitions in relation to physical or social meanings. As shown in examples 7, 9 and 10, definitions that refer to 'abstract' entities and human and social qualities tend to be realised not by *being* verbs, but through identifying/verbal processes (*are called, we call them*), whereas the more 'specific' entities, and particularly those related to the natural world (animals etc.) tend to be realised through processes of *being* (*sth is*) (examples 2, 3, 4, 5 and 6). The only exception seems to be example 8, in which an entity of the physical world is defined by a *saying* process. Another exception could be example 1, in which a social entity is defined through a *being* process. However, it should be noted that this instance was preceded by the teacher's rather unsuccessful attempt to define, realised by a *saying* process.

7. N: *Αμυαλος λέγεται κάποιος*

N: Unintelligent is called someone

[identifying]

[[που κάνει πράγματα [[που δεν είναι σωστά//,
[[that does things [[that are not right//,
που δεν πρέπει να τα κάνουμε]]]]]].
that we shouldn't do]]]]].

8. N: [The teacher reads the fairy tale]

«...γιατί μ'αυτά του τα αγκάθια τον φοβούνται όλοι.

Ακόμα και τα πιο μεγάλα ζώα»

'... because with these thorns of his everybody is frightened of him.

Even the bigger animals'

Πώς τον λένε αυτόν;

What do they call him?

[identifying]

v: *Σκατζόχοιρο*

n: hedgehog.

9. N: *Αυτοί που βάζουν φωτιά στο δάσος πώς λέγονται*

N: Those who set fire in the woods how are they called ? [identifying]

v: *Κακοποιοί*

n: criminals

N: *Κακοποιοί ή εμπρηστές*

N: Criminals or arsonists.

10. N: Πώς λέγονται οι άνθρωποι (.)
 N: What are are those people called (.) [identifying]
 Ξέρετε πώς λέγονται οι άνθρωποι αυτοί
 Do you know what those people are called
 που ποτέ τους δειν είναι ευχαριστημένοι με κάτι; Οι αχόρταγοι;
 who are never happy with anything? The greedy?
 ν : Α, α
 n: A, a
 N : Πώς λέγονται οι άνθρωποι αυτοί,
 N: What are these people called,
 Πώς τους λέμε αυτούς τους ανθρώπους;
 What do we call these people?
 Ξέρετε πώς τους λέμε;
 Do you know what we call them? [identifying]
 Αχάριστους
 Ungrateful.
 ν : Αχριστους
 n: Ungrateful
 N : Λέμε μην είσαι αχάριστος
 N: We say don't be ungrateful [verbal]

Notice that in example 10, the last clause is not realised by the metalinguistic *call* which functions as identifying process (*how are they called, how we call them*), but by *verbal process* (*say + projection*).

In the above cases, there are different realisations of the identifying/verbal processes; therefore, different realisations of experiential meaning. Specifically, there are different choices in the Assigners of the identifying clauses (Halliday, 2004: 237) (*we call, they call*) and in the choice of voice (active–passive) (*we/they call, sth is called*). In the active voice clauses, the entities involved (*we, they*) relate to the direct experience, whereas in the passive voice clauses (*sth is called*) they are left implicit, i.e. more removed from the material base of the experience.

These choices seem to form a continuum from 'the simplest form of projection' (Halliday, 2004: 447) by verbal process *we say+projection* (direct speech) to the intermediate forms realised by identifying/verbal processes (*we call, they call*) and ultimately to passive identifying/verbal processes (*it's called*), which are considered to be more congruent to scientific discourse's realisations of definitions.

Attributive clauses

According to our analysis, the classification of the entities either through submission to a wider category or through the part–whole relationship is realised in the transitivity system mainly through attributive processes. One or more attributes of the entity are isolated and reconnected in order to create an experientially different reality. Therefore, the typical classifications are lexically realised through attributive processes of 'being' and metalinguistic 'saying'. The following examples are some typical examples of intensive attributive clauses in our data:

11. N: *Οι λαγοί έχουν μικρή ουρά και μεγάλα αυτιά*
 Rabbits have small tails and big ears [possessive attributive]
και οι σκίουροι έχουν φουντωτή ουρά και μικρά αυτιά.
 and squirrels have tufted tail and small ears
Στο μόνο που μοιάζουνε είναι τι;
 They look alike only in what?
Είναι ζώα και τα δύο, ε;
 They are both animals, aren't they? [attributive]
12. N: *Ποια είναι έντομα;*
 N: Which are insects? [attributive]
13. N: *Ο λύκος είναι απί τα τρομερά ζώα του δάσους*
 N: The wolf is one of the horrible animals of the forest [attributive]
14. N: {ο σκίουρος και ο λαγίς} είναι ζώα που ζούνε στο δάσος
 N: {the squirrel and the rabbit} are animals that live in the forest. [attributive]
15. N: *Το τσίρκο είναι μια άλλη φυλακή για τα ζώα*
 N: The circus is another prison for animals [attributive]
16. N: *Το 'ελικόπτερο' είναι ένα έντομο, που είναι,*
 N: The 'helicopter' is an insect that is.
που μοιάζει σαν ελικόπτερο
 it looks like a helicopter [attributive]

Examples 11 and 16 constitute unmarked categorisations, realised by *look like* verb. The submission in a category is realised through an attributive process (*is*), by which the entities (rabbits, squirrels, 'helicopter') are ascribed to the categories of animals and insects. In example 16, the unsuccessful attempt to ascribe further characteristics so as to justify the homonymy of the helicopter with the insect leads to the use of the relational process *looks like*, which here functions as an attributive process for the creation of analogy.

Besides the typical cases of categorisation using attributive processes, cases of *marked* classifications appear in our corpus, which are realised through material and/or mental processes. Some of the most relevant examples are the following:

17. N: *Ποιος ζεσταίνει ένα σπίτι;*
 N: Who heats a house? [material]
v1, v2 : η σόμπα
n1, n2: the stove
v4 : τοκαλοριφέρ., το τζκι
n4: the central heating. . . , the fireplace
 N: *το καλοριφέρ. . . το τζάκι δίνουν ζεστασιά στο σπίτι, όταν έξω κάνει. . .*
 N: {the central heating. . . the fireplace give warm to the house, when outside it is :::
v6 : κρύο
 n6: cold :::

The classification under the class 'heating units' would require a grammatical metaphor, which is not to be expected in the context of pre-primary education. Therefore, the categorisation is realised through material processes (*heats, give warm*). And in the next clause, attributes are ascribed through a temporal circumstance (*when it is cold*).

Another example of classification, in which the relational attributive processes are conflated with other types of processes, occurred in an instance of metalanguage teaching (phonemic awareness):

18. N: 'Όλα αυτά, τελειώνουν όλες αυτές οι λέξεις, σε τι;

N: All these, all these words end in what? [material]

v : Aa :::

Aa :::

Χρονιά, Πρωταπριλιά, Πρωτοχρονιά, αυγά, ταψιά, μπουκιά,

Xronia, Protaprilia, Protoxronia, avga, tapsia, boukia

[Year, First of April, New Year's Day, eggs, baking pans, bite]

'Όλα τελειώνουν σε α. Ακούγονται το ίδιο.(.)

They all end in -a. They sound the same (.). [mental]

In this case, in order to teach phonemic awareness, instead of the use of a nominalisation (e.g. *They have the same rhyme*), which is not expected in pre-primary education, the material process (*end in*) and the mental process of phonetic perception (*sound*) are used. Thus, the choice of marked relational processes seems to be more appropriate, due to the fact that a congruent attributive process could not have been used.

Discussion

As mentioned above, in the Greek pre-school settings, fairy-tale or story reading is considered one the most appropriate teaching practices. In fact, it is the most frequently used means of emerging literacy, since it is the base for construing classification relations among the world's entities, which cannot be accessible through direct observable perception.

From the analysis of our data, examples of definitions and classifications emerged, through which teachers attempt to impose a 'non-common sense' order on the entities that emerge in the fairy tales, in order to reshape children's experience on the basis of definitions and classifications. This re-shaping of experience constitutes a theory-laden move towards school knowledge and literacy, as Halliday and tradition have already aptly discussed (Halliday, 1998, 1999; Halliday & Matthiessen, 1999).

Another point worth mentioning is that the SFG methodological tools were successfully applied in data derived from Greek educational communicative instances, and this application has illustrated the following points not directly foreseen by the adopted framework. In fact, two kinds of different definitions realisations were traced. Specifically, in cases in which the entities relate to direct experience, realisations more congruent with common experience – such as active voice – were used (examples 8 and 10), whereas in cases in which the entities were more removed from the material base of the experience, passive identifying/verbal processes were chosen (examples 7, 9 and 10).

