

The Problems Identified in the Previous Coding Schemes Used for Analysing L2/FL Writers' Think-Aloud Protocols

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Abstract

The think-aloud method has been extensively used by researchers investigating the composing process. The vast majority of published works on this method, if not all, have focused on issues related to the way of administering it, and to its validity and/or reliability rather than discussing the validity of the coding schemes used for analysing the protocols generated by writers. This paper tries to fill in this gap by critically reviewing the types of the previous coding schemes used for analysing L2/FL writers' think-aloud protocols. Five types of these coding schemes were identified in the literature. The weaknesses and/or strengths of each type are highlighted. In addition, the paper discusses some other problematic issues in these schemes that make the comparability of the findings of composing research more difficult, on the one hand, and raise some questions about the validity of some schemes, or at least some parts of them, on the other. The paper ends with presenting implications for researchers interested in the area of the composing process.

1 Introduction

The think-aloud method is one of the most commonly used methods for collecting data about the composing process. Using this method, writers are asked to verbalize everything that comes to their minds while performing the writing task; these verbalizations are recorded, then transcribed and analysed in a later stage. The data collected from writers' concurrent verbalizations as well as the texts produced by them are called think-aloud protocols. By analysing these protocols, researchers infer the strategies/behaviors used by writers while performing a specific writing task. Since the early 1980s, some works have been published on using the think-aloud method in investigating the composing process. All of these published works (e.g. Cooper & Holzman, 1983; Flower & Hayes, 1985; Dobrin, 1986; Steinberg, 1986; Smagorinsky, 1989; 1994; Ransdell, 1995) have either discussed how to administer the think-aloud method and to analyse the protocols writers generate or debated its validity and reliability in investigating the composing process. None of these published works, however, has dealt with validity of the coding schemes that have been used by researchers to analyse and describe their participant writers' think-aloud protocols. Therefore, this article will critically review some of the coding schemes used in analysing L2/FL writers' think-aloud protocols to determine their validity and inter-consistency.

2 Perl's (1979) Seminal Coding Scheme

Janet Emig (1971) was the first writing researcher to use the think-aloud method in her seminal work on the composing process. In her study, Emig described her 8 twelfth-grader participants' composing processes qualitatively under some sub-headings such as pre-writing, planning, starting, characterization of composing aloud, reformulation and stopping. In a later study, Sondra Perl (1979) used a coding scheme for describing her L1 participants' composing processes. Since Perl's pioneer study, the vast majority of writing studies, either in L1 or L2/FL, employing the think-aloud method have depended on using a specific coding scheme in describing their participants' composing process, with the exception of a very few ones that have used qualitative analysis of the protocols such as McDonough and McDonough (2001) and Wolfersberger (2003). The advantage offered by the coding scheme is that it describes the composing process in a standardized and quantitative way. The units any coding scheme is composed of have been referred to by researchers as composing behaviours, or strategies or activities or acts or processes. In this paper, the author will interchangeably use the terms strategies or behaviors to refer to these units.

Perl's seminal coding schemes can be described as an individual-strategy one in that it lists most writing behaviours without classifying them into main categories or components. Though some problematic aspects can be identified in this scheme such as incorporating monitoring behaviours, e.g. indicating concern for a grammatical rule, in the editing category and not differentiating revising behaviours from editing ones, it remains the seminal coding scheme of writers' behaviours based on which many other ones were developed for analysing L1 or L2/FL writers' think-aloud protocols.

3 The Five Types of L2/FL Coding Schemes Identified

Based on reviewing thirty-one coding schemes developed by writing researchers since the mid 1980s for analysing the think-aloud protocols generated by L2/FL writers performing handwritten tasks, e.g. narrative, argumentative, expository, writing from a picture prompt, letter-writing etc., other than writing-from-resources or summary writing, five types of these schemes were identified:

- a- individual-strategy schemes derived mainly from Perl's (1979) one,
- b- categorical schemes,
- c- attention to aspects of writing schemes,
- d- problem-solving schemes, and
- e- language-switching schemes.

While the first three schemes can be described as general ones used for analysing the composing process as a whole, the last two schemes are regarded as specific ones describing a particular aspect of it. Appendix 1 provides exemplary schemes of each type along with Perl's seminal scheme.

Many researchers in the area of L2/FL writing developed their own modified versions of Perl's (1979) individual-strategy coding scheme. Raimes's (1985) modified version of Perl's (1979) coding scheme is more likely the first published scheme in L2/FL composing research and it is also the version that has been adapted by some other L2/FL writing researchers, including Arndt (1987), Seaman (1994), Yahya (1994), Rashid (1996), Armengol-Castells (2001), El Mortaji (2001), Mahfoudhi (2003), and J. Wang (2005). Those researchers adapted Perl's scheme by adding some other few units to it and/or narrowing it down. Generally speaking, the main difference between all these individual-strategy schemes and Perl's one is that they include more types of reading and text-changing (i.e. revising and editing) strategies. This variation in the types of text-changing strategies included in the schemes might have been influenced by the emergence of the text-based revision taxonomies, e.g. Faigley and Witte (1981), in the early 1980s, given that Perl's scheme was published in 1979.

Another orientation in analysing L2/FL writers' think-aloud protocols is using a categorical coding scheme that includes a small number of categories representing the main components of the composing process with their sub-categories. Two types of categorical coding schemes can be identified in the L2/FL composing process studies reviewed: the so-called metacognitive categorical coding schemes and the general categorical coding schemes. The first metacognitive coding scheme for the composing process was developed by Wenden (1991) who divides her scheme into three categories: planning, evaluation, and monitoring. Each of these three main categories includes some other sub-categories or strategies some of which may be cognitive. Following Wenden, Victori (1995), Cava (1999), and Whalen and Menard (1995) used adapted metacognitive schemes. The general categorical coding schemes, on the other hand, are those schemes that have classified the composing process into general strategic or behavioural components rather than merely focusing on its so-called metacognitive aspects. General categorical coding schemes can be classified into those schemes which are based on categorizing the stages of the composing process and those schemes which are based on categorizing the shared composing behaviours or strategies. The coding schemes developed by Skibniewski (1988), Akyel and Kamisli (1996), and Albrechtsen (1997) belong to the first type. The three general categorical coding developed by Castro (2003), He (2005) and A. Wong (2005) are based on the shared composing behaviours, i.e. behaviours of the same type or function, rather than on the stages of writing.

Cumming (1988) developed a coding scheme for analysing the aspects writers attend to while composing. This scheme was adapted from another scheme developed by Scardamalia and Paris (1985). Following Cumming, two of his students, Uzawa (1996) and Lo (2000), developed adapted coding schemes in their studies. In addition to the basic single categories or configurations, in these authors' words, of attending to writing aspects, both Cumming (1988) and Lo (2000) reported protocol examples in which writers attend to more than one aspect at the same time. Problem-solving process in writing is believed to require more mental efforts than other writing processes. Proposed problem-solving coding schemes describe the writing behavioural patterns this process involves. Cumming's (1988) problem-solving coding scheme is more likely the first one to be developed in L2/FL writing research. Cumming derived his coding scheme of

problem-solving behaviours from the works of Flower and Hayes (1980), and Scardamalia and Bereiter (1985). Other problem solving coding schemes used in L2/FL writing process research include those developed by Krings (1989), Jannausch (2001) - a modified version of Krings's scheme, Zimmermann (2000) and Roca de Larios *et al.* (1999). Finally, some researchers investigating L2/FL writers' switching to their L1s, e.g. Qi (1998), Woodall (2000), Wang and Wen (2002) and L. Wang (2003), developed coding schemes that account for the causes of language-switching behaviours in the composing process. As the dates of their publication shows, the language-switching schemes have been developed in a later stage than the other types of the above-mentioned schemes.

4 Evaluating the Five Types of the Coding Schemes

While the individual-strategy schemes might be easier to develop and use, they are disadvantageous in that they might sometimes inform us about the type of the writing strategies/behaviours used rather than the reason for using it and in that they may not inform us about the effort allocated to the different components or sub-processes of the composing process. A main problem related also to the metacognitive schemes is that there are no clear-cut boundaries between what can be regarded as 'cognitive' and 'metacognitive'. Wenden's (1991: 315-316) view that cognitive strategies are task-specific, i.e. specific tasks require using specific cognitive strategies; and metacognitive strategies are not, i.e. they are general and transferable ones, does not seem to be applicable. The general categorical coding scheme which are based on categorizing the stages of the composing process do not seem to have taken into account the recursive nature of the composing process in that they limit the occurrence of some strategies/behaviours to specific stages of it. The categorical coding schemes that are based on the shared composing behaviours or strategies rather than on the stages of writing have avoided this problematic issue. The categorical coding schemes show how frequent writers attend to their composing components, i.e. they inform us about the effort writers allocate to these components or sub-processes of the composing process, and reasons for using some strategies. Some of these schemes also provide us with a detailed analysis of specific writing components such as the analysis of the reading and questioning behaviours given in the schemes developed by Albrechtsen (1997) and A. Wong (2005), respectively. A problematic issue, however, in the categorical schemes that may influence their comparability is the differences between the main categories used in each scheme and in the sub-categories included in each main category.

The schemes of attention to aspects of writing may be the easiest type of schemes to use and develop but the results provided by them may be the most difficult to compare with those provided by other types of schemes. These schemes may be the least frequently used ones for analysing writers' think-aloud protocols. The main problem with this type of schemes and the units they are made up of is that they are very broad and overlapping. The three authors using this type reported protocol examples in which writers attend to more than one aspect at the same time. For example, Cumming (1988) reported protocol examples in which writers attend to double configurations, triple configurations, quadruple configurations, and quintuple configurations. The problem-solving coding

schemes have deepened our understanding of the different behavioral patterns used in solving a rhetorical problem and of how the monitoring component functions in the composing process. Though the problem-solving coding schemes have enriched our understanding of these aspects of the composing process, they did not differentiate between some important aspects of the composing problem-solving process such as the linguistic problems and the ideational problems, and problems related to proposed text and written text and did not clarify the role of questioning in the problem-solving process adequately. The same applies to proposed language-switching coding schemes which do not cover all causes of or purposes for using L1 in L2/FL composing.

5 Other Problematic Issues in the Coding Schemes Reviewed

Apart from the problematic issues highlighted above about each type of schemes reviewed and from the lack of coverage of language-switching and self-questioning behaviours in many of these schemes, there are some other thorny ones that make the comparability of the findings of composing research more difficult, on the one hand, and raise some questions about the validity of some schemes, or at least some parts of them, on the other one. Some of these problematic issues are highlighted in the following paragraphs.

5.1 Labeling the same composing behaviour differently

This problem can be observed clearly in the labels given to the planning behaviours in the above reviewed schemes. The list of the labels given to planning behaviours includes: planning structure or strategy, rehearsing, global planning, general planning, local planning, paragraph planning, goal setting (global goals and procedural goals), generating content, organizing content, gist, intentions, procedures, pragmatic planning, textual planning, linguistic planning, planning ideas, planning procedures, planning linguistic text, planning organization, brainstorming, setting content goal, setting organization goal, setting rhetorical goal, setting style-oriented goal, organizing prior to writing, and planning for audience prior to writing. We may be surprised if we know that this plethora of labels describes a far fewer number of planning behaviours. This may also apply to replacing monitoring with assessing, evaluating, management or problem-solving, brainstorming with speaking without writing, and resourcing with consulting, compensating, communication and verification. Such case of using various labels by researchers to describe the composing behaviours with the same definitions confuses writing researchers and make it difficult for them to compare their findings with each other.

5.2 Using the same label for describing different composing behaviours

Many examples of using the same label to describe different composing behaviours can be identified in the coding schemes reviewed above. While both of Raimes (1985) and Yahya (1994) use the label 'rehearsing' to refer to developing content and trying out new ideas, Arndt (1987) means by rehearsing trying out the language in which to express the idea. Rehearsing as defined by Raimes and Yahya may have the same meaning of

'brainstorming' or 'speaking without writing' which is viewed by Yahya as voicing out ideas but not necessarily writing them. Rashid (1996) used the label 'general editing strategy' to describe monitoring strategies/behaviours (thinking, rethinking and considering choices) and spelling out the word which is a type of rehearsing, and the label 'general revision' to refer to evaluating proposed or written text. In many other schemes, both editing and revising have different meanings. Contrarily to the definitions adopted by many researchers, Albrechtsen (1997) views questioning for what to write next as a planning behaviour and questioning about how to phrase something as a frustration behaviour. Likewise, Castro (2003) includes many of the planning behaviours in the reviewing category of her scheme, and dictionary use (a resourcing behaviour) and writing notes (a planning behaviour) in the category of organizing and deciding, and uses metacommenting to refer to some monitoring behaviours such as taking decisions and assessing. These examples make the validity of some schemes or some of their units questionable.

5.3 Differences in measuring behaviours

Another issue that may complicate the comparability of research findings is using different measures for assessing the same composing behaviour. The most remarkable example of this is the way writing researchers identified what can be regarded as a significant pause. While Castro (2003), for example, defines pausing as a one-second interruption, Lo (2000) and Woodall (2003) define it as a three-or-more-second interruption; other writing researchers define it as any interruption lasting two seconds or more, four seconds or more, five seconds or more, and longer than five seconds. An observable difference also is the length of the think-aloud protocol chunk coded. Some coded chunks representing the same composing behaviours in the schemes reviewed may range from one phrase or one line in some schemes to two or three lines in others. This suggests that even when some writing researchers agree upon the definition of a specific composing behaviour, they may code it differently in their participants' think-aloud protocols.

5.4 Inclusion of written communication strategies

Another problematic issue that can be observed in some of coding schemes reviewed is their inclusion of some written communication strategies. For example, Wenden (1991), El Mortaji (2001), J. Wang (2005), and He (2005) include writing in a lead-word or expression (e.g. first), translating, writing down Chinese equivalents, and adjusting or approximating messages, respectively, in their composing process schemes. Including such written communication strategies in the composing process schemes without differentiating between them and composing behaviours makes some writing researchers confused about what can be regarded as a composing behaviour and it also influences the validity of these schemes.

5.5 Analysing the frequencies rather than the percentages of the behaviours/strategies demonstrated

The vast majority of the previous L2/FL studies using the think-aloud method have analysed the number of the strategies or behaviours demonstrated by their participants. This way of analysis may result in providing misleading results if some writers spent more time composing or were higher verbalizers than others. To make it clearer, the frequencies of all composing behaviours, either successful or less successful ones, of some writers can be higher than those of other writers simply because they spend more time composing and/or verbalized more thoughts, and not because they allocate more efforts to or overuse specific composing behaviours. Analysing the percentages of the composing behaviours demonstrated can resolve the problems related to differences among writers in verbalizing thoughts and also helps researchers avoid any misleading interpretation resulting from demonstrating more or less composing behaviours by writers spending longer or shorter time composing. Roca de Larios *et al.* (1999, 2001, 2008) reported they have adopted this analysis method to neutralise inter-participant variability of the time spent on the task. In addition, Rijlaarsdam and Berg (1996) argue that analysing the percentages of verbalized composing behaviours is fairer than analysing their frequencies as the former way shows the relative contribution of each behaviour to the whole composing process.

6 Conclusion

This paper has critically reviewed the types of the coding schemes used by writing researchers in analysing L2/FL writers' think-aloud protocols. The above review of the L2/FL writers' think-aloud coding schemes has some implications for future researchers interested in investigating composing process. When developing their own coding schemes, writing researchers need to review as many previously developed schemes as possible in order to be well-informed about the different conceptualizations of composing behaviors and sub-processes and derive their schemes from multiple sources. Compared to other general schemes, i.e. individual-strategy, writing stage-based categorical and attention to aspects of writing ones, the behavioral component-based categorical schemes may be the most appropriate ones for describing writers' think-aloud protocols as they help us understand the amount of effort allocated to writing sub-processes. The L2/FL composing research is still lacking more comprehensive coding schemes integrating a more detailed description of the problem-solving or monitoring behaviors and the language-switching aspects. Consequently, writing researchers need to devote their efforts towards that end¹. We still also lack published works that critically review the coding schemes developed for analysing think-aloud protocols generated by L1 writers performing different types of tasks and by L2/FL writers performing writing-from-sources, i.e. responding to the text read, summary writing, or computer-based tasks. Finally, analysing the percent frequencies rather than the raw frequencies of the composing behaviours/strategies should be considered when dealing with the think-aloud

¹ A more comprehensive coding scheme that avoids many of the problematic issues highlighted has been developed by the researcher. An article about this newly developed scheme is being prepared for publication.

data generated by a number of participants, i.e. usually more than ten, spending different amounts of time composing their texts.

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Appendix 1: Examples of the Five Types of the Coding Schemes Identified in the L2/FL Writing Process Research

Table 1: Perl's (1979) seminal coding scheme of L1 writers' think-aloud protocols

Strategy/Behaviour	Definition
General Planning	Organizing thoughts and deciding how to proceed
Local Planning	Deciding what to write next
Global Planning	Discussing changes in drafts
Commenting	Sighing or commenting on the topic
Interpreting	Rewording the topic to understand it
Assessing	Judging one's writing either positively or negatively
Questioning	Asking questions
Talking leading to writing	Finding ideas on the topic but not necessarily writing all one is verbalizing
Talking and writing at the same time	Writing down what is being verbalized concurrently
Repeating	Repeating written text or proposed text
Reading related to the topic	Reading the directions Reading the question Reading the statement
Reading related to one's product	Reading one sentence or a few words Reading a number of sentences together Reading the entire draft through
Writing silently	
Writing aloud	
Editing	Adding grammatical markers, words, phrases or clauses Deleting grammatical markers, words, phrases or clauses Indicating concern for a grammatical rule Adding, deleting or considering the use of punctuation Considering or changing spelling Changing the sentence structure through embedding Coordination or subordination Indicating concern for appropriate vocabulary (word choice) Considering or changing verb form
Periods of silence	

Table 2: Type 1: L2/FL individual-strategy coding schemes

Raimes's (1985) scheme	Mahfoudhi's (2003) scheme
Questioning	Enquiring
Assessing	Assessing
Commenting	Commenting
Repeating a word, phrase or part of sentence	Repetition
Rehearsing	Rehearsing
Researcher intervention	Researcher intervention
Silence	Silence
Unintelligible remark	Unintelligible remark
Writing	Writing
Surface-level editing changes Addition Deletion Grammar punctuation spelling sentence verb form or tense word form	Editing changes
Revising changes affecting meaning addition deletion Substitution word choice	Revising changes
Reading the assigned topic Reading the whole draft (after Sentence 4) (Rescanning) Reading sentence or part of sentence (followed by number of sentence)	Reading (6 types of reading)
Planning structure or strategy	Global planning Local planning Written planning Planning Paragraph planning
Revising	Underlining the keywords in the prompt Note-making

Table 3: Type 2.1: Wenden's (1991) coding scheme of writing metacognitive strategies

Planning	<p>Metacognitive strategies a- Knowledge retrieval b- Decision making (related to world knowledge, rhetorical knowledge and linguistic knowledge)</p> <p>Cognitive strategies used in planning a- Clarification strategies (self-questioning, hypothesizing, defining terms and comparing) b- World knowledge retrieval strategies (reading what has been written, writing in a lead-word or expression, rereading the assigned question, self-questioning, writing till the idea would come up, summarizing, and thinking in one's native language) c- Linguistic knowledge retrieval strategies (circumlocution and written rehearsing) d- Resourcing (asking the researcher and using a dictionary) e- Deferral f- Avoidance</p>
Evaluation	<p>Metacognitive strategies a- Reviewing or rereading what has been written b- Identifying the criteria used for assessing the text (usually by questioning) c- Applying the criteria to the text or verbalizing the assessment</p> <p>Cognitive strategies used in evaluation Verification: checking dictionary or asking the researcher when not sure of the accuracy or appropriateness of one's evaluation</p>
Monitoring	<p>Metacognitive strategies a- Problem recognition or identification b- Problem assessment</p>

Table 4: Type 2.2.1: Akyel & Kamisli's (1996) general categorical scheme (stage-based)

General writing strategies	
<p>While-composing</p> <p>ACQ assessing, commenting and questioning</p> <p>Pl planning</p> <p>Rh rehearsing</p> <p>R rescanning</p> <p>RW reading the whole text</p> <p>P pause</p> <p>Tr translation</p>	<p>Pre-writing</p> <p>Pl planning</p> <p>Rh rehearsing</p> <p>RW reading the topic</p> <p>ACQ assessing, commenting and questioning</p>
<p>Deep-level Revision strategies</p> <p>a addition</p> <p>del deletion</p> <p>sub substitution</p> <p>r reorganization</p> <p>c combination</p>	<p>Surface-Level Editing</p> <p>a addition</p> <p>del deletion</p> <p>sub substitution</p> <p>sp spelling</p> <p>wf word form</p> <p>p punctuation</p> <p>v verb form or tense</p> <p>ss sentence structure</p>

Table 5: Type 2.2.2: A. Wong's (2005) general categorical coding scheme (shared behaviour-based)

Questioning	<ul style="list-style-type: none"> Question to check text Question to evaluate text Question to generate text Question to organize text
Reading and Rereading	<ul style="list-style-type: none"> Rereading below the level of the sentence Rereading one sentence Rereading two or more sentences Rereading at the level of paragraph Reading two or more paragraphs Rereading the whole draft Scanning (speed rereading) Reading the topic assignment Reading reference material Reading the writing plan
Goal Setting/Planning	<ul style="list-style-type: none"> Setting content goal Setting organization goal Setting rhetorical goal Setting style-oriented goal
Revising operations (making changes to text that affect meaning)	<ul style="list-style-type: none"> Revising - addition below the level of the sentence Revising - addition at the level of the sentence Revising - addition above the level of the sentence Revising - deletion below the level of the sentence Revising - deletion at the level of the sentence Revising - deletion above the level of the sentence Revising - substitution Revising - word choice Revising - (cohesion or coherence in text)
Editing operations (making changes to text that do not affect meaning)	<ul style="list-style-type: none"> Editing – addition Editing – deletion Editing – spelling error Editing – syntactical/grammatical Editing – punctuation

Table 6: Type 3: attention to aspects of writing coding schemes

Cumming (1988)	Uzawa (1996)	Lo (2000)
<p>Language use: focusing on linguistic aspects such as grammar, punctuation or orthographic conventions</p> <p>Discourse organization: focusing on the organization of the written discourse and the structure beyond the clause level</p> <p>Gist: formulating, considering, reconsidering or searching for content in writing</p> <p>Intentions: attending to achieving an objective set in the text</p> <p>Procedures: planning to take a procedure or do something while writing, i.e. strategy planning, such as writing, checking something, reading, or starting or finishing something</p>	<p>Metacognitive level attention: generating content and refining it</p> <p>Discourse Level attention: attending to text organization and logical flow</p> <p>Linguistic level attention: attending to linguistic units, i.e. sentences, clauses, phrases, words, spelling, punctuation</p> <p>Personal comments: metacommenting and questioning</p>	<p>Goals: global intentions and local gist</p> <p>Fit: discourse coherence or fit between parts of writing</p> <p>Word: lexical expression</p> <p>Rules: syntactic, morphological, orthographic or punctuation conventions</p> <p>L1-L2: switching between first and second languages</p>

Table 7: Cumming’s (1988) four other configurations which include combinations of the five main ones

<p>Double configurations (language use/discourse organization, language use/gist, language use/intentions, discourse organization/gist, discourse organization/intentions, procedures/gist/ procedures/language use, procedures/discourse organizations, procedures/intentions, gist/intentions)</p>	
<p>Triple configurations (language use/discourse organization/gist, discourse organization/gist/intentions, language use/discourse organization/ procedures, language/use/discourse organization/intentions, language use/gist/intentions, gist/intentions/procedures, discourse organization/gist/procedures, discourse organization/intentions/procedures, language use/intentions/procedures, language use/gist/procedures).</p>	
<p>Quadruple configurations: (gist/language use/intentions/procedures, gist/discourse organization/language use/intentions, gist/discourse organization/intentions/procedures, discourse organization/language use/intentions/procedures, discourse organization/gist/language use/ procedures).</p>	
<p>Quintuple configurations:</p>	<p>(gist/discourse/organization/language use/intentions/procedures).</p>

Table 8: Type 4: problem-solving coding schemes

Cumming (1988)	Zimmermann (2000)	Roca de Larios <i>et al.</i> (2001)
<ul style="list-style-type: none"> - Knowledge-telling - Problem identified with no evaluation or resolution - Problem identified and resolved immediately with no evaluation - Problem identified and evaluated but not resolved - Problem identified, evaluated and resolved 	<ul style="list-style-type: none"> - Uttering a tentative form, evaluating, accepting, writing down and repair - Tentative form modified, tentative form repeated, tentative form accepted -Evaluating, rejecting/simplifying/postponing, Simplified tentative forms, accepted, - Simplified tentative forms, rejected, generating one or more new alternatives tentative formulations - Tentative forms in L1, tentative forms in L2, L2 problem identification, L2 problem solving strategies activation. 	<ul style="list-style-type: none"> - Identifying the problem - Producing one or more alternatives - Monitoring or evaluating the alternative(s) - Repairing or on-line revising, - Hesitation phenomena - On-line evaluation.

Table 9: Type 5: language-switching coding schemes

Qi (1998)	Woodall (2000)	Wang & Wen (2002)	L. Wang (2003)
Generating ideas Initiating an idea Facilitating the development of a thought Lexical meaning verification Overload of working memory	Understanding or verifying the meaning of the word Deciding what to write next Understanding or verifying grammatical forms Understanding or verifying the meaning of the word Understanding the meaning of a phrase Deciding what to write next	Task examining Idea-generating Idea-organizing Text-generating activities Process-controlling	Discourse planning Idea generation Language use Lexical searching Translation for monitoring written production Metacommenting

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Pharyngealization in Syrian Arabic

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Abstract

In this paper, I will study the process of pharyngealization (or emphasis spread) in Syrian Arabic within the framework of Optimality Theory (Prince and Smolensky 1993). I will show that the domain of emphasis can be the syllable that includes the emphatic segment, the whole word, or across word boundaries. Following Davis 1993 and 1995, I am going to use the feature [+RTR] (Retracted Tongue Root) to refer to the pharyngealized sounds. The data in this paper is taken from interviews with and recordings of Syrian people.

1 Introduction

It has been found that emphatic sounds (t^f , d^f , s^f , z^f) have influence on segments in the same syllable, word or even across word boundaries. In other words, the influenced (pharyngealized) sounds tend to be pronounced in a way more like the emphatic segment itself “**with a retraction of the root of the tongue towards the upper part of the pharynx, hence producing a constriction in the upper pharynx**” (Jarrah 1993:229). Note that the process of pharyngealization affects both consonants and vowels in the emphatic domain. Let us now proceed to see how far emphasis spread is likely to reach.

2 Domain of Emphasis Spread

As in many other Arabic dialects, the emphasis domain in Syrian Arabic is the word. There are also other cases where emphasis spreads regressively across word boundaries. In those cases, the emphatic sound in the second word initial position affects the last segment in the previous word which becomes pharyngealized accordingly. The following examples show these two cases:

- | | | | |
|-------------------------|---|-------------------------|---------------------------|
| (1)- /ħe:t̪/ | → | [ħ̣e:t̪̣] | “wall” |
| (2)- /ṣe:f/ | → | [ṣ̣e:f̣̣] | “summer” |
| (3)- /mat̪̣mu:r/ | → | [ṃ̣ạt̪̣̣ṃ̣u:ṛ̣] | “buried” |
| (4)- /ʔa:sẹt̪̣t̪̣u:la/ | → | [ʔa:sẹt̪̣̣t̪̣̣u:ḷ̣ạ] | “she measured her height” |

3 Optimality Theoretic Account of Emphatic Spread

3.1 Theoretical Background

In previous theories of grammar, differences among dialects or languages have been accounted for by positing a new or different rule that meets the specific needs of a given language. With the advent of Optimality Theory, these variations are said to be captured and accounted for by means of a set of violable constraints. Two points are important here. First, these constraints are universal. In other words, the concept of

having different rules to account for the same phenomenon across languages is now replaced with the notion of universal constraints. Second, these universal constraints are differently ranked among languages so as to meet the language-specific requirements. The possible candidates are tested against these constraints. The optimal candidate or the winner is required to comply with the requirements of the top ranked constraint or have the least number of violations.

3.2 Emphasis spread within words

This process will be studied on the basis of feature spread. Adra (1999) argues that pharyngealization involves spreading the [RTR] feature from the emphatic segment to other segments which are not associated with this feature. For this purpose, some markedness and faithfulness constraints will be introduced as follows:

SPREAD [RTR]

Assign the feature [RTR] to all the segments in the emphatic domain

This constraint is satisfied as long as all segments in the emphatic domain are assigned the [RTR] feature. This constraint interacts with the faithfulness constraint:

IDENT I-O [RTR]

The output segment and its input correspondent must have the same value of the feature [RTR] (McCarthy & Prince 1997)

This constraint is satisfied as long as all the segments in the emphatic domain retain their underlying values for the feature [RTR].

Note that ranking the markedness constraint above the faithfulness constraint ensures that the [RTR] is affiliated with every segment in the emphatic domain. To support our analysis so far, let us study the following examples:

In (1), emphasis spreads backwards to influence all the segments in the emphatic domain, the word. In (2), on the other hand, emphasis spreads forwards to cover the whole word as well. Thus, we need to introduce some constraints to determine the edges of the emphatic domain. These constraints will be:

RTR-LEFT

ALIGN ([RTR], left, word, left)

Any instance of [RTR] is aligned initially in word (McCarthy 1997)

RTR-RIGHT

ALIGN ([RTR], right, word, right)

Any instance of [RTR] is aligned finally in word (McCarthy 1997)

These constraints ensure that the emphasis domain coincides with the word edges (the initial and final sounds). They also show the direction of emphasis spread.

For these alignment constraints to be crucial in our analysis, they need to outrank the faithfulness constraint. Importantly, they do not interact with the constraint SPREAD [RTR]. Thus, they are interchangeably ranked. Let us see these constraints at work:

$$/h\underline{e}:t^f/ \rightarrow [h^f\underline{e}:t^f] \quad \text{“wall”}$$

In this example, the underlying form is /h\underline{e}:t^f/ and we have the following ranking of constraints:

RTR-LEFT, SPREAD [RTR] >> IDENT I-O [RTR]

Tableau 1 illustrates the process of emphasis spread to the left:

Candidates	RTR-LEFT	SPREAD [RTR]	IDENT I-O [RTR]
a) ♥ (<u>h</u> ^f <u>e</u> :t ^f)			**
b) (h ^f <u>e</u> :t ^f)		!*	*
c) h(<u>e</u> :t ^f)	!*		*

Candidate (a) is the optimal candidate since it satisfies both top ranked constraints, RTR-LEFT and SPREAD [RTR]. Its violation of the constraint IDENT-IO [RTR] is not crucial as the constraint in question is lower in ranking. Candidate (b) is ruled out because it involves a segment which is not pharyngealized (/e:/) in violation of the top ranked constraint, SPREAD [RTR]. Candidate (c) is also ruled out due to its violation of the other top ranked constraint, RTR-LEFT (the left edge of the emphatic domain does not coincide with the word initial segment).

Interestingly, the same line of analysis can be adopted to account for the cases where emphasis spreads forwards. In such examples, however, the constraint RTR-RIGHT will be used instead. The following example explains:

$$/s^f\underline{e}:f/ \rightarrow [s^f\underline{e}:f^f] \quad \text{“summer”}$$

In the same fashion, alignment and markedness constraints will outrank the faithfulness constraint as shown in the following:

RTR-RIGHT, SPREAD [RTR] >> IDENT I-O [RTR]

Table 2 explains the process of emphasis spread to the right for the input /s^fe:f/:

Candidates	RTR-RIGHT	SPREAD [RTR]	IDENT I-O [RTR]
a) ♥ (s ^f e:f ^f)			**
b) (s ^f e:f ^f)		!*	*
c) (s ^f e:f ^f)f	!*		*

Candidates (b) and (c) are knocked out due to their fatal violations of the top ranked constraints, SPREAD [RTR] and RTR-RIGHT respectively. Candidate (a), on the other hand, satisfies these constraints. Consequently, it is chosen as the winner.

Still in other cases, emphasis may spread leftwards and rightwards simultaneously as in (3). More examples follow:

- (5)- /mas^fdu:m/ → [m^fa^fs^fd^fu:m^f] “shocked”
- (6)- /fələst^fi:n/ → [f^fə^fl^fə^fs^ft^fi:n^f] “Palestine”

To account for these cases, both alignment constraints will be used at the same time. Besides, they will be interchangeably ranked with the constraint SPREAD [RTR]. In sum, we have the following ranking:

RTR-LEFT, SPREAD [RTR], RTR-RIGHT >> IDENT I-O [RTR]

Table 3 accounts for emphasis spread on both directions for the input /mas^fdu:m/:

Candidates	RTR-LEFT	SPREAD [RTR]	RTR-RIGHT	IDENT I-O [RTR]
a)♥(m ^f a ^f s ^f d ^f u:m ^f)				*****
b) (m ^f a ^f s ^f)du:m			*!	**
c) ma (s ^f d ^f u:m ^f)	*!			***
d) (m ^f a s ^f d ^f u:m ^f)		!***		**

Candidate (a) is the winning candidate although it violates the faithfulness constraint five times as the constraint in question is low in ranking. Candidate (b) loses out due to its violation of the alignment constraint, RTR-RIGHT (the right edge of the emphatic domain does not coincide with that of the word. In the same manner, candidate (c) is ruled out for the same reason (the left edge of the emphatic domain does not match with word initial segment. Although it satisfies both alignment constraints, candidate (d) has no chance to surface because the [RTR] feature is not

affiliated with all the segments in the emphatic domain in violation of the constraint SPREAD [RTR].

3.2 Emphasis Spread across Word Boundaries:

According to Adra (1999) and Watson (2002), emphasis spread may reach segments outside the emphatic domain (the word). Two points need to be taken in to consideration: the direction of this process and the segments being targeted. Adra 1999 argues that the second word initial emphatic segment affects the previous word final segment on condition they are identical. The following examples illustrate:

- (7)- /dars saʕb/ → [dars^ʕ s^ʕaʕ^ʕib] “difficult lesson”
 (8)- /akar-it tabiib-a/ → [akar-it^ʕ t^ʕa^ʕbiib-a] “she thanked her doctor” (P.194)

In (7) and (8), emphasis spreads leftwards to affect the last segment in the first word. More importantly, the emphatic segment and the last segment of the first word are identical (s s^ʕ, t t^ʕ).

Watson 2002, on the other hand, argues that **“the leftmost consonant of a following word is emphasized when this sequence is syllabified with the preceding word”** (P.274). The following example clarifies:

- (9)- /il-ʔo:da kbi:ra/ → /il-ʔo:da kbi:ra/ “the room is large” (P.274)

In this example, /k/ is pharyngealised since it is syllabified with the previous word that contains the emphatic segment, /d^ʕa^ʕ k^ʕ/.

Our data analysis shows that emphasis spread across word boundaries is regressive in accordance with Adra’s findings. This is evident in (4). Another example follows:

- (10)- /bared de:fu / → [bared^ʕ d^ʕe:^ʕ f^ʕ u^ʕ] “his guest felt cold”

It has also been found that pharyngealization across word boundaries affects one segment only. In other words, emphasis does not extend to the beginning of the first word. A plausible explanation for this tendency comes with the fact that the closer the segment is to the emphatic sound, the higher its chances to get pharyngealized as found by Teifour 1997, Mustafawi 2006. This scenario can be shown in the following:

- (10a)- /bared de:fu / → [bared^ʕ d^ʕe:^ʕ f^ʕ u^ʕ], [bære^ʕ d^ʕ d^ʕe:^ʕ f^ʕ u^ʕ], [bære^ʕ e^ʕ d^ʕ d^ʕe:^ʕ f^ʕ u^ʕ]

The optimal candidate is predicted to have pharyngealization spreading to the segment preceding the emphatic sound and no further. Obviously, having more segments being pharyngealised outside the emphatic domain will certainly incur more violations of the faithfulness constraint, IDENT I-O [RTR].