Moreover, metalinguistic verbal processes (*it is called, we call sth*) seem to be used in the educational setting to the same extent as the identifying processes of *being*. Evidence in our data indicates the differentiated choice between these two types of lexicogrammatical realisations. Specifically, the verbal/relational processes are chosen in order to identify entities that belong to the social world and/or are culturally constructed qualities (*ungrateful, unintelligent*). In other words, those that are conventionally considered as 'abstract notions'. On the other hand, the more typical relational processes (*it is, it becomes* etc.) are usually chosen in order to refer to entities of the physical world, that is concrete entities and/or scientifically classified. An eventually systematic use of these different lexicogrammatical realisations in the system of transitivity would mean an implicit but clear distinction between sociocultural and natural entities already in the pre-school settings. In other words, this would mean that teachers of pre-school settings «urge» the re-shaping of children's experience according to the paradigm of school/scientific knowledge, according to the distinction between concrete and abstract entities as well as between the physical and social world.

This evidence needs to be further investigated taking into account school discourse variability. In this perspective, school texts of different disciplines and of different modes (written/spoken) should be analysed in order to investigate whether the above mentioned tendencies occur throughout the continuum of school knowledge re-contextualisation, and thus they constitute effective tools for the shaping of children's consciousness concerning the world.

Correspondence

Any correspondence should be directed to Marianna Kondyli, Department of Science of Education and Early School Education, University of Patras, Panepistimioupoli Rio, 26500 Patra, Greece (kondyli@upatras.gr).

Notes

1. We would like to thank Dr. Bessie Mitsikopoulou for her insightful comments on an earlier draft of this paper.
2. Language characteristics that facilitate educational knowledge can be summarised as follows: experiences with generalisations through information exchange, orientation to the hypothetical and generalised meanings as well as the learning and reflecting through texts, familiarisation with definitions and criteria for categorisation, with oral monologues and/or texts, with inferences, reflection on meanings etc. (Painter, 1999a; Williams, 1999).
3. Our total corpus comprises of 16 lessons. However, only 9 lessons were selected for more intensive analysis, because they display an instructional field («discussion» and «elaboration») overtly directed towards school knowledge.
4. For a detailed discussion about the importance of reading/storytelling to pre-school children as an essential literacy practice in Western societies, see, e.g. Hasan (1996), Hasan and Cloran (1990), Martinez and Teale (1993), and Williams (1999).
5. The behavioural and verbal processes have higher frequency in the regulative field (see Williams, 1999).

References

- Bernstein, B. (1990) *Class, Codes and Control, Vol. 4: The Structuring of Pedagogic Discourse*. London: Routledge.