Based on these findings, emphasis spread across word boundaries can be viewed as one case of regressive assimilation in which the emphatic sound influences the preceding sound yielding a pharyngealized sound. For this purpose, we are going to

introduce a new constraint which requires two neighboring segments to have the same value for the feature [RTR] as follows:

AGREE [RTR]

Adjacent output consonants must have the same value of the feature [RTR]

This constraint ensures that sequence [-RTR] [+RTR] will have one of two surface forms: [-RTR] [-RTR] or [+RTR] [+RTR]. However, we still need to make sure that the process is done regressively. In fact, this is not difficult to account for in the light of the implicational hierarchies introduced in Mohanan 1993 and Jun 1995. According to these hierarchies, the onset is less likely to be targeted by a phonological process than the coda. In terms of the constraints, this is expressed in the onset specific faithfulness constraint as follows:

ONS-IDENT I-O [RTR]

The output onset consonant and its input correspondent must have the same value of the feature [RTR].

This constraint needs to outrank the general faithfulness constraint. Moreover, it is interchangeably ranked with the agreement constraint AGREE [RTR].

To see our constraint at work, let us study the example in (10). The underlying representation is /bæred d^fe:fu / and we have the following ranking of constraints:

ONS-IDENT I-O [RTR], AGREE [RTR] >> IDENT I-O [RTR]

Table 4 accounts for emphasis spread across word boundaries:

Candidates	ONS-I-O [RTR]	AGREE [RTR]	IDENT I-O [RTR]
a) ♥bæred ^f d ^f e: ^f f ^f u ^f			****
b) bæred d ^f e: ^f f ^f u ^f		*!	***
c) bæred de: ^f f ^f u ^f	*!		***

Candidate (a) is chosen as optimal since it satisfies both of the top ranked constraints, ONS-I-O [RTR] and AGREE [RTR]. Its violations of the faithfulness constraints are not crucial here since the constraint in question is lower ranked. Candidate (b) and (c) are ruled out due to their violations of AGREE [RTR] and ONS-I-O [RTR], respectively.

This line of analysis does not go unchallenged. Adra 1999 argues that if the emphatic sound is in word final position and it is followed by a word beginning with an

identical sound, a process of depharyngealization takes place. In other words, the emphatic sound loses its [RTR] feature to be realized as a plain one. The following highlights this point:

- (11)- /nis^ʕ samke/ → [n^ʕi^ʕ s samke] “half a fish”
 (12)- /beed^ʕ daafi/ → [b^ʕe^ʕe^ʕd daafi] “warm eggs” (P.196)

In (11), /s^ʕ/ loses its [RTR] feature to be realized as /s/. Similarly, /d^ʕ/ in (12) is depharyngealized yielding a plain sound /d/. More importantly, emphasis in both examples spreads leftwards to the beginning of the first word although the emphatic segment loses its [RTR] feature in the surface form. Adra 1999 considers that to be a case of opacity. He argues that a phonological process like A → B/C_D is opaque if it takes place in contexts other than C_D. This, Adra 1999 argues, applies to the case at hand since pharyngealisation is triggered in a context where the emphatic sound does not exist.

It is worth mentioning that the process of depharyngealization in this context is in compliance with Mohanan’s and Jun’s implicational hierarchies according to which the coda is more likely to undergo a phonological process. Indeed, it is the coda that changes its [RTR] feature to match that of the following word initial sound.

However, our data show that the emphatic sound in these contexts retains its underlying [RTR] feature in contrary to the observations made by Adra 1999 as shown in the following examples:

- (13)- /ba:s^ʕ su:rɪ/ → [b^ʕa:^ʕs^ʕ su:rɪ] “a Syrian bus”
 (14)- /ʕawwad^ʕ da:nia/ → [ʕ^ʕa^ʕw^ʕw^ʕa^ʕd^ʕ da:nia] “he compensated for Dania”

To account for this behavior, we need to introduce a constraint that prohibits the loss of the [RTR] feature from the emphatic sound in the surface form. Our desired constraint will be MAX I-O [RTR] as proposed by Mustafawi 2006 as follows:

Faithfulness: MAX I-O [RTR]

Every [+RTR] specification in the input is present in the output. (P.93)

A violation will be incurred for each segment which loses its [RTR] feature between the underlying and surface forms. Note that the constraint at hand needs to be top ranked in order to give the optimal results. In sum, we have the following ranking of constraints:

MAX I-O [RTR]>> ONS-IDENT I-O [RTR], AGREE [RTR] >> IDENT I-O [RTR]

Let us see if the new constraint and the proposed ranking will be able to account for this process. Take the example in (13) repeated here:

- (13)- /ba:s^ʕ su:rɪ/ → [b^ʕa:^ʕs^ʕ su:rɪ] “a Syrian bus”

Table 5 shows the failure of emphasis spread for the input /ba:s^f su:rI/:

Candidates	MAX I-O [RTR]	ONS I-O [RTR]	AGREE [RTR]	IDENT I-O [RTR]
a) ♥ <u>b</u> ^f <u>a</u> : <u>s</u> ^f su:rI			!*	**
b) <u>b</u> ^f <u>a</u> : <u>s</u> su:rI	!*			**
c) <u>b</u> ^f <u>a</u> : <u>s</u> ^f <u>s</u> ^f u:rI		!*		***

As shown above, Candidate (b) is ruled out due to its fatal violation of the top ranked constraint MAX I-O [RTR]. Candidates (a) and (c) satisfy this constraint. However, they violate the equally ranked constraints; AGREE [RTR] and ONS-IO [RTR] respectively. Thus, the decision between the two is passed to the faithfulness constraint which chooses candidate (a) as it incurs a less number of violations of that constraint than candidate (c) does.

The last point to be addressed in this paper is the case when emphasis spreads across word boundaries between segments which are not identical. The following examples illustrate this point:

- (15) - /ra:s t̥o:nI/ → [ra:s^f t̥o:^f n̥I^f] “Toni’s head!”
 (16) - /mi:t s̥u:s̥/ → [mi:t̥ s̥u:^f s̥^f] ~ [mi:s̥ s̥u:^f s̥^f] “100 chicks”

As can be seen, emphasis spread is triggered although the two segments are not identical. The same machinery can be used to account for this process. In other words, ranking the agreement constraint above the faithfulness constraint guarantees that both segments have the same value of the feature [RTR] in the surface form. Moreover, the onset specific constraint ensures that emphasis spreads regressively. In sum, we have the following ranking of constraints:

ONS-IDENT I-O [RTR], AGREE [RTR] >> IDENT I-O [RTR]

Table 6 supports this analysis for the input /ra:s t̥o:nI/:

Candidates	ONS I-O [RTR]	AGREE [RTR]	IDENT I-O [RTR]
a) ra:s t̥o: ^f n̥I ^f		!*	***
b) ♥ ra:s̥ t̥o: ^f n̥I ^f			****
c) ra:s̥ to: ^f n̥I ^f	!*		****

Candidate (a) is knocked out due to its fatal violation of the agreement constraint, AGREE [RTR]. Candidates (b) and (c) satisfy this constraint. Besides, they violate the faithfulness constraint four times. Accordingly, the decision between the two

candidate (b) since it satisfies this constraint, whereas candidate (c) does not.

4 Conclusion

We have seen that emphasis spread (or pharyngealization) takes place within words or across word boundaries. In the first case, the process works on both directions, leftwards and rightwards. In the second case, however, emphasis spreads only to the left.

In OT, it has been found that ranking the constraint SPREAD [RTR] together with alignment constraints above the faithfulness constraint ensures that the [RTR] is associated with each segment in emphatic domain. The following summarizes:

RTR-LEFT, SPREAD [RTR], RTR-RIGHT >> IDENT I-O [RTR]

In the case of emphasis spreading across word boundaries, the constraint AGREE [RTR] is made to outrank the faithfulness constraint. Thus, the emphatic sound and the first word final sound have the same value of the feature [RTR]. The constraint ONS-IDENT-I-O [RTR] entails that the process is regressive. Thus, constraints are ranked as:

ONS-IDENT I-O [RTR], AGREE [RTR] >> IDENT I-O [RTR]

Finally, we have found that the emphatic segment in word final position is not depharyngealized when followed by a plain one contrary to Adra's observation. This has been accounted for by making the constraint MAX I-O [RTR] outrank all other constraints.

5 Future Studies

In some cases, emphasis spread is said to be blocked to the right of the emphatic sound when opaque segments (w, j, and a) interfere. These segments are said to have the feature [+high] which is incompatible with the feature [RTR] as found by Archangeli & Pulleyblank 1989 and Davis 1993. This will be given much more interest in future studies.

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Code-Breaking Strategies and Idiom-Type Variables in the Identification, Comprehension and Retention of L2 Idioms

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Abstract

This study investigates the ability of intermediate and upper intermediate proficiency learners of English with L1 Mexican Spanish to identify interpret and retain English idioms encountered incidentally in a reading passage. Language outcomes were collected through an immediate questionnaire and a delayed test administered three weeks after the learners did the reading task. Three hypotheses were tested: a) That there would be a negative correlation between the similarity of idioms in English and Spanish and the ability of participants to identify them; b) that there would be a positive correlation between similarity of idioms in English and Spanish and the ability to interpret their meanings and retain them; c) and that inferencing meaning from context would be a more frequent code-breaking strategy than look-up in bilingual or monolingual dictionaries. Results from the study show the first hypothesis to be disconfirmed, but the second and third to be confirmed. The article discusses the pedagogical implications of these findings.

1 Introduction

The objective of this study is to investigate the strategies that L2 learners of English use in order to code-break the meaning of unknown idioms and evaluate the effect that these strategies have in the comprehension and retention of idioms. When learners come across and notice / identify unknown vocabulary when reading or listening and do not choose to ignore it, they need to appeal to certain strategies that help them get the meaning of the unknown words. These strategies have been called: word solving strategies (Hosenfeld 1977) discovery strategies (Schmitt 1997, 2000), word attack strategies (Nutall 1982, Nation, 1990, Uchida 2000), lexical processing strategies (Fraser 1999), and word decoding strategies (Zuckernick 1996).

Alseweed (2000) who investigated the use of discovery strategies by undergraduate Saudi Arabian students when reading, included a set of discovery strategies in his study. Alseweed (op.cit) used the term 'word solving strategies', suggested by Hosenfeld (1977). Alseweed found that the word solving strategies that his learners used in reading were: 1) Guessing: a) contextual guessing, b) morphological guessing, c) guessing using background knowledge; (this section did not include cognate guessing and picture guessing as in Schmitt's study, basically because it was difficult for the learners to find cognates between Arabic and English and also because pictures are not always included in reading texts), 2) Appeal for assistance: a) using the dictionary, b) asking someone; 3) Skipping; 4) Misidentification. In our view, including misidentification as a word solving strategy is perhaps a mistake since it is not a strategy for solving a problem because no problem has been detected.

Another taxonomy of discovery strategies was proposed by Fraser (1999) who found in her study a set of 'Lexical processing strategies' used by learners when getting the meaning of unknown vocabulary while reading. Fraser's taxonomy is closely related to Alseweed's because it is limited to the reading activity. Her taxonomy of lexical processing strategies is structured as follows: 1) consult: a) dictionary use, 2) infer: a) L1 word identification, b) L2 word identification, c) sense creation; 3) combined strategies; a) infer and consult; 4) ignoring, 5) no attention. The code-breaking strategies included in our study are closely related to the taxonomy proposed by Fraser in that they explore the use both inferencing and dictionary use, a combination of the two and ignoring.

The focus of the study is on the incidental learning of vocabulary through reading in L2. Incidental learning has very often been considered to have advantages over direct instruction. Huckin & Coady (1999:182) claim in this respect that the incidental learning of vocabulary is contextualized and gives the learner a richer source of meaning. L2 reading is also considered to be pedagogically efficient in that it enables two activities to occur at the same time, vocabulary acquisition and reading. Consequently, a methodology based on incidental learning of vocabulary will be used taking as a basis some features of studies that explore the identification, code-breaking and retention of single vocabulary items and most importantly those focused on the learning of idioms. This literature has raised some hypotheses and research questions that our study will try to clarify.

Hypothesis I.- Concerning the idiom-type variables involved, it has been hypothesized that a negative relationship would be found between the 'interlingual similarity' of the idioms and their successful identification. This hypothesis is based on research carried out by Laufer (1989). Laufer found that idioms are an important source of mistaken identification, especially in the case of identical idioms, whose close interlingual similarity makes the learner think of plain phrases but not idioms. Liantas (2001) and Liantas (2000) found that different idioms (dissimilar idioms) were detected more often than the similar or identical idioms. Hence, we can predict that the similarity of the idioms is a factor that contributes to their unsuccessful identification.

Hypothesis II.- In relation to the frequency of use of the code-breaking strategies it is hypothesized that inferencing will be used more often than the dictionary in order to code-break the meaning of idioms also, the bilingual dictionary will be used more often than the monolingual dictionary. These hypotheses are based on the results of various studies on vocabulary processing strategies. De Bot et al. (1997) found for example that their subjects appealed to inference in 80% of the attempts to decode unknown words. Similar results were obtained by Paribakht & Wesche (1999). Fraser's study (1999) supports this hypothesis as well albeit with lower percentages of inference, 44%¹. Furthermore, ample research indicates that approximately seventy percent of the foreign language learners in the world prefer using the bilingual dictionary, (Tomaszczyk 1979). Wingate (2002) found that 90% of her subjects preferred using the bilingual dictionary. Bensoussan, Sim & Weiss (1984) found this preference as well. The results of our preliminary study point in that direction as well since the availability of the

¹ The learners in these studies were similar to the learners in our study concerning proficiency levels. Their L1 was different, in De Bot et al. (1997) and Paribakht & Wesche (1999) the learners' L1 varied a lot (French, Farsi, Spanish, Arabic, Chines) in Fraser (1999) the learners' L1 was French.

dictionaries is of 40% bilingual dictionary vs. 21% monolingual dictionary, their use shows the same differences: 53% bilingual dictionary vs. 23% monolingual dictionary.

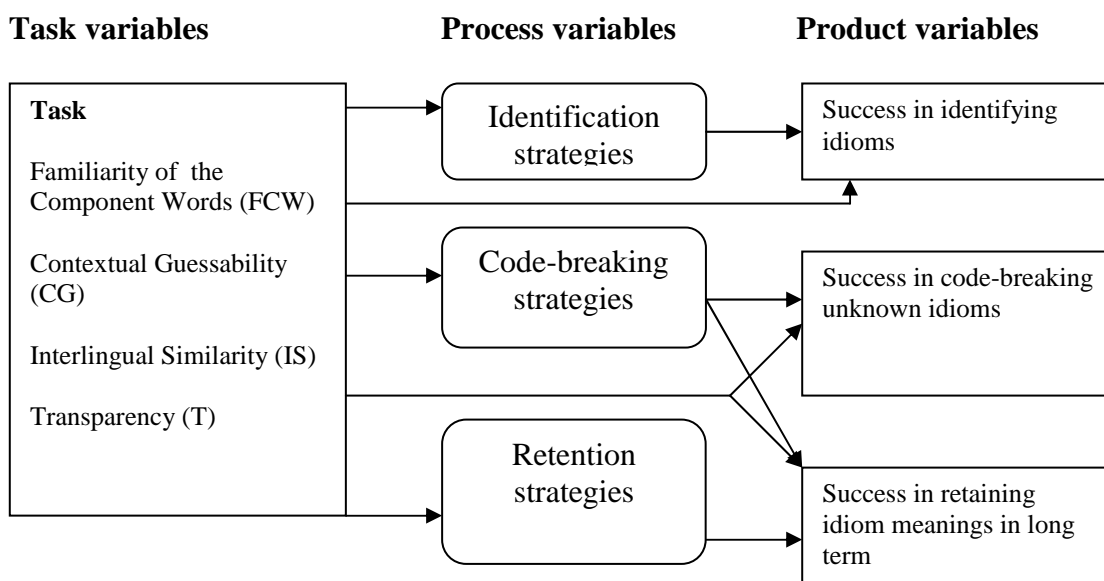
Hypothesis III.- It is further hypothesized that a positive relationship between ‘interlingual similarity’ and the successful code-breaking of idioms would be found. This positive relationship would also be found between ‘interlingual similarity’ and ‘The familiarity of the component words’ with delayed retention (DR). These hypotheses are grounded on the results obtained by Irujo (1986), Liantas (2002b) and Charteris-Black (2002) who found that L1 reference plays an important role in the identification and the code-breaking of L2 idioms, especially when the source and the target languages are close to one another not only in equivalent linguistic forms but also in conceptual metaphoric figures, as is the case of Spanish (L1) and English (L2) in the present study. The hypotheses are also supported by the studies on idiom retention that have tested specifically the metaphor contained in imageable idioms and the extent to which the metaphor has helped in the retention processes (see Boers 2000, Boers & Demecheleer 2001, Charteris-Black 2002 & Bogaards 2001). The familiarity of words that make up the idioms, according to Bogaards (2001) can also favour the successful inferencing of their meaning and their retention as well.

2 The Study

The nature of the investigation is to a great extent exploratory, but it contains a correlational design relating idiom types with identification of idioms, the successful code-breaking of idioms and their successful retention. The data will be analysed taking idioms as cases to look at the effects of idiom type on use of strategies and success in decoding them,

The variables, processes and products involved in the study and their respective relationships are represented in Figure 1.

Figure 1: Subject and task variables, process variables and product variables.



The explanatory variables of the study are the task variables. The task variables are basically variables related to the nature of the idioms as all other aspects of the task were constant. The dependent variables are found in the processes such as the identification and code-breaking of idioms and on the products, namely, the success in identification, code-breaking and retention of idioms.

3 Research Design

3.1 Setting and Participants

Our study involved the voluntary participation of thirty two students in their 6th semester of an undergraduate programme in Applied Linguistics at the State University of Tlaxcala, Mexico. Students had an intermediate/ upper intermediate level of English. They passed the Nation's vocabulary Levels test with an average of 71% success. The sample included in the present study represents the type of subjects we can find in all public universities in Mexico and perhaps in Latin America as well, especially in English language teaching undergraduate programmes. They all have Spanish as their L1, no one speaks an Amerindian language i.e. Nahuatl, they all belong as well to the same social mix which is mostly working class.

3.2 Instruments

3.2.1 The reading text

The reading text used in the main data collection task was selected taking into consideration criteria that were determined by the nature of the study but also by the results of the pilot study². The most important criteria are the following:

- i) The vocabulary in the text should be graded so as to meet the vocabulary level of the students in the 2,000 word level. The text should have a readability level of 98% within the 2000 frequency band (Hsueh-chao & Nation 2000 and Nation 2001) in order for the students to have a chance of comprehending it thoroughly.
- ii) The length of the text had to range between 1000 and 1200 words. This amount of words was determined by the results in the pilot study and was considered convenient³ in order to:
 - Insert twenty-one idioms⁴ in it without altering too much the style of the text, keep its original nature and in order not to be too obvious. Also, to allow enough context for guessing without another idiom being in that context.
 - Enable subjects to read the text in one hour.

The text was obtained from a web site called Voice of America⁵. The site provides factual and fiction stories that have been simplified in order to suit different levels of vocabulary. In this case, the text selected falls in the category of texts within the 2,000 most frequent words. The analysis of the text in terms of readability was done through the same web instrument used for the pilot text, 'the vocabulary profile' in the website

² It should be noted that the reading text was different from the pilot text.

³ Be flexible enough

⁴ Roughly one idiom per 50 words where one in 20 is the minimum recommended for new items.

⁵ www.voanews.com/SpecialEnglish/adv_search.cfm

called 'The Compleat Lexical Tutor'.⁶ The vocabulary profile of the original text indicates that it has a readability level of 98.4% of running words in first 2000. The lexical density was $340/1159 = 0.29$ ⁷ and the reading ease is ⁸

$$206.825 - \left(\frac{.846 \times 132}{111.54} \right) - \left(\frac{1.015 \times 13.2}{13.39} \right) = 81.89$$

3.2.2 The immediate retrospective and elicitation questionnaire (IREQ)

The immediate retrospective and elicitation test together with the interviews, elicited retrospective information from the subjects to record the strategies they used to code-break the idioms. The questionnaire provided information not only about the strategies selected but also the sequence of use of those strategies. It tested the meaning comprehended of the idioms and checked what idioms were previously known by the students. It also provided information about the words in the idioms that were familiar to the students. The code-breaking strategies elicited by the instrument were determined by other studies which attempt to evaluate the lexical processing strategies used by the learners while reading e.g. Alseweed (2000), Fraser (1999). An example of the elicited information for each target idiom is included below.

Be at someone's beck and call

- 1.- I knew the idiom before reading the text, it means: _____
- 2.- I did the following when I read the idiom (1-4)
 - () Looked it up in the dictionary: *bilingual / monolingual / electronic/ pocket*
 - () Asked for its meaning to: *teacher / peers/ overheard*
 - () Ignored it
 - () Inferred its meaning through: *context /word meaning/ Spanish similarity /metaphor*
- 3.- The meaning of the idiom is: _____
- 4.- I know the meaning of the following words in the idiom:

3.2.3 The delayed retention test

The delayed retention test has as a main objective the testing of the delayed retention of the idioms that were unknown to the students in the reading. It should be noted that by the end of the first set of tasks all the learners knew which items were idioms in the text but they had never been told the correct meaning or whether whatever meaning they code-broke was correct. The delayed retention test was administered in Spanish. Its questions were expressed as follows:

Be at someone's beck and call

- a) This idiom was included in the text yes () no ()
- b) This idiom was included in the text but I don't remember its meaning
- c) This idiom was in the text, it means: _____

⁶ Site: [http:// 132.208.224.131/](http://132.208.224.131/) The Compleat Lexical Tutor

⁷ Number of content words divided by the number of words

⁸ The reading ease was calculated with the Flesh Reading Formula

3.2.4 The questionnaire on retention strategies

This questionnaire was intended to gather data on what students did after the administration of the 'Delayed Retention Test'. Its aim was to collect the retention strategies the students appealed to after the main task if any. The data gathered through this questionnaire is not relevant to answer the hypotheses of this paper, hence it will only be mentioned.

3.3 Procedures

The data collection was carried out in two different sessions. In the first session the learners were asked to read the text in detail in order to answer comprehension questions. They were told they had one hour to read the text and were free to ask questions or to look up unknown words in their own dictionaries or the dictionaries provided by the researcher. When they finished they were asked to identify the idioms contained in the text by underlining them. The researcher collected the texts and distributed the IREQ (see 3.2.2). The researcher and the learners went through one section together in order to be clear about how the learners were expected to answer this instrument. After the administration of the retention questionnaire, students were interviewed by five teachers including the researcher. The objective of these interviews was to gather more specific data about the decisions that the learners claimed having made at the moment of the reading and which were recorded in the IREQ. The questions were made taking as a basis the text and the IREQ. Retrospection worked as a triangulation of the information provided. The teachers received training from the researcher to carry out the retrospective reports.

The second session took place 20 days after the first session and it was basically aimed at collecting data on the retention of the meaning of unknown idioms with the administration of the 'delayed retention test' (see 3.2.3) and the possible use of retention strategies through the administration of the questionnaire on retention strategies (see 3.2.4). The administration of each instrument took approximately half an hour each.

3.4 Data Analysis

The quantitative analysis was carried out using the programme SPSS (Statistical Package for the Social Sciences). The data collected was organised in percent scores to be analysed in SPSS. Two main files were created: a) having the idioms as cases and recording scores in percents for all the aspects measured, b) having the subjects as cases. All scores in the files related to correct idiom identification, correct idiom code-breaking and correct idiom retention were calculated excluding the idioms that a subject knew before the reading task.

In order to analyze the data obtained in the process and product stages with idioms as cases, it was necessary to measure the task variables involved in the study. These task variables are specifically the quantification of the idioms in terms of a) the familiarity of the component words (FCW) that the students had at the moment of reading which was determined by the answers provided in the IREQ, b) contextual guessability (CG), determined by giving the text to eight native speakers of English who were asked to write the most plausible idiom, word or phrase they could think of that fitted the context, c) interlingual similarity (IS), determined by four native speakers of Spanish

who had to classify the 21 idioms by giving them a score, 3 for identical idioms, 2 for similar idioms and 1 for different idioms, and d) transparency (T), which was measured by four native speakers of English who were asked to indicate the extent to which the meaning of the idioms could be inferred through their constituent words and they were given an example. The three judges categorized the idioms as: transparent, semi-transparent and opaque. Transparent idioms received a score of three points, semi-transparent idioms received 2 points and opaque idioms received one point.

4 Results and Discussion

4.1 Idiom identification (II)

Hypothesis I was not confirmed since no significant correlation was found between II and Interlingual Similarity (IS), ($r = -.160$, $n = 21$, $p = 0.488$). The result tends to be negative, it is however non significant. Notwithstanding, we find instances of idioms that were identical and/or very similar and which passed unperceived by the subjects due to the close similarity. The students did not think they were idioms at first, because despite their L1 similarity they were unknown to the students and second, the linguistic structure was not noticeable. The following learner quotation illustrates this phenomenon.

S13 I identified thirteen idioms and we already know that there were twenty-one,⁹ so this means that many idioms were not perceived, and even with those that I was able to identify, maybe they have problems with the right meaning. There were some idioms that were so similar to Spanish that I did not take them as idioms. "On the fringes", for example, I didn't think it was an idiom and I treated it in a literal way.

The results of idiom identification success obtained in our study can be compared only with Liontas (2001), (2002a) because the subjects were L2 learners. Our results only weakly support Liontas (2002a). In this study also the dissimilar or different idioms in L1 and L2 were detected more often than the other two types. Our study showed the same trend even though no significant difference was found.

Table A: Success in idiom identification (II), comparison with other studies.

Study	Different idioms	Similar idioms	Identical idioms	Total success
Liontas (2001)				70.09%
Liontas (2002a) ¹⁰	96.43%	83.92%	89.64%	89.99%
Our study	53.08%	42.11%	40.54%	42.39%

Our figures show a clearer trend than Liontas' as they go down successively over the three values. The score obtained in II by the three groups in the Liontas' study was

⁹ Learners were not told about the exact number of idioms, but they found it out when solving 'the immediate retrospection and elicitation test', since the idioms were listed in that test, see appendix.

¹⁰ The percents in Liontas (2002a) in this table include only the Spanish idioms, French and German idioms were not considered.

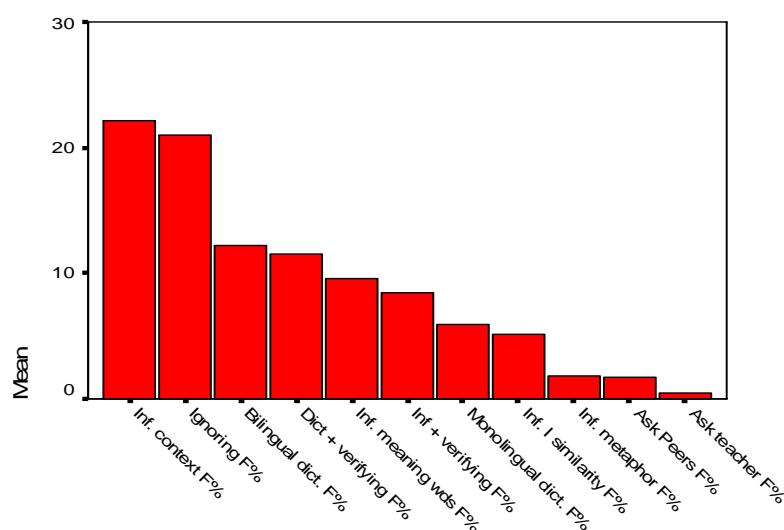
89.99%. This is a high percent if compared with the mean of the successful idiom identification of the subjects in our study. The idiom identification scores of our subjects were almost 50% less than the scores in Liontas (2002a). This could be due to the condition of the task in Liontas' study; the idioms were not contained in only one continuous text but in several paragraphs. Each paragraph contained one idiom and the subjects knew that, they just had to look for it. This could have eased the degree of difficulty of the task. As for our study, having the twenty-one idioms contained in the text and being unaware, before reading, that it was necessary to pay attention to them made the task more difficult but more like real life.

Quantitative and qualitative data indicate that the strategies that the learners in our study used in order to identify idioms in the reading text were the following:

- 1.- Checking literal meaning of a phrase against the meaning which one can infer from the context should fill the space where the phrase is (related to contextual guessability).
- 2.- Checking if a phrase internally has a meaning that makes sense (related to transparency)
- 3.- Checking if there is a similar L1 idiom or word for word translation equivalent (related to interlingual similarity)
- 4.- Checking in dictionary and finding a phrase given as a phrase there or not.
- 5.- Checking if a phrase could have a meaning with a metaphor of a known type other than the literal meaning.
- 6.- Checking internal syntax (structure) of a phrase for features thought of as odd of typical of idioms.

4.2 Frequency of use of code-breaking strategies

Figure 2 below indicates that out of the 651 times a single or compound strategy was used, 22.1% of those times, Inferencing from Context (IC) was used hence, it was the most frequently used strategy by the learners. The measure of the frequency of use of Inferencing from Context (IC) and the idiom-type variable 'Contextual Guessing' (CG) did not correlate at all therefore, we might conclude that there was a fairly indiscriminate use of IC. It is possible as well that the learners had used other knowledge sources together with IC but decided that IC was the predominant strategy, e.g. the use of interlingual similarity together with context. This is one of the weaknesses of the IREQ which was not able to record all strategies at the moment they were used as 'think aloud' would have done.

Figure 2: Percent of the frequency of use of the code-breaking strategies (CBS).

The use of the Bilingual Dictionary (BD) alone (12.18%) and in combination with another strategy in order to confirm the meaning of the idioms (11.57%), was next most frequently used. Students expressed these preferences through the questionnaire and in the retrospective reports as well.

S2 'I first, read the text quickly to have a general idea of the topic and I underlined the words that I didn't know. Then, in compound words I was able to infer their meaning, with some, it was necessary to use the dictionary like in shoe lace. In general, I tried to infer the meaning of words and my second option was the use of the dictionary.'

The second hypothesis was confirmed, as the frequency of use of IC was significantly higher than the frequency of use of the BD. ($t = 2.748$, $df = 20$, $p = 0.012$, 2-tailed). Even if we add up the means of the bilingual and the monolingual dictionary (12.18% + 5.92% = 18.10%), the mean of IC is still higher (20.1%). The result on the frequency of use of inferencing and dictionary supports the findings in Hulstijn, Hollander & Greidanus (1996) and Fraser (1999) who found that in extended reading texts, learners do not want to cut the flow of the reading when they are engaged in it and prefer to use several types of inferencing before checking the dictionary. In both studies the dictionary was used less than the other conditions. In Hulstijn et al. dictionary use registered 12% and in Fraser 40%.

In our study, the sum of the strategies that involved inferencing equals 47.04%, this amount includes the combination of inferencing with any other strategy to confirm the meaning of the idiom. As for dictionary, the sum of bilingual dictionary, monolingual dictionary and combined strategies is 29.67%. We find a difference of 17.37% between the use of inferencing and dictionary. This difference is similar to the one found in Fraser (1999) which was of 19%. In Fraser's study and in our study the combinations of inferencing plus dictionary and dictionary plus inferencing were present. The frequencies in both studies varied, in Fraser inferencing plus dictionary had a frequency of use of 30% and for dictionary plus verifying 20%. In our study the results turned out

the opposite, dictionary plus verifying was more frequently used (11.57%) than inferencing plus verifying (8.46%).

4.3 Correct idiom code-breaking (CIC) and delayed retention (DR)

Hypothesis III identified ‘Interlingual similarity’ (IS) as a possible predictor of Correct idiom code-breaking’ (CIC), it was also considered as a predictor of Delayed retention (DR) together with ‘the familiarity of the component words’ (FCWs). The correlation between IS and the correct code-breaking of the idioms was nearly significant ($r = .421$, $n = 21$, $p = .057$ two-tailed). This means that the more similar the idioms were in L1 and L2 the more possibility they had to be correctly code-broken. So it suggests that the strategies that used IS were successfully used. Another idiom-type variable that appeared as a predictor of CIC was the familiarity with the component words FCW which correlated most positively with the CIC ($r = .438$, $n = 21$, $p = .047$, two-tailed).

In relation to retention, an MR test was carried out using the stepwise method with the four idiom-type variables as explanatory variables and DR as dependent variable. Only FCW appeared with a borderline significance: beta: .406, $p = 0.058$. These results indicate that among the various types of idioms concerning CG, T, FCW and IS, the type of idioms that seem to have an impact on the results in correct delayed retention are the idioms categorized by the familiarity that the learners had of the constituent parts of the idioms, (FCW). Figure 3 illustrates these results.

Figure 3: Familiarity of the words in the idiom and idiom retention

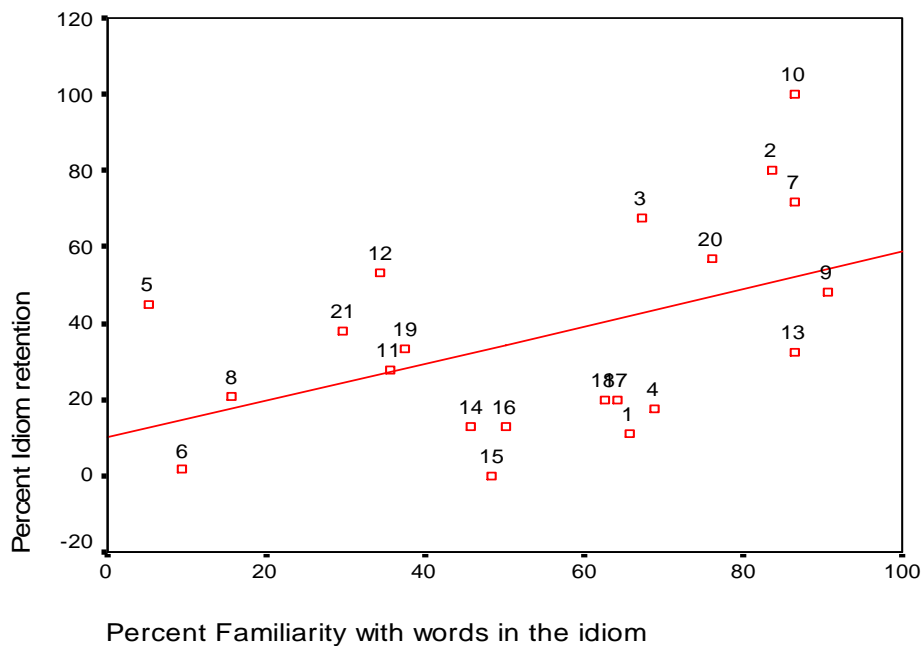


Figure 3 shows that the idioms whose content words were more frequently known by the subjects were the idioms that were retained better after a three-week period. These results indicate that the hypothesis is partially confirmed since FCW was a predictor variable of correct scores in both CIC and DR in the multiple regression, however IS was not since it had a nearly significant relationship with CIC but, in DR, IS stopped being influential and only FCW seemed to have an important effect.

5. Conclusions

Most of the studies on idiom identification, comprehension and retention have been focused on the exploration of a determined idiom-type variable that most of the time has been the ‘Interlingual similarity’ of the idioms, hence a careful selection of the target items has been carried out in order to test related hypotheses. Our study however, has incorporated four different idiom-type variables that have been explored in order to verify their effect in comprehension and retention. Our results have shown that when having all variables together it is not ‘interlingual similarity’ the idiom-type variable that affects positively the scores in comprehension and retention. In our study ‘The familiarity of the component words’ has proved to be a better predictor of both measures, comprehension and delayed retention. This finding leads us to conclude this paper with some pedagogical implications.