- Bernstein, B. (1996) *Pedagogy, Symbolic Control and Identity: Theory Research critique*. London: Taylor & Francis.
- Christie, F. (ed.) (1999) *Pedagogy and the Shaping of Consciousness*. London and New York: Continuum.
- Christie, F. (2004) Authority and its role in the pedagogic relationship of schooling. In: L. Young and C. Harrison (eds) *Systemic Functional Linguistics and Critical Discourse Analysis* (pp. 173–201). London and New York: Continuum.
- Cloran, C. (1994) *Rhetorical Units and Decontextualization: An Inquiry into Some Relations of Context. Meaning and Grammar*. Nottingham: University of Nottingham.
- Cloran, C. (1999) Contexts for learning. In: F. Christie (ed.) *Pedagogy and the Shaping of Consciousness* (pp. 31–65). London and New York: Continuum.
- Cloran, C., Butt, D. and Williams, G. (eds) (1996) *Ways of Saying: Ways of meaning. Selected Papers of Raquaiya Hasan*. New York: Cassell.
- Douka, F. (2003) Contextualized and de-contextualized discourse strategies for fairy-tale teaching in pre-school settings. Unpublished MA thesis, University of Patras [in Greek].
- Eggs, S. (1994) *An Introduction to Systemic Functional Linguistics*. London: Pinter.
- Halliday, M.A.K. (1996) Literacy and linguistics: A functional perspective. In: R. Hasan and G. Williams (eds) *Literacy in Society* (pp. 339–376). London: Longman.
- Halliday, M.A.K. (1998) Things and relations: Re-grammaticising experience as technical knowledge. In: J. R. Martin and R. Veel (eds) *Reading Science. Critical and Functional Perspectives on Discourses of Science* (pp. 185–235). London and New York: Routledge.
- Halliday, M.A.K. (1999) Language and the re-shaping of human experience. *Glossikos Ipologistis* 1, 19–32. [transl. in Greek]
- Halliday, M.A.K. (2004) *An Introduction to Functional Grammar* (3rd edn; rev. by C.M.I.M. Matthiessen). London, Melbourne and Auckland: Edward Arnold.
- Halliday M.A.K. and Hasan, R. (1976) *Cohesion in English*. London: Longman.
- Halliday, M.A.K. and Hasan, R. (1985) *Language, Context and Text: Aspects of Language in a Social-Semiotic Perspective*. Victoria: Deakin University Press.
- Halliday, M.A.K. and Martin, J. R. (1993) *Writing Science: Literacy and Discursive Power*. London: Falmer.
- Halliday, M.A.K. and Matthiessen, C.M.I.M. (1999) *Construing Experience through Meaning*. London and New York: Cassell.
- Hasan, R. (1996) Literacy, everyday talk and society. In: R. Hasan and G. Williams (eds) *Literacy in Society* (pp. 377–424). London: Longman.
- Hasan, R. (2005) Speech genre, semiotic mediation and the development of higher mental functions. In: J. J. Webster (ed.) *The Collected Work of Raquaiya Hasan, Volume 1, Language, Society and Consciousness* (pp. 68–105). London, Oakville: Equinox.
- Hasan, R. and Cloran, C. (1990) A sociolinguistic study of everyday talk between mothers and children. In: M.A.K. Halliday, J. Gibbons and H. Nicholas (eds) *Learning, Keeping and Using language, V. I: Selected Papers from the 8th World Congress of Applied Linguistics, 1987* (pp. 67–99). Amsterdam: Benjamins.
- Kondyli, M. and Arxakis, A. (2004) The role of language in shaping educational knowledge: Analysis of instructional conversations in pre-school Greek educational settings. *Studies for Greek Language*, 24, 301–312. Thessaloniki: Aristotelian University of Thessaloniki [in Greek].
- Kondyli, M. and Douka, F. (2006) Aspects of generalizations and taxonomies of the world: Literacy practices in Greek pre-primary schools. *Studies for Greek Language*, 26, 220–232. Thessaloniki: Aristotelian University of Thessaloniki [in Greek].
- Macnamara, J. (1982) *Names for Things. A Study of Human Learning*. Cambridge, MA: MIT Press.
- Makin, L. and Diaz, C.J. (eds) (2002) *Literacies in Early Childhood. Changing Views, Challenging Practices*. Sydney, Philadelphia and London: MacLennan & Petty.
- Martin, J. R., Matthiessen, C.M.I.M. and Painter, C. (1997) *Working with Functional Grammar*. London: Arnold.
- Martin, J.R and Veel, R. (eds) (1998) *Reading Science. Critical and Functional Perspectives on Discourses of Science*. London and New York: Routledge.

- Martinez, M. and Teale, W. (1993) Teacher storybook reading style: A comparison of six teachers. *Research in the Teaching of English* 27 (2), 175–199.
- Nelson, K. (1979) Explorations in the development of functional semantic system. In: W.A. Collins (ed.) *Children's Language and Communication* (pp. 47–81). Hillsdale, NJ: Erlbaum.
- Painter, C. (1999a) Preparing for school: Developing a semantic style for educational knowledge. In: F. Christie (ed.) *Pedagogy and the Shaping of Consciousness. Linguistic and Social Processes* (pp. 66–87). London and New York: Cassell.
- Painter, C. (1999b) *Learning Through Language in Early Childhood*. London and New York: Continuum.
- Vygotski, L.S. (1962) *Thought and Language*. Cambridge: Cambridge University Press.
- Wertch, J.V. (ed.) (1984) *Culture, Communication and Cognition: Vygotskian Perspectives*. Cambridge: Cambridge University Press.
- Wignell, P. (1998) Technicality and abstraction in social science. In: J.R. Martin and R. Veel (eds) *Reading Science. Critical and Functional Perspectives on Discourse of Science* (pp. 297–336). London and New York: Routledge.
- Williams, G. (1999) The pedagogic device and the production of pedagogic discourse: A case example in early literacy education. In: F. Christie (ed.) *Pedagogy and the Shaping of Consciousness. Linguistic and Social Processes* (pp. 88–122). London and New York: Cassell.