One pedagogical implication can be suggested on the basis of the success in code-breaking derived from the type of idioms selected. It is well known that the vocabulary content of teaching and learning materials of a foreign language is generally determined according to frequency and range of occurrence of the lexical items (O’Dell 1997). Due to these conditions, idioms are usually included in materials for upper intermediate and advance levels in very scarce amounts. Cornell (1999:7) pinpoints that idioms involve a greater teaching and learning load than normal lexis, hence it is necessary to determine what idioms should receive special attention in a determined language course. Our findings point to a particular direction that could be followed with high possibilities of success.

The results of our study showed that the successful code-breaking of idioms and their successful retention were related to idioms whose component words were previously known by the learners. Hence, a selection of idioms made up of high-frequency component words can be made in order to include those idioms in the lexical syllabus of beginner and lower intermediate learners provided they are important and frequently used by native speakers. Those items can be selected from books on idioms that are categorized thematically but whose frequency is also indicated, e.g. *Idioms in Use* by Michael McCarthy.

Incorporating a good amount of idioms in very early stages of language learning implies raising awareness about the presence of metaphor as well. It is essential to show how metaphor is ‘intrinsic to the nature of the language itself’ (Lewis 1993:112) and that understanding metaphor in daily communication is not limited to learners with a high proficiency level. The identification of metaphors that were not idioms in our study shows that learners are aware of the presence and function of metaphor. Nevertheless, this awareness can be broadened with the incorporation of idioms in early stages. It can also be more effective if the idioms presented are those whose component words are already known and those whose ‘interlingual similarity’ is identical or similar. Our results showed that both types can help learners recognize the metaphor more easily.

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Estonian Sign Language-Estonian Code-switching

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Abstract

The Deaf use a sign language and a spoken language in their everyday life, therefore they are considered to be bilingual. Bilingualism in the Deaf community has been referred to as bimodal bilingualism (Emmorey et al. 2005), as it involves two modalities: auditory-vocal and visual-manual modality, which enables the sequential occurrence of the elements in language contact situations. The language contact in bimodal bilingualism may result in various phenomena, such as code-switching, coda-talk, and contact signing (Lucas 2000). The code choice by both the Deaf and hearing bimodal bilinguals has been studied (Lucas and Valli 1992; Van den Bogaerde 2000; Emmorey et al. 2005, 2008; Bishop and Hicks 2005). The main factors influencing the code-switching in the Deaf individuals are the parental hearing status, the hearing status of the interlocutor, and language proficiency of the signer and the interlocutor. An experiment was carried out to determine how the hearing status of the interlocutor influences the code choice in the Deaf Estonian Sign Language-Estonian bilinguals. Five Deaf subjects were asked to describe a picture to five hearing and five Deaf students. The results of the experiment indicate that in both conditions, more features of Estonian Sign Language occurred, e.g. the use of signing space, mini-topicalisation, and classifiers. However, sometimes fingerspelling and the word order of the Estonian language were used with the hearing interlocutors, which resulted in code-switching. There were also some differences in signing pace and mouthing.

1 Introduction

Although bimodal and unimodal bilinguals differ in the ways of perceiving and producing language, they possess some similarities: their language skills vary, they do not consider themselves as bilinguals, and they move along the monolingual-bilingual language mode continuum (Grosjean 1996: 31-32). Language contact in bimodal bilingualism may result in various phenomena, such as code-switching, *coda-talk*¹, and *contact signing* (Lucas 2000). It is possible to code-switch both between two sign languages and between a sign language and a spoken language. Lucas (2000: 148) argues that code-switching occurs when a Deaf person stops signing and starts speaking. Here, code-switching is used as a cover term that includes code-blending, or speaking and signing at the same time. Code-switching by both the Deaf and hearing bimodal bilinguals has been studied. Lucas and Valli (1992) investigated the code choice by the Deaf, Emmorey et al. (2005, 2008) and Bishop and Hicks (2005) looked at the way codas talk, and Van den Bogaerde (2000) considered both hearing and Deaf bimodal bilinguals:

¹ Coda-talk refers to the way the hearing children of Deaf adults communicate.

she investigated the mother-child interaction between Deaf mothers and their Deaf and hearing children. *Contact signing* is a concept first thoroughly described by Lucas and Valli (1992) who considered it as a third system that emerges in the contact between a sign language and a spoken language and involves the features of both American Sign Language (ASL) and English.

The main factors influencing the code choice in Deaf bilinguals are parental hearing status, the hearing status of the interlocutor, language proficiency of the signer and the interlocutor, and the context in which signing takes place. The present paper focuses on the influence of the hearing status of the interlocutor on the code choice of the Deaf Estonian Sign Language-Estonian bilinguals. Parental hearing status is also considered to some extent. Previous research has shown mixed results on the effect of the above mentioned variables on code-switching by the Deaf. Hoffmeister and Moores (1987) found that the Deaf early learners of ASL with hearing parents code-switched the least, and the Deaf early signers with Deaf parents code-switched the most when signing a tape to a Deaf and to a hearing audience. Similar results were reported by Lucas and Valli (1992) who noted that the majority of the Deaf informants with Deaf parents switched from ASL signing to contact signing or signed English when signing to the hearing interviewer. Some studies, however, have reported the lack of code-switching in the Deaf children of Deaf parents. For example, in studying the interactions between four Deaf mothers and their three Deaf and three hearing children, Van den Bogaerde (2000) noted that the hearing children of Deaf adults often code-mixed, while the Deaf children communicated mainly in the sign language.

2 Method

An experiment was carried out with the Estonian Deaf students in order to determine whether code choice depends on the hearing ability of the interlocutor. Ten Deaf students, five with Deaf and five with hearing parents, and five hearing students with the average age of 17.9 participated in the study. The hearing students spoke Estonian at home, while the Deaf subjects used both Estonian and Estonian Sign Language. The hearing subjects attended a bilingual Deaf school where they had been learning Estonian Sign Language for two and a half years. The experiment consisted of a task where five Deaf students, two with hearing and three with Deaf parents, were asked to describe a picture to the hearing and Deaf subjects. The picture depicts a winter day with several activities: the children are sledging, a man is clearing the street, another man has just tripped on the ice, a woman is walking a dog, two cars have collided, and two men are arguing. After the Deaf student finished describing the picture to the hearing subject, the comprehension of the story by the latter was checked. In analysing the material, it was observed if there were any differences in signing to the Deaf and hearing individuals. The analysis focuses on the EVK (Estonian Sign Language, or *eesti viipekeel*) use of signing space, minim-topicalisation, classifiers, and mouthing. Fingerspelling and simultaneous communication are seen as features connected to the Estonian language rather than EVK. The data was

transcribed² similarly to Davis (1989) who studied whether the ASL interpreters code-switched – the signs were written down into gloss form that included comments on the use of space, classifiers, mouthing, and other types of non-manual behaviour.

3 Results

First, the similarities in signing to the Deaf and the hearing will be discussed, followed by the differences. Some features linked to EVK occurred regardless of whether a Deaf subject described the picture to a Deaf or a hearing subject. Topicalisation is used in many sign languages to emphasise important information. Lucas et al. (2005: 85-86) claim that in ASL, the topic is placed at the beginning of the sentence and it is expressed with a nonmanual signal: raised eyebrows and forward head tilt. For example, the sentence FATHER LOVE CHILD can be changed so that the topic – CHILD – is the first: CHILD, FATHER LOVE (Lucas et al. 2005: 85-86). Here, the change occurs at the sentence level: the object and the subject switch places. Topicalisation can also affect smaller phrases, resulting in a phenomenon referred to as *mini-topicalisation* (Fischer 1990: 78). It was found that mini-topicalisation occurred in the picture describing task by EVK-Estonian bilinguals, both when signing to the Deaf and hearing interlocutors.

- (1) D1: LINN VÄLJAK ILUS // PALJU-INIMESI
TOWN SQUARE BEAUTIFUL // MANY-PEOPLE
'There is a beautiful town square with many people.'

In example 1, the noun TOWN SQUARE has been moved to the beginning of the sentence, followed by modifiers BEAUTIFUL and MANY-PEOPLE. In mini-topicalisation, quantifiers can also switch places with the head, as indicated in (2).

- (2) C1: KASS KAKS KAKLEMA // KASSID KAKLEMA
CATS TWO FIGHT // CATS FIGHT
'Two cats are fighting; the cats are fighting.'

The second feature of EVK that frequently appeared in the data was classifiers, or classifier constructions³, which are morphemes used for indicating spatial relations, movement, and the shape and size of the objects (Sandler and Lillo-Martin 2006). Sutton-Spence and Woll (1998: 48) state that the most important characteristics of classifiers are the following: they refer to a group with common features; they are proforms; and they can be used with motion verbs. Meir (1999) distinguishes between theme and instrumental classifiers. The former describe the shape of an object, such as 'a cylindrical object', and 'a vehicle', while the latter are connected to tools used for different purposes, e.g. SPOON-FEED, FORK-EAT, and KNIFE-CUT.

² The handshapes and their notation in Estonian Sign Language is explained in (Toom et al. 2006). Among other symbols, // is used for indicating a pause, + refers to sign replication, signs are presented in uppercase letters, and fingerspelling is distinguished by using hyphenated lowercase letters, e.g. c-a-t.

³ Lucas et al. (2005: 80-82) use the term *depicting verbs* to refer to classifiers.

- (3) E1: TULETÕRJEAUTO KOHALE-SÕITMA-s-KLA
FIRE ENGINE ARRIVE-veh-CL
'The fire engine arrives.'
- (4) D2: AUTOD KOKKU-PÕRKAMA-s-KLA
CARS CRASH-veh-CL
'The cars crash.'

As seen from the examples, the theme classifiers connected to the vehicles were used both in signing to a Deaf and to a hearing person. E1 uses the classifier to indicate that a long flat vehicle arrived with the B_ handshape, and D2 describes the two cars colliding by using the A handshape. As typical representatives of depicting verbs, the classifiers in the given examples occur with motion verbs.

Another characteristic of sign languages present in the data was the use of signing space, which is an area less than 50 square inches in front of the signer where most signs are formed (Lucas et al. 2005: 203). Sutton-Spence and Woll (1998: 129) make a distinction between topographic and syntactic space. Topographic space is the layout of representations of things as they are in relation to other things. For example, if the bathroom is next to the living room in a house, the rooms are placed accordingly in signing space when describing it. Syntactic space, however, does not have to be linked with the location of items in the real world. For example, when talking about the differences between the Deaf and hearing, the two signs referring to these groups can be placed one on each side, although they are not there in reality. Topographic space was used in signing both to the Deaf and hearing. In the experiment, first the order of the houses in the picture was determined by positioning each house from right to left. After a pause, another house was identified, and the sign WINDOW placed on it (5).

- (5) A1: MAJA + + + // MAJA AKEN
HOUSE + + + // HOUSE WINDOW
'There are many houses. One of them has a window.'

So far the similarities in signing to the Deaf and hearing have been considered. The differences in the way the Deaf subjects signed the story to the Deaf and hearing manifested in mouthing, simultaneous communication, fingerspelling, and signing pace. The mouthing in the Deaf students' signing varied depending on the interlocutor. The mouth patterns were divided into four categories: *partial Estonian mouthing*, *full Estonian mouthing*, *simultaneous communication*, and *EVK mouthing* (Table 1)⁴. *Partial Estonian mouthing* refers to reduced mouthing of Estonian, *full Estonian mouthing* refers to the clear use of Estonian mouthing, and may also be accompanied by speech, in which case it is termed *simultaneous communication*.

⁴ The distinction is based on Davis's (1989) study on language contact in ASL interpretation with the category *simultaneous communication* added to it.

Table 1: Differences in mouthing

	Hearing interlocutor	Deaf interlocutor
Partial Estonian mouthing ⁵	36	22
Full Estonian mouthing	44	18
Simultaneous communication	12	4
EVK mouthing	94	119
Signs	186	163

As indicated in the table, partial and full Estonian mouthing were more common in describing the picture to the hearing interlocutor, and EVK mouthing frequently occurred when signing to the Deaf interlocutor. Sometimes full mouthing led to signed Estonian, or simultaneous communication. In such cases, the predominant EVK code was switched to the one of the Estonian language, which resulted in code-blending, as the signs and speech were produced simultaneously. This was more frequent in the first condition, where the Deaf described the picture to the hearing interlocutor. Surprisingly, there were also instances of full mouthing and simultaneous communication in signing to the Deaf subjects, which shows that the hearing ability is not the only factor influencing code-switching. Another aspect that has to be considered is the parental hearing status. The results show that this factor does not seem to play an essential role in the code choice between EVK and Estonian in the experiment, as all the subjects used EVK mouthing, as well as full and partial Estonian mouthing. Simultaneous communication occurred in the performance of three subjects; two of them had Deaf parents, and one came from a family with hearing parents. It has to be noted that the majority of code-blends were found in the speech of a Deaf child with hearing parents. Interestingly, the other subject with hearing parents did not produce any code-blends.

As for word classes, it was noted that the majority of words involved in simultaneous communication were nouns (12); there were only 3 verbs. Full Estonian mouthing also occurred more frequently with nouns (37) than verbs (5). These results contrast with the ones of a study by Emmorey et al. (2005: 666) who found that for bimodal bilinguals, the most often used classes in code-blends were verbs. The reason for the more frequent code-blending in nouns may lie in the fact that the verbs in EVK have distinctive mouth patterns that are not directly connected with Estonian words⁶.

In addition to the use of voice, the Estonian language word order and fingerspelling also play an important role in the code choice.

⁵ Several different terms have been used for describing mouth patterns. The patterns connected to the spoken language have been termed *spoken components*, *mouthings*, and *word pictures*; the patterns not linked to spoken languages have been referred to as *mouth gestures*, *mouth arrangements*, *oral components*, and *oral adverbials* (Sutton-Spence and Boyes-Braem 2001: 2-3). In the present paper, the terms are differentiated by referring to the two languages: Estonian and EVK.

⁶ The tendency also occurs in BSL where most of the spoken components accompany nouns; verbs are expressed with oral components, which are connected to BSL rather than English (Sutton-Spence and Woll 1998: 82).

(6) A1: SEAL OLEMA POOD
THERE BE SHOP
'There is a shop.'

(7) A1: LAPSED KELGUTAMA
CHILDREN SLEDGE
'The children are sledging.'

In example 6, A1 follows the normal word order of a declarative sentence in the Estonian Language, as in EVK the signs would typically be arranged as: POOD SEAL, or SHOP THERE. The Estonian influence is noticeable both in the sign order and in the mouth pattern. A1 explicitly mouths each word except the adverb THERE, which is signed only. The noun CHILDREN is also expressed by full mouthing, whereas SLEDGING is produced with partial Estonian mouthing (7). Fingerspelling is another phenomenon connected to the spoken language. In the experiment, fingerspelling with voice was used when a Deaf subject was describing the picture to a hearing subject (8).

(8) B1: MEES J KÜLM MAA j-ä-ä // PIKALI-KUKKUMA
MAN J COLD EARTH i-c-e // FALL-DOWN
'A man falls down on frozen earth, or ice.'

In this example, intra-sentential code-switch⁷ can be seen. The Deaf student is thinking how to present the concept of ice: she starts fingerspelling the word, with the first letter clearly seen in her signing. Then the letter J suddenly changes into KÜLM 'cold', and MAA 'earth' is signed after that. To make sure that the interlocutor understands, JÄÄ 'ice' is fingerspelled at the end of the phrase. This is an interesting difference, as fingerspelling was not used in signing to the Deaf subjects.

Apart from mouthing, simultaneous communication, word order, and fingerspelling, the signing pace in describing the picture to the Deaf and hearing subjects also varied. The results of the experiment indicate that the Deaf signed slightly faster to the Deaf subjects than to the hearing subjects. In the former condition, 0.95 signs were produced per second, while in the latter case, the signing rate was slower – 0.88 signs per second.

4 Conclusion

The results of the experiment indicate that the Estonian Deaf bilinguals signed in a similar manner with the Deaf and hearing interlocutors. More elements of Estonian Sign Language than Estonian were present in both conditions, e.g. the use of signing space, mini-topicalisation, and classifiers. However, sometimes fingerspelling, the word order of the Estonian language, and simultaneous communication were used with the hearing interlocutors, which resulted in code-switching. Mouth patterns also varied in signing to the Deaf and hearing subjects: partial and full Estonian mouthing were used more often

⁷ It has to be noted that fingerspelling itself does not belong to Estonian; it is the orthographic representation of Estonian. However, the use of fingerspelling instead of a sign refers to switching to Estonian-based signing, as in EVK, the sign JÄÄ 'ice' would be used instead of fingerspelling.

with hearing interlocutors, and EVK mouthing with the Deaf interlocutors. In addition, the Deaf students signed somewhat faster to the Deaf subjects than to the hearing subjects. Interestingly, full mouthing and simultaneous communication occurred in describing the picture to the Deaf students as well, which shows that the hearing ability is not the only factor influencing code-switching. The parental hearing status is another aspect that has to be considered. Its influence, however, was not clear in the data, as all subjects used EVK mouthing, as well as full and partial Estonian mouthing. Simultaneous communication also occurred both in students with hearing and Deaf parents. As for word classes, the majority of signs involved in code-switching were nouns, which contrasts with some earlier findings in bimodal bilingualism. Clearly, more data is needed to analyse the code choice in the Estonian Deaf bilinguals. The experiment indicated that some differences in signing to the Deaf and hearing interlocutors were present in mouthing, simultaneous communication, word order, and signing rate.

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Helping less proficient children in multi-level classrooms: A study of TEYL¹ teacher strategies used

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Abstract

Primary school English teachers in Taiwan currently face the challenge of teaching children with mixed English level, as a high percentage of children receive English instruction before enrolling at primary school. This study aims to investigate what strategies TEYL teachers commonly use while teaching multi-level classes and how those strategies correlate with each other. Data was collected through a structured questionnaire sent out to 55 self-selecting TEYL teachers throughout Taiwan. The questionnaire listed 13 possible teaching strategies and two open-ended questions requesting additional information about their current practices. Results showed that a majority of the teachers reported a certain degree of difficulty while teaching to multi-level classes. Statistical analysis revealed that several teaching strategies were significantly associated with others, but the use of strategies seems unrelated to teachers' profiles. These teachers reported a great preference for peer-assistance and classroom managerial strategies for teaching such classes, rather than modifying the teaching curriculum or introducing outside resources into their teaching to improve children's English learning.

1 Introduction

It is common in any class for some students to be better at learning while others struggle. The situation in Taiwan, however, goes beyond this norm. In Taiwan, the official educational policy is to introduce English at third grade (at around age of 10). A recent survey² revealed that one-third of children had engaged with English learning before this age. Thus, some third graders can be *false* beginners, because they have already reached certain level of English proficiency before third grade. Apart from learner's individual learning pace, TEYL teachers therefore, have to face the challenge of teaching multi-level proficiency children in a mainstream class. Thus, unlike its usual definition: the class where students vary in abilities, motivations, and

¹ TEYL stands for Teaching English to Young Learners. In this study, TEYL teachers refer to those who are teaching English in the primary schools.

² The survey was done by National Teachers' Association R.O.C. and Citibank group in Taiwan, 2003.

interests, learning styles, anxiety, experiences and so forth (Ainslie, 1994; Shank & Terrill, 1995), a multi-level class in this study should be viewed as a multi-starting point for young learners. I therefore use the term multi-level rather than referring to ability or proficiency.

According to the educational policy in Taiwan, weekly learning hours for English are not as many as those for mathematics or Mandarin³. Primary school children only receive once or twice English class periods every week. However, it does affect children's general language learning motivation in the long run. TEYL teachers have the responsibility to initiate children's English learning and to enhance motivation in this official, initial stage. Mixed 'starting point' classes, if not handled appropriately can give primary school children a negative experience of language learning. Therefore, the primary condition of making English learning interesting and fun is not met. This duty to motivate is explicitly mentioned in the official description of primary English language teaching curriculum⁴ aims.

This study investigated what teaching strategies are used, and with what frequency by current TEYL teachers while teaching multi-level classrooms in Taiwan. It also examined how these commonly used strategies related to each other. Further investigation focused in particular on the difficulties that teachers encounter when handling low achievement students in mainstream classes – as this is the group that is most in danger of becoming demotivated. Ideally, teachers should meet each student's educational needs and to apply various teaching techniques to suit everyone's learning pace. However, to put such teaching into practice or to maintain this in the normal classrooms is not an easy job for teachers (Westwood, 2002). Difficulties can include the large class size, fixed curricula, teachers' workloads, and lack of time for preparation. These difficulties are outlined in detail in section 2 below.

2 Challenges for teachers

Tomlinson (1999) states that all classes are mixed-ability, and that some are even more mixed than others. As already mentioned earlier, children in Taiwan are supposed to start English learning on the same timeline, but, in reality, the situation is usually quite different. To reach the best teaching and learning quality, teachers need to take children's prior learning experience into consideration while teaching; they

³ There are normally 4-6 class hours for learning mathematics and 5-7 for Mandarin, each primary school has the right to decide the class hours within the range.

⁴ Grade 1-9 Curriculum, amendments for Language Arts (English), Ministry of Education, No. 0950030031C, (10/03/2006)

also need to overcome other current policy barriers such as large class sizes. Normally, there are around 35 children in one class, and it is hard to catch every student's individualized attention all the time. In addition, those who had learned English would be easier to reach the English curriculum goal than those who had no experience before third grade.

Moreover, students in multi-level classes can demonstrate difficult behaviour: they get bored because the lesson is not geared to their level; they then become uncooperative; and can cause trouble in class, especially in classes of young learners. In an ideal world, teachers would spend time to revise their teaching plan to suit all learners, but they also easily feel frustrated because there is only limited time to help those who need individual attention. Indeed, it can be time-consuming to plan the lesson and design the tasks to meet everyone's needs, and sticking to the middle may be the safest and easiest method in teaching a mixed-level and large class. However, in order to meet each student's requirements and to offer the best teaching, we need to find out if the TEYL teachers are aware of this issue which deserves more serious consideration.

3 Teaching strategies

Teaching multi-level classes is never easy. Very few studies have investigated teaching strategies relating to mixed-level instruction. Therefore, teaching strategies here mostly focus on general good teaching practice. Strategies from the literature including the following, each of which has been widely applied: (1) grouping students into pairs or teams; (2) developing the students' responsibility for their own learning and for supporting peers (typically through promotion of pair and group work); (3) differentiated instruction, which I shall, in this paper refer to as 'differentiated teaching'; (4) classroom instructions; and (5) positive reinforcement.

The first strategy, grouping, is perhaps the most promoted in methodology books and TEFL (Teaching English as Foreign Language) training courses. Grouping need not necessarily according to learning achievements; motivation in mixed level groups can also be promoted by grouping according to interests and friendships. Researchers (e.g. Ainslie, 1994; Todd, 1998) have set out the advantages of applying grouping strategies: providing students more chances to practice; offering peer-support within the group; encouraging shyer students to talk, and so on. These advantages are pretty much alike what we obtained from the teachers for this study, i.e. cooperation among students and developing students' responsibility for learning.

In order to help all learners to achieve the best results, differentiated teaching are applied to meet individual needs in a normal class, and a number of countries have seen this differentiated teaching as “best practice” (Wragg, Haynes, Wragg & Chamberlain, 2000). According to Heacox (2002), this type of teaching involves “changing the pace, level, or kind of instruction you provide in response to individual learners’ needs, styles, or interests (p.5).” Tomlinson (1999; 2000; 2001) defined it as different teaching strategies used by a teacher to help an individual or a small group to create the best learning. Since ‘one size doesn’t fit all’, teachers often need to judge students’ learning needs and purposes of activity plans in a diverse classroom (Heacox, 2002).

Tomlinson (1999) and Todd (1998) point out that grouping students needs to be conducted carefully. Weaker students may not be able to improve or to benefit within the group because of improper group management, as higher achievement learners may lead the group all the time. Clearly, in an EFL class, giving clear classroom instructions and presenting content and tasks in easy and manageable ways are the key to dealing with mixed-level classes. It is important to tell all students exactly what to do, or students can be confused and give up easily (Baker, 2000), especially less proficient learners. Finally, teachers need to display positive attitudes and enthusiasm to what they teach (Dornyei, 2001) and help students build up their confidence in both learning and themselves. It is all too easy for teachers of multi-level classes to give the lower proficiency students the feeling that they are doing badly at English and losing their confident in learning English.

Two studies which have been carried out were in primary and secondary schools in Hong Kong (Chan, Chang, Westwood & Yuan, 2002; Yuen, Westwood & Wong, 2004). Their results indicated that teachers seldom made changes to their teaching to suit the needs of individual learners. Chan *et al* (2002) listed the eight most common teaching strategies used for differentiated teaching, and their results are similar to those of studies by Weston et al (1998) and Ellett’s (1993). This list of strategies is not comprehensive, and further interesting ideas are put forward by teachers in the open-ended responses in my study.

4 Method and procedures

The target subjects of this study were teachers who are responsible for English teaching in primary schools in Taiwan. Questionnaire items were taken from the

research by Yuen et al. (2004), and redesigned by the researcher with the addition of three items (item 11, open-ended question item 14 and 15). The questionnaire includes strategies discussed in the section above. Further items relate to program adaptation (item 5), bringing in extra resources (items 12 and 13), and strategies beyond the classroom (items 4 and 10). Teachers reported their use of the 13 listed teaching strategies using a 5-point Likert scale (1 to 5) to indicate frequency — a mark of five indicated frequent use, while one indicated no use. Open-ended questions were also included, inviting TEYL teachers to offer their own strategies when they teach as well as the difficulties they encountered while teaching English in multi-level classes.

Because potential respondents were located throughout Taiwan, the questionnaire was placed on-line which could access it easily. The length of collecting data was around a month. A total number of 55 primary English teachers completed the on-line questionnaire. The majority of respondents were experienced in TEYL: nearly half had been teaching children for over five years (including teaching in the private sector), and around 83% had taught English in primary schools for a minimum of two years. There were 58% of the teachers held a BA degree and 67% of these majored in English.

5 Results

A high proportion (83%) of these teachers reported that they have encountered a certain degree of difficulty while teaching multi-level classrooms. Therefore, most teachers did aware this situation in primary schools. Difficulties reported were mainly of two types: (1) administrative constraints beyond the influence of the teachers; (2) class management problems. These teachers seemed to suffer most from difficulties of the administrative type, common to teachers around the world: time limitations (most frequently mentioned), program demands, textbook suitability, large class size, and the difficulties of using English only in class. However, one teacher pointed out such problems resulted from the current educational system at this primary level. English plays a less important role compared to Maths and Mandarin; English teachers have to deal with the class on their own most of time with less support from homeroom teachers⁵.

Teachers mentioned several characteristics of less proficient pupils including: reticence, shyness, low motivation, getting confused easily, giving up easily, and not handing in their homework on time. Interestingly, one teacher reports a suggestion

⁵ In Taiwan, normally English teachers are not the main class teachers at primary level.

from some of her pupils: that they should be given dispensation in class work and tests because of their low level of English. This suggests awareness among the children themselves that they are at a disadvantage. The teachers reported disparity among the children, making it hard to have everyone enjoy in the same class. They were aware that grouping needs to be applied carefully. Some teachers reported that children with better English proficiency tend to take over the leadership of the group, and that children who joined English classes outside the school (i.e. private sector) would think “they knew everything”. These made teaching more difficult. As a result, to get the program progress, they acknowledged neglect of children who are left behind or who were advanced, only focusing on the average level of the class (Yuen et al, 2004).

Table 1 displays questionnaire items in descending order of frequency of reported usage. As can be seen, teachers make high use of strategies related to classroom management (1, 3, 2, and 11) to deal with multi-level classes. This result is in line with previous studies mentioned in section 2. Curriculum adaptation, on the other hand, is less favoured by these teachers. These strategies require teachers to adjust their teaching content (5, 7, 8, 9); extra instructional resources (12, 13) and/or further support (10, 4).

Table 1: Teachers teaching strategies for helping less proficient students (n=55)

Strategies	Mean	SD
1. Encourage other students to give help to less proficient students when needed.	4.00	0.82
3. Give less proficient students more direct help during the lesson.	3.83	0.68
2. Allow students with lower proficiency more time to finish written work.	3.8	1.06
11. Place students with difficulties near you.	3.64	1.25
5. Revise reading and writing core vocabulary more frequently.	3.36	1.02
7. Provide less proficient students with extra tuition out of lesson time.	3.07	1.20
8. Set smaller tasks and exercises, with less reading and writing for less proficient students.	2.95	0.95
6. Place the low achievement student in a particular ability group in class.	2.83	1.37
12. Use computer-aided instructions with the students.	2.67	1.16
13. Find and use simpler books and materials for the students with less proficiency.	2.45	1.26
10. Allow the students with lower proficiency to leave your lesson to receive remedial teaching.	2.36	1.25
9. Set the less proficient students different homework from other students.	2.35	0.91
4. Make more frequent contact with the parents of less proficiency for help at home.	2.29	1.01

Surprisingly, teachers reported a low tendency to contact parents to negotiate help at home. It is highly valued for parents involving in children’s education (Ellis, 2001). In my study of preschool English learning (Hsu, 2006), teachers also made good use of

this strategy for helping children learning at home. However, it seems to be less favourable for primary English teachers. The first three strategies listed in Table 1, indeed, would be easier to apply, because they are convenient and time-saving. The strategies do not require extra preparation before the lesson. In contrast, the last three strategies displayed in Table 1 imply to add extra workload for teachers and are more time consuming.

Looking for patterns of usage in the data, the following associations and disassociations emerge. While these teachers did experience a certain degree of difficulty while teaching in multi-level classrooms, such problems appear not to relate to their age, educational background. However, teachers' length of teaching experience with young learners does have a slight negative correlation with the difficulty of teaching multi-level classrooms ($r_s = -0.337$, $p < 0.012$) (See appendix). This suggests, unsurprisingly, that newer teachers have more difficulty with multi-level classes. There was also no significant correlation between teachers' backgrounds and the 13 teaching strategies. The exception here is that teachers who were English-majored in the university tend to use computer more often to assist children's English in class (strategy 12, $r_s = 0.304$, $p < 0.024$).

As regards the strategies, correlation again emerged (See Appendix for statistical table). Most notably, if teachers encourage students to help less proficient students, they provide remedial teaching as well. In class, teachers may place less proficient students in a particular group, use simpler material, and give them different homework. Teachers who use grouping strategy are also more likely to have low achievement students sit near the teacher in class, offer remedial teaching and extra tuition for those students as well as set smaller tasks or exercises and give them more time to finish. Likewise, teachers who design different tasks for less proficient students tend to give those students different homework from others, tend to find simple material or resources, revise core vocabulary frequently in class, use grouping strategies and provide extra teaching after class. The use of computer technology also correlates with the use of simple books and material for those less proficient students. Some negative correlations also emerge with regard to strategies: notably that those who like to give direct help to those less proficient students in class tend not to set different homework for them or give remedial teaching or rearrange sitting in class. Thus, the results seem to imply that these teachers like to stick to the plan that they already have, only providing clear guidance in class rather than making any changes to suit individual needs.

Table 2 summarizes further strategies mentioned in the open-ended section of the questionnaire. Comments are grouped into two parts, whose frequencies are indicated in brackets.

Table 2: Teachers' own strategies for helping less proficient students

Strategies already mentioned in the closed items	<ol style="list-style-type: none"> 1. Grouping students based on their English proficiency either heterogeneous or homogeneous. (32) 2. Encourage higher achieving students to help less proficient ones. (14) 3. Provide remedial teaching after class. (6) 4. Arrange different level of tasks for students to finish. (5) 5. Place low achievement students near the teacher or next to advanced one for monitoring. (3) 6. Give extra guidance to those who need it while teaching. (2) 7. Give extra attention to less proficient students in class. (2)
New strategies proposed by the teachers of this study	<ol style="list-style-type: none"> 8. Use bilingual repetition of classroom instructions. (1) 9. Use props or realia to get students' attention while teaching. (4) 10. Ask students questions according to their English proficiency. (3) 11. Ask homeroom teacher for help. (3) 12. Do easy tasks first, and follow up with some more challenging ones. (3) 13. Allow whole class performance first then require individual responses. (1) 14. Help them to build up correct concepts. (1) 15. Give higher achieving learners more challenges to accomplish. (3) 16. Allow higher achieving learners to choose whether to join or leave the class activity. (1) 17. Encourage advanced learners to read more. (1) 18. Apply mentor-mentee system in class (pupil-pupil). (4) 19. Encourage less proficient students to practice more. (4) 20. Assign a group leader or a teaching assistant in each group. (4) 21. Try to build up confidence in less proficient students. (4) 22. Ask less proficient student to do basic tasks only. (2) 23. Assign less written work but more oral practice for lower proficient students. (2) 24. Ask proficient students to read aloud, acting like a model for less proficient. (1) 25. Putting (reasonable) pressure on less proficient students. (1)

Most popular strategies, clearly, are very close to strategies covered in the provided statements (Items 1-7 in Table 2). Again, most frequently mentioned is grouping (item 1) based on children's English proficiency either heterogeneously or homogeneously. Also, a high percentage of respondents use peer support (item 2). Teachers encourage higher proficiency students to help less proficient ones. Several teachers considered this strategy to be very useful, and they believe that students learn better through peer teaching. The teacher is also taking an extra burden for remedial teaching after normal class time (item 3). Teachers set different levels of tasks for children to accomplish

(item 4). Several teachers give extra guidance (item 5) and attention (item 6) to less proficient children in class. Clearly, those children take up more of the teacher's attention in class.

The second part of Table 2 presents further strategies (items 8-25) which are provided by the respondents and are not included in the close-ended questionnaire. Future research might profit from including these as prompts to see if other teachers do in fact use them. They can be grouped as follows: program adaption (items 12, 23); bringing in extra resources (item 9); classroom instructions (items 8, 24); strategies beyond the classroom (item 11); grouping (items 13, 18, 20); positive reinforcement (items 14, 21, 25), and differentiated teaching (items 10, 15, 16, 17, 19, 22). Based on the responses shown in Table 3, it can be seen that these teachers did not contribute many strategies based on redesigning the teaching plans (items 12, 23). Most teachers tend to follow the fixed schedule instead of reconstructing their teaching plans for learners in a multi-level class. The reason for this may be that English teachers in primary schools are viewed as subject teachers; therefore, they only appear in the English class. Thus, they only have limited time to stay with the children. They may expect help from the homeroom teachers to review vocabulary and sentences for improving children's English learning. However, homeroom teachers are also quite busy; and it is unclear how much those homeroom teachers will do. This finding seems to indicate that these teachers prefer to ask the homeroom teachers for help rather than look for help from the parental side. It may be because of the availability and the convenience for looking helps from the homeroom teachers at school, while contacting with parents takes more time and may not as efficient as homeroom teachers do.

6 Discussion

As indicated earlier, primary school English teachers in Taiwan experience a certain degree of difficulty while teaching multi-level classes. However, the findings suggest that they seldom adopt any specific teaching strategies to solve the difficulty or to meet individual needs in class. Unlike whole class teaching, adopting differentiated teaching means extra workload. Nowadays, children have a great opportunity to engage in the English language from various resources before receiving school English instruction. They may have experiences from kindergarten, private sector, parental tutoring at home, English TV programs, English CDs, storybooks and so forth. Children, therefore, may have various levels of exposure to English when they come to school English classes. Thus, it will be very helpful if teachers have a general

understanding about children's learning backgrounds and preferences while teaching, as this would help teachers to revise curriculum and design materials which make teaching more efficient.

Primary level of English teaching is highly demanding. Within limited class time, teachers cannot always pay attention to individual children in class. Without significant guidance, sticking to the middle level would be the choice of most teachers would do. Yet, the needs between higher proficiency children and lower-level ones are quite different. Low achievement children will develop low motivation and will become shy when expressing themselves in class or even give up learning. If teachers apply different classroom management policies to students inappropriately, this can also cause extra trouble. For example, lower achievement students may think they only need to reach a lower standard rather than an average one. Other learners or even higher achieving children may think it is unfair and that they are being penalised because their English is better. Also, some studies (Artiles, 1998; Minow, 1990) show that students might feel they are being labelled through different tasks; thus, recognizing the differences among students needs to be handled in sensitively ways to prevent negative outcomes. Hence, teachers need to be careful while giving any specific instructions.

In this study, grouping is the most common teaching strategy used in class. In fact, grouping can be viewed as part of peer cooperation, that is, children can accomplish the task through working together. Some teachers also mentioned that children feel less stressed and learn better while working with peers. From teachers' side, it is also a good way to relieve teachers' working loads during limited class time. Researchers (Arthur, Gordon & Butterfield, 2003) also indicate that peer cooperation is truly useful and can develop a student-to-student support network. However, grouping needs more attention. Inadequate grouping strategies may not improve lower achievement learners' learning (Tomlinson, 1999; Todd, 1998), but flexible grouping can provide "better instructional match between students and their individual needs" (Heacox, 2002, p. 85). Thus, it is worthwhile for TEYL teachers to adopt different managerial skills while grouping children in mainstream classes for having better learning.

Finally, these teachers' background features in this study seem to have little or no impact on their strategy application. Teachers who have taught for longer years seem to use fewer teaching strategies. This may be because well-experienced teachers have already constructed their certain teaching frameworks which they think they do not

need to or are unwilling to change. It implies that the teachers may have different approaches for applying the teaching strategies that are not connected with their backgrounds which needs further investigation. Generally speaking, these teachers seem to stick to what they are used to doing and tend to not apply many instructions for children with various learning backgrounds and levels of English. Further studies may include more factors like schools, teacher training programs, class sizes or any information to examine the relationships among them.

7 Conclusion and Implications

It is inevitable that children receive English instruction before enrolling at primary schools in Taiwan nowadays. However, Taiwan's educational policy does not encourage school authorities to group schoolchildren by their English proficiency level which may also pose difficulties in implementation. Though differentiated teaching can be a good solution to this problem some students may not like to be treated differently. In addition, elements such as content, process, products and environment have been highlighted for teachers to differentiate (Tomlinson, 1999; 2000; 2001). In fact, there is no certain rule for successful teaching, thus, coping with mixed-level classes certainly needs to be a feature of teacher training.

Indeed, unlike the whole class teaching, differentiated teaching means extra workload for teachers. As Schumm and Vaughn (1995) point out that obstacles like time-consuming preparation, difficulties in applying different tasks in the whole class, hindering the progress of higher-achieving students while simplifying the curriculum may make teachers reluctant to implement differentiated teaching. However, the key to good teaching is to meet individual needs, teachers need to make more effort to the problem of teaching multi-level classes.

Apart from teachers' perception of dealing with multi-level classes, the educational authorities, no doubt, need to take seriously on this issue and to provide more teacher training programs to help TEYL teachers with this multi-level class teaching. It is also the key to keep constantly high quality of curriculum adaptation and classroom instructions, and to improve and maintain children's best interests in this early stage of learning English.

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Appendix

Spearman's Correlation between teachers' background and teaching strategies using for helping low achievement learners

	Spearman's rho	EDU	MAJOR	Years of TEYL	Yrs teaching YLs in primary school	Difficulty of teaching	Strategy 1	Strategy 2	Strategy 3	Strategy 4	Strategy 5	Strategy 6	Strategy 7	Strategy 8	Strategy 9	Strategy 10	Strategy 11	Strategy 12	Strategy 13
AGE	Correlation Coefficient	.126	-.047	.311(*)	.346(**)	-.174	.017	.036	-.074	-.180	-.258	-.082	-.032	-.055	.092	-.084	-.244	-.155	-.156
	Sig. (2-tailed)	.360	.735	.021	.010	.205	.899	.793	.594	.189	.057	.552	.818	.688	.506	.544	.073	.259	.254
EDU	Correlation Coefficient		.277(*)	.204	.245	-.201	.054	.160	.134	-.135	-.209	.088	.019	.099	.210	-.097	.041	-.012	-.025
	Sig. (2-tailed)		.041	.135	.071	.142	.695	.242	.330	.327	.126	.524	.890	.474	.124	.479	.767	.931	.856
MAJOR	Correlation Coefficient			.224	.158	-.027	.194	.035	.011	.203	-.027	-.082	-.258	.003	.075	.014	-.035	.304(*)	.181
	Sig. (2-tailed)			.100	.248	.847	.155	.801	.937	.137	.846	.550	.057	.985	.585	.920	.798	.024	.186
Years of TEYL	Correlation Coefficient				.682(**)	-.337(*)	.158	.061	.053	.155	-.195	-.025	-.160	-.053	.135	-.031	-.153	-.121	.066
	Sig. (2-tailed)				.000	.012	.249	.658	.702	.260	.154	.858	.243	.702	.328	.820	.264	.378	.632
Yrs teaching YLs in primary school	Correlation Coefficient					-.233	.130	.136	.074	.054	-.171	.056	-.072	-.145	.041	-.014	-.220	-.079	-.067
	Sig. (2-tailed)					.087	.342	.322	.593	.698	.213	.685	.603	.290	.766	.918	.107	.567	.629
Difficulty of teaching	Correlation Coefficient						-.024	-.165	-.119	.016	.088	-.107	-.170	-.017	.054	.066	.052	.075	-.079
Strategy 1	Correlation Coefficient							.548(**)	.242	.312(*)	.218	.338(*)	.021	.127	.321(*)	.399(**)	.141	.071	.270(*)
	Sig. (2-tailed)							.000	.075	.020	.109	.012	.878	.356	.017	.003	.304	.605	.046
Strategy 2	Correlation Coefficient								.412(**)	.082	.113	.276(*)	.198	.190	.128	.303(*)	.158	.184	.170
	Sig. (2-tailed)								.002	.550	.411	.042	.148	.164	.351	.024	.250	.180	.214
Strategy 3	Correlation Coefficient									.023	.299(*)	.041	.088	.192	-.004	-.041	-.061	.052	.148
	Sig. (2-tailed)									.867	.027	.765	.521	.159	.976	.765	.658	.706	.282

Strategy 4	Correlation Coefficient																			.207	.145	.296(*)	.202	.162	.234	.213	.156	.452(**)	
	Sig. (2-tailed)																				.129	.291	.028	.140	.237	.085	.118	.255	.001
Strategy 5	Correlation Coefficient																					.200	.105	.346(**)	.056	-.039	.220	.049	.050
	Sig. (2-tailed)																					.143	.447)	.683	.779	.106	.722	.715
Strategy 6	Correlation Coefficient																						.334(*)	.305(*)	.206	.395(**)	.445(**)	.135	.135
	Sig. (2-tailed)																						.013	.024	.131	.003	.001	.326	.325
Strategy 7	Correlation Coefficient																							.292(*)	.085	.251	.299(*)	.226	.239
	Sig. (2-tailed)																							.030	.539	.065	.027	.097	.079
Strategy 8	Correlation Coefficient																								.455(**)	.070	.113	.188	.398(**)
	Sig. (2-tailed)																								.000	.611	.413	.170	.003
Strategy 9	Correlation Coefficient																									.082	.104	.195	.210
	Sig. (2-tailed)																									.552	.449	.154	.124
Strategy 10	Correlation Coefficient																										.320(*)	.202	.175
	Sig. (2-tailed)																										.017	.140	.202
Strategy 11	Correlation Coefficient																											.255	.208
	Sig. (2-tailed)																											.061	.128
Strategy 12	Correlation Coefficient																												.447(**)
	Sig. (2-tailed)																												.001

***Shuo* ‘say’ vs. *Yiwei* ‘assume’ in Chinese**

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Abstract

The verbs shuo ‘say’ and yiwei ‘assume’ are identified from Huang (1984) and Xu (1986) on the interpretation of embedded null objects in Chinese. Shuo ‘say’ predominates in Huang’s examples, while yiwei ‘assume’ predominates in Xu’s. Specifically, these two verbs can be differentiated in terms of their semantic and syntactic differences. A grammaticality judgment task was conducted, whereby sixteen native speakers of Chinese judged bi-clausal sentences in which an embedded null object was either with matrix verb shuo ‘say’ or yiwei ‘assume.’ The results revealed a clear difference between shuo ‘say’ and yiwei ‘assume’ that is not considered in the literature. I show the disagreement between Huang and Xu can be resolved with reference to this distinction.

1 Introduction

As is known, Chinese is a language that displays the freedom for the use of null arguments in its grammar (Huang 1984, 1987, 1989, Xu 1986, Li 1990, He 1996, Huang Y. 2000). It not only allows either a subject or an object to be dropped, but also can drop both of them at the same time without leaving any grammatical ambiguity assuming that the context unambiguously provides antecedents. Consider the example below.

(1) A: Zhangsan kanjian Lisi le ma?
Zhangsan see Lisi Asp Q
“Did Zhangsan see Lisi?”

B: (a) null subject
e kanjian Lisi le.
see Lisi Asp
“(He) saw Lisi.”

(b) null object
ta kanjian e le.
he see Asp
“He saw (him).”

(c) null subject and null object
e kanjian e le
see Asp
“(He) saw (him).”

According to (1), it is clear that Chinese allows the freedom for the use of null

arguments in its grammar. In spite of this, the interpretation of embedded null objects in Chinese has been a disputed topic (Huang 1984, 1987, 1989, Xu 1986).

2 Previous Studies

2.1 Huang (1984)

Huang (1984) proposes that there is a subject-object asymmetry in Chinese with respect to the distribution of empty categories. Huang claims that the distribution of empty categories is more restricted in object position than in subject position: embedded null subjects rather than embedded null objects can refer to matrix subjects. To be more specific, embedded null subjects can be coindexed with matrix subjects and be interpreted as *pro*, whereas embedded null objects can not. Consider the examples below.

(2) a. Embedded null subject

Zhangsan_i shuo [e_i bu renshi Lisi].
 Zhangsan say not know Lisi
 “Zhangsan_i said that (he_i) did not know Lisi.”

b. Embedded null object

Zhangsan_i shuo [Lisi bu renshi e_{*i}]
 Zhangsan say Lisi not know
 “Zhangsan_i said that Lisi did not know (him_{*i}).”

The embedded null subject in (2a) can refer to the matrix subject *Zhangsan*, whereas the embedded null object in (2b) cannot. As a result, the embedded null subject in (2a) can be interpreted as a pronominal (i.e., *pro*), while the embedded null object in (2b) cannot.

Despite the asymmetry indicated above, both embedded null subjects and embedded null objects can be interpreted as variables. Huang (1984) asserts that a null argument is left because of the movement to the topic position and where the topic position is null it is because of the Topic-NP Deletion operation proposed by Tsao (1977). Tsao (1977) claims that Chinese-type languages have a rule called “Topic-NP Deletion,” which operates across sentences to delete the topic of a sentence having an identical referent in the preceding sentence. Also, note that the null argument is topicalized first before the topic is deleted from the topic position. Accordingly, sentences in (2) can be interpreted as (3) below.

(3) a. Embedded null subject

Discourse Topic_j ... [Zhangsan shuo [topic e_j [e_i bu renshi Lisi]]]
 Zhangsan say not know Lisi
 “Zhangsan_i said that (he_j) did not know Lisi.”

b. Embedded null object

Discourse Topic_j ... [Zhangsan shuo [topic e_j [Lisi bu renshi e_i]]]
 Zhangsan say Lisi not know
 “Zhangsan_i said that Lisi did not know (him_j).”

The embedded null subject in (3a) and the embedded null object in (3b) are moved from their initial position to the topic position where the topic is deleted through the process of topic NP deletion. This is to say, the embedded null subject in (3a) and the embedded null object in (3b) are coreferential with their null topics, and are interpreted as variables.

Overall, an embedded null subject in Chinese can be interpreted either as a null pronominal when it is A-bound by a matrix subject, or as a variable when it is A'-bound by a (zero) topic. By contrast, an embedded null object in Chinese can only be A'-bound by a (zero) topic and be interpreted as a variable. This phenomenon is known as subject-object asymmetry in the literature and is held by Huang (1984) to lend support for the claim that *pro* is only available to the subject position but not to the object position except for a language with a rich verb-object agreement marking system. This assumption, however, has been challenged by Xu (1986).

2.2 Xu (1986)

Contrary to Huang, Xu (1986) proposes that embedded null objects in Chinese can also be coreferential with matrix subjects, and thus, they can be interpreted as *pro* as well. Xu (1986) argues that it is true native speakers of Chinese would not take matrix subjects as the controller of the embedded null objects without additional context in the examples Huang illustrated. Xu (1986), nonetheless, asserts that many other sentences are capable of allowing embedded null objects coreferential with matrix subjects unless context has led the readers or hearers to do otherwise. Consider the example below.

- (4) *xiaotou_i yiwei [mei ren kanjian e_i]*
thief assume no man see
“The thief thought nobody saw (him).”

In (4), native speakers of Chinese would spontaneously take the matrix subject *xiaotou* “thief” as the referent of the embedded null object; thus, the embedded null object is interpreted as *pro*. Xu (1986) contends that the interpretation of embedded null objects in Chinese does not primarily depend on syntactic factors but rather on semantic and pragmatic factors (on the importance of such factors in interpreting sentences, see also Comrie 1988 and LaPolla 1993).

3 Distinction between *Shuo* ‘say’ and *Yiwei* ‘assume’

Despite highlighting the relevance/importance of semantic and pragmatic factors when interpreting embedded null objects in Chinese, Xu (1986) did not outline what these are, resulting in divergent interpretations of such objects. However, by examining the sentences illustrated in Huang (1984) and Xu (1986), I discovered that matrix verbs play a key role in determining the interpretation of embedded null objects in Chinese. Two types of matrix verbs were identified – *shuo* ‘say’ and *yiwei* ‘assume.’ *Shuo* ‘say’ is commonly found in Huang’s examples, while *yiwei* ‘assume,’ commonly found in Xu’s. Specifically, the two types of verbs can be distinguished in

terms of their semantic and syntactic differences.¹ Section 3.1 describes their lexico-semantic meaning, while section 3.2 presents their syntactic behaviour.

3.1 Semantically

The lexical meanings of *shuo* ‘say’ and *yiwei* ‘assume’ are specified as below (*Dictionary of Spoken Chinese*, Yale University, 1966).

(5) *shuo*: say, speak, or talk
 ta bu hui shuo yingwen
 he not can speak English
 “He can not speak English.”

(6) *yiwei*: assume, often to be proved wrong later
 wo yiwei na shi ni
 I think that BE you
 “I thought that was you.”

From the lexical meanings above, we can conclude that the *shuo* ‘say’ is a descriptive verb, used to indicate a positive assertion, while *yiwei* ‘assume’ is a belief verb, used to represent one’s belief that is likely to be false.

3.2 Syntactically

Syntactically, DP movement, involving *bei* ‘be’ and *ba* ‘take’ constructions, is more acceptable with *yiwei* ‘assume’ than *shuo* ‘say,’ as shown below.

(7) *bei* construction

a. *shuo* ‘say’
 ??Peter_i bei John shuo t_i zou le
 Peter be John say leave Asp
 “Peter is said to leave by John.”

b. *yiwei* ‘assume’
 Peter_i bei John yiwei t_i zou le
 Peter be John assume leave Asp
 “Peter is assumed to leave by John.”

(8) *ba* construction

a. *shuo* ‘say’
 *John ba Peter_i shuo t_i hen congming
 John take Peter say very smart
 “*John took Peter and said (he) to be very smart.”

¹ Some more Chinese verbs behave as *shuo* ‘say’ and *yiwei* ‘assume’. For instance, *zhidao* ‘know’ operates in the same manner as *shuo* ‘say,’ while *renwei* ‘think’ operates in the same manner as *yiwei* ‘assume.’ See Hsieh’s doctoral dissertation for more details.

b. *yiwei* ‘assume’

John ba Peter_i yiwei t_i hen congming
John take Peter assume very smart
“*John took Peter and assumed (he) to be very smart.”

Therefore, not only is the identification of a syntactic difference between *shuo* ‘say’ and *yiwei* ‘assume’ a novel finding but it also supports the semantic differences highlighted in 3.1 above. Importantly, the distinction between *shuo* ‘say’ and *yiwei* ‘assume’ may help to resolve the Huang/Xu controversy with respect to null object interpretation in Chinese. To test this out, an experiment was conducted, which is reported in the following section.

4 The Study

The aim of the study is to investigate how native speakers of Chinese interpret embedded null objects with matrix verbs *shuo* ‘say’ and *yiwei* ‘assume.’ A grammaticality judgment task was conducted, whereby participants judged bi-clausal sentences in which embedded null objects were either with matrix verb *shuo* ‘say’ or *yiwei* ‘assume.’ This section is organized as follows: section 4.1 specifies the hypotheses on which this study is based; section 4.2 presents the test items; section 4.3 describes the participants; finally, section 4.4 details the procedure.

4.1 Hypotheses

The hypotheses for the study are illustrated below.

- Hypothesis 1:** The native speakers of Chinese will interpret embedded null objects as variables with matrix verb *shuo* ‘say’ (as per Huang, 1984).
- Hypothesis 2:** The native speakers of Chinese will interpret embedded null objects as *pro* with matrix verb *yiwei* ‘assume’ (as per Xu, 1986).

4.2 Test Items

Two test types are examined:

- (i) **SayEC:** Sentences with matrix verb *shuo* ‘say’ and an embedded null object.
- (ii) **AssumeEC:** Sentences with matrix verb *yiwei* ‘assume’ and an embedded null object.

Participants were asked to indicate whether the embedded null object refers to (A) the matrix subject, (B) someone else, or (C) either. An example of a test item is given below.

(9) a. *SayEC*

Adam shuo Andy wen e le
Adam say Andy ask Asp
“Adam said Andy asked (him).”

Andy wen shei?
Andy ask who
Whom did Andy ask?

(A) Adam (B) someone else (C) either

b. *AssumeEC*

Mandy yiwei Lea buhui daying e
Mandy assume Lea will not promise
“Mandy assumed Lea will not promise (her).”

Lea buhui daying shei?
Lea will not promise who
Whom will not Lea promise?

(A) Mandy (B) someone else (C) either

4.3 Participants

16 L1 Chinese adults participated in the study. They were all postgraduates at a UK university, and had lived in the UK less than 4 years.

4.4 Procedure

For the test, participants were given a booklet where two test items were presented per page. In each test item, a sentence was followed by a question. Participants were asked to choose one answer that they think most appropriate for the question. Participants were told not to return to the previous test items to change answers, nor to look ahead to the following test items. Participants were also told not to try to identify spelling/punctuation errors in the test items. The test was conducted individually with participants or in a group. There was no time limitation for participants to complete the questionnaire. Generally, it took about 20 minutes for the participants to finish.

5 Results

Table 1 below presents the raw numbers and percentages of responses in null object interpretation by participants.

Table 1: Results of Null Object Interpretation by Participants (n=16)

Response	SayEC	AssumeEC
A	13/64 (20%)	27/64 (42%)
B	37/64 (58%)	26/64 (41%)
C	14/64 (22%)	11/64 (17%)

Note:

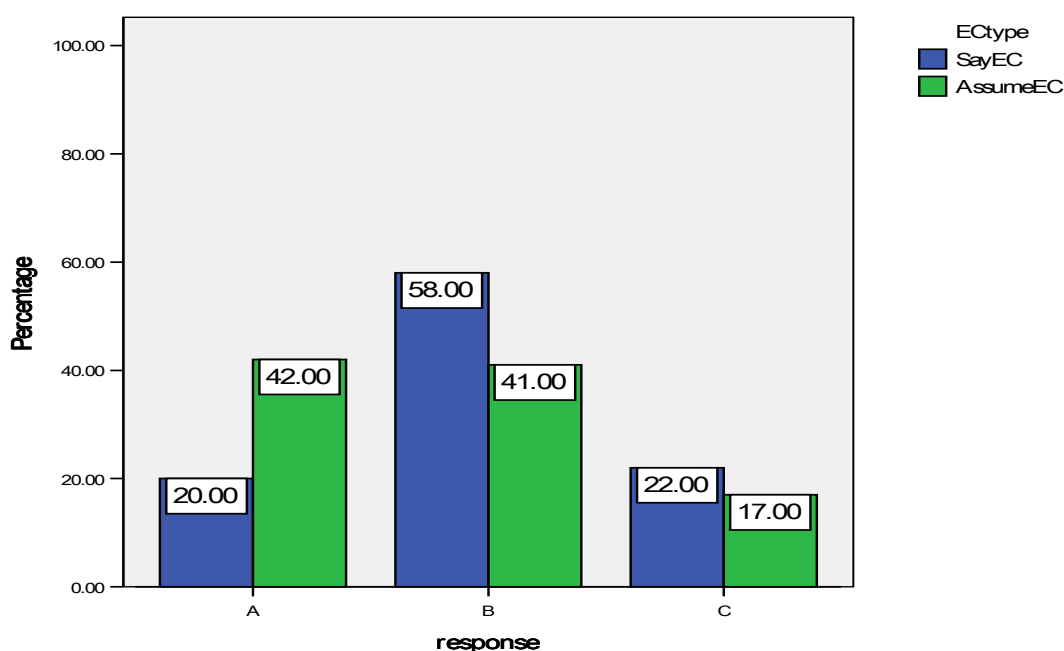
- Response A: coreference with matrix subjects
- Response B: coreference with someone else, i.e., sentence-external referents
- Response C: coreference with matrix subjects and sentence-external referents (subject/topic)

In type *SayEC*, Table 1 shows that 58% of the answers indicated response B, while only 20% and 22% of the answers indicated responses A and C respectively. A one-way ANOVA shows that there was a significant effect of response type in *SayEC* ($F_{(2, 30)} = 7.575$, $p=0.002$). Results of *t*-tests reveal that the difference between responses A and B was significant ($t=3.105$, $df=15$, $p=0.0035$, one-tailed), and so was the difference between responses B and C ($t=3.216$, $df=15$, $p=0.003$, one-tailed). It suggests that response B was preferred in *SayEC*; in other words, coreference with sentence-external referents was preferred by participants in the interpretation of embedded null objects with matrix verb *shuo* ‘say.’

As to type *AssumeEC*, Table 1 shows that answers were almost equally divided in responses A and B, with 42% and 41% respectively. A one-way ANOVA shows that there was no significant effect of response type in *AssumeEC* ($F_{(2, 30)} = 2.331$, $p>.05$). The result of *t*-test reveals that there was no significant difference between responses A and B ($t=0.103$, $df=15$, $p>.05$, one-tailed). Accordingly, response A and response B were accepted in *AssumeEC*; that is, coreference either with matrix subjects or with sentence-external referents was preferred by participants in the interpretation of embedded null objects with matrix verb *yiwei* ‘assume.’

6 Discussion

Recalling the hypotheses above, Hypothesis 1 predicts that the native speakers of Chinese will interpret embedded null objects as variables with matrix verb *shuo* ‘say,’ while Hypothesis 2 predicts that they will interpret embedded null objects as *pro* with matrix verb *yiwei* ‘assume.’ Figure 1 below illustrates the mean percentages of responses in null object interpretation by participants.

Figure 1: Mean Percentages of Responses in Null Object Interpretation by Participants (n=16)

Note:

- Response A: coreference with matrix subjects
- Response B: coreference with someone else, i.e., sentence-external referents
- Response C: coreference with matrix subjects and sentence-external referents (subject/topic)

Figure 1 shows that participants interpreted embedded null objects differently with matrix verbs *shuo* ‘say’ and *yiwei* ‘assume’: coreference with sentence-external referents was preferred in the former, while coreference either with matrix subjects or with sentence-external referents was preferred in the later. It suggests that embedded null objects tended to be interpreted as variables with matrix verb *shuo* ‘say,’ either as *pro* or as variables with matrix verb *yiwei* ‘assume.’ Therefore, Hypothesis 1 is born out by the data, whereas Hypothesis 2 seems to be partially supported.

Nevertheless, by comparing responses in *SayEC* and *AssumeEC*, a picture emerges. Participants showed a stronger preference for coreference with matrix subjects in *AssumeEC* than *SayEC*. The result of *t*-test reveals that there was a significant difference between response A in *SayEC* and *AssumeEC* ($t=4.341$, $df=15$, $p=0.0005$, one-tailed). This suggests that embedded null objects with matrix verb *yiwei* ‘assume’ tended to be coindexed with matrix subjects, whereas embedded null objects with matrix verb *shuo* ‘say’ did not.

Accordingly, we may conclude that embedded null objects in Chinese, unlike Huang’s (1984) claim, can be interpreted either as variables or as *pro*. Note that it does not mean every embedded null object in Chinese can be interpreted either as *pro* or as a variable. As demonstrated above, the interpretation of embedded null objects in Chinese should consider the complex interplay of semantic/pragmatic factors rather than rely on syntactic functions only. To be more specific dealing with this issue, along with the empirical findings here, a generalization is proposed for the interpretation of embedded null objects in Chinese, as shown in (10) below.

- (10) An embedded null object in Chinese can be interpreted as:
- a. a variable, if it is A'-bound by an element, whether mentioned or not, and with matrix verb *shuo* 'say' or *yiwei* 'assume'; or
 - b. *pro*, if it is A-bound by an element outside of the governing category, and with matrix verb *yiwei* 'assume.'

7 Conclusion

Two types of matrix verbs were identified in the examination of the sentences illustrated in Huang (1984) and Xu (1986): *shuo* 'say' and *yiwei* 'assume.' Specifically, the two types of verbs can be distinguished in terms of their semantic and syntactic differences. This paper investigates the interpretation of embedded null objects with matrix verbs *shuo* 'say' and *yiwei* 'assume' by native speakers of Chinese. A grammaticality judgment task was conducted where embedded null objects were either with matrix verb *shuo* 'say' or *yiwei* 'assume.' The results showed that embedded null objects tended to be interpreted as variables with matrix verb *shuo* 'say,' either as *pro* or as variables with matrix verb *yiwei* 'assume.' Importantly, this finding resolves the Huang/Xu controversy.

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Helping less proficient children in multi-level classrooms: A study of TEYL¹ teacher strategies used

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Abstract

Primary school English teachers in Taiwan currently face the challenge of teaching children with mixed English level, as a high percentage of children receive English instruction before enrolling at primary school. This study aims to investigate what strategies TEYL teachers commonly use while teaching multi-level classes and how those strategies correlate with each other. Data was collected through a structured questionnaire sent out to 55 self-selecting TEYL teachers throughout Taiwan. The questionnaire listed 13 possible teaching strategies and two open-ended questions requesting additional information about their current practices. Results showed that a majority of the teachers reported a certain degree of difficulty while teaching to multi-level classes. Statistical analysis revealed that several teaching strategies were significantly associated with others, but the use of strategies seems unrelated to teachers' profiles. These teachers reported a great preference for peer-assistance and classroom managerial strategies for teaching such classes, rather than modifying the teaching curriculum or introducing outside resources into their teaching to improve children's English learning.

1 Introduction

It is common in any class for some students to be better at learning while others struggle. The situation in Taiwan, however, goes beyond this norm. In Taiwan, the official educational policy is to introduce English at third grade (at around age of 10). A recent survey² revealed that one-third of children had engaged with English learning before this age. Thus, some third graders can be *false* beginners, because they have already reached certain level of English proficiency before third grade. Apart from learner's individual learning pace, TEYL teachers therefore, have to face the challenge of teaching multi-level proficiency children in a mainstream class. Thus, unlike its usual definition: the class where students vary in abilities, motivations, and

¹ TEYL stands for Teaching English to Young Learners. In this study, TEYL teachers refer to those who are teaching English in the primary schools.

² The survey was done by National Teachers' Association R.O.C. and Citibank group in Taiwan, 2003.

interests, learning styles, anxiety, experiences and so forth (Ainslie, 1994; Shank & Terrill, 1995), a multi-level class in this study should be viewed as a multi-starting point for young learners. I therefore use the term multi-level rather than referring to ability or proficiency.

According to the educational policy in Taiwan, weekly learning hours for English are not as many as those for mathematics or Mandarin³. Primary school children only receive once or twice English class periods every week. However, it does affect children's general language learning motivation in the long run. TEYL teachers have the responsibility to initiate children's English learning and to enhance motivation in this official, initial stage. Mixed 'starting point' classes, if not handled appropriately can give primary school children a negative experience of language learning. Therefore, the primary condition of making English learning interesting and fun is not met. This duty to motivate is explicitly mentioned in the official description of primary English language teaching curriculum⁴ aims.

This study investigated what teaching strategies are used, and with what frequency by current TEYL teachers while teaching multi-level classrooms in Taiwan. It also examined how these commonly used strategies related to each other. Further investigation focused in particular on the difficulties that teachers encounter when handling low achievement students in mainstream classes – as this is the group that is most in danger of becoming demotivated. Ideally, teachers should meet each student's educational needs and to apply various teaching techniques to suit everyone's learning pace. However, to put such teaching into practice or to maintain this in the normal classrooms is not an easy job for teachers (Westwood, 2002). Difficulties can include the large class size, fixed curricula, teachers' workloads, and lack of time for preparation. These difficulties are outlined in detail in section 2 below.

2 Challenges for teachers

Tomlinson (1999) states that all classes are mixed-ability, and that some are even more mixed than others. As already mentioned earlier, children in Taiwan are supposed to start English learning on the same timeline, but, in reality, the situation is usually quite different. To reach the best teaching and learning quality, teachers need to take children's prior learning experience into consideration while teaching; they

³ There are normally 4-6 class hours for learning mathematics and 5-7 for Mandarin, each primary school has the right to decide the class hours within the range.

⁴ Grade 1-9 Curriculum, amendments for Language Arts (English), Ministry of Education, No. 0950030031C, (10/03/2006)

also need to overcome other current policy barriers such as large class sizes. Normally, there are around 35 children in one class, and it is hard to catch every student's individualized attention all the time. In addition, those who had learned English would be easier to reach the English curriculum goal than those who had no experience before third grade.

Moreover, students in multi-level classes can demonstrate difficult behaviour: they get bored because the lesson is not geared to their level; they then become uncooperative; and can cause trouble in class, especially in classes of young learners. In an ideal world, teachers would spend time to revise their teaching plan to suit all learners, but they also easily feel frustrated because there is only limited time to help those who need individual attention. Indeed, it can be time-consuming to plan the lesson and design the tasks to meet everyone's needs, and sticking to the middle may be the safest and easiest method in teaching a mixed-level and large class. However, in order to meet each student's requirements and to offer the best teaching, we need to find out if the TEYL teachers are aware of this issue which deserves more serious consideration.

3 Teaching strategies

Teaching multi-level classes is never easy. Very few studies have investigated teaching strategies relating to mixed-level instruction. Therefore, teaching strategies here mostly focus on general good teaching practice. Strategies from the literature including the following, each of which has been widely applied: (1) grouping students into pairs or teams; (2) developing the students' responsibility for their own learning and for supporting peers (typically through promotion of pair and group work); (3) differentiated instruction, which I shall, in this paper refer to as 'differentiated teaching'; (4) classroom instructions; and (5) positive reinforcement.

The first strategy, grouping, is perhaps the most promoted in methodology books and TEFL (Teaching English as Foreign Language) training courses. Grouping need not necessarily according to learning achievements; motivation in mixed level groups can also be promoted by grouping according to interests and friendships. Researchers (e.g. Ainslie, 1994; Todd, 1998) have set out the advantages of applying grouping strategies: providing students more chances to practice; offering peer-support within the group; encouraging shyer students to talk, and so on. These advantages are pretty much alike what we obtained from the teachers for this study, i.e. cooperation among students and developing students' responsibility for learning.

In order to help all learners to achieve the best results, differentiated teaching are applied to meet individual needs in a normal class, and a number of countries have seen this differentiated teaching as “best practice” (Wragg, Haynes, Wragg & Chamberlain, 2000). According to Heacox (2002), this type of teaching involves “changing the pace, level, or kind of instruction you provide in response to individual learners’ needs, styles, or interests (p.5).” Tomlinson (1999; 2000; 2001) defined it as different teaching strategies used by a teacher to help an individual or a small group to create the best learning. Since ‘one size doesn’t fit all’, teachers often need to judge students’ learning needs and purposes of activity plans in a diverse classroom (Heacox, 2002).

Tomlinson (1999) and Todd (1998) point out that grouping students needs to be conducted carefully. Weaker students may not be able to improve or to benefit within the group because of improper group management, as higher achievement learners may lead the group all the time. Clearly, in an EFL class, giving clear classroom instructions and presenting content and tasks in easy and manageable ways are the key to dealing with mixed-level classes. It is important to tell all students exactly what to do, or students can be confused and give up easily (Baker, 2000), especially less proficient learners. Finally, teachers need to display positive attitudes and enthusiasm to what they teach (Dornyei, 2001) and help students build up their confidence in both learning and themselves. It is all too easy for teachers of multi-level classes to give the lower proficiency students the feeling that they are doing badly at English and losing their confident in learning English.

Two studies which have been carried out were in primary and secondary schools in Hong Kong (Chan, Chang, Westwood & Yuan, 2002; Yuen, Westwood & Wong, 2004). Their results indicated that teachers seldom made changes to their teaching to suit the needs of individual learners. Chan *et al* (2002) listed the eight most common teaching strategies used for differentiated teaching, and their results are similar to those of studies by Weston et al (1998) and Ellett’s (1993). This list of strategies is not comprehensive, and further interesting ideas are put forward by teachers in the open-ended responses in my study.

4 Method and procedures

The target subjects of this study were teachers who are responsible for English teaching in primary schools in Taiwan. Questionnaire items were taken from the

research by Yuen et al. (2004), and redesigned by the researcher with the addition of three items (item11, open-ended question item 14 and 15). The questionnaire includes strategies discussed in the section above. Further items relate to program adaptation (item 5), bringing in extra resources (items 12 and 13), and strategies beyond the classroom (items 4 and 10). Teachers reported their use of the 13 listed teaching strategies using a 5-point Likert scale (1 to 5) to indicate frequency — a mark of five indicated frequent use, while one indicated no use. Open-ended questions were also included, inviting TEYL teachers to offer their own strategies when they teach as well as the difficulties they encountered while teaching English in multi-level classes.

Because potential respondents were located throughout Taiwan, the questionnaire was placed on-line which could access it easily. The length of collecting data was around a month. A total number of 55 primary English teachers completed the on-line questionnaire. The majority of respondents were experienced in TEYL: nearly half had been teaching children for over five years (including teaching in the private sector), and around 83% had taught English in primary schools for a minimum of two years. There were 58% of the teachers held a BA degree and 67% of these majored in English.

5 Results

A high proportion (83%) of these teachers reported that they have encountered a certain degree of difficulty while teaching multi-level classrooms. Therefore, most teachers did aware this situation in primary schools. Difficulties reported were mainly of two types: (1) administrative constraints beyond the influence of the teachers; (2) class management problems. These teachers seemed to suffer most from difficulties of the administrative type, common to teachers around the world: time limitations (most frequently mentioned), program demands, textbook suitability, large class size, and the difficulties of using English only in class. However, one teacher pointed out such problems resulted from the current educational system at this primary level. English plays a less important role compared to Maths and Mandarin; English teachers have to deal with the class on their own most of time with less support from homeroom teachers⁵.

Teachers mentioned several characteristics of less proficient pupils including: reticence, shyness, low motivation, getting confused easily, giving up easily, and not handing in their homework on time. Interestingly, one teacher reports a suggestion

⁵ In Taiwan, normally English teachers are not the main class teachers at primary level.

from some of her pupils: that they should be given dispensation in class work and tests because of their low level of English. This suggests awareness among the children themselves that they are at a disadvantage. The teachers reported disparity among the children, making it hard to have everyone enjoy in the same class. They were aware that grouping needs to be applied carefully. Some teachers reported that children with better English proficiency tend to take over the leadership of the group, and that children who joined English classes outside the school (i.e. private sector) would think “they knew everything”. These made teaching more difficult. As a result, to get the program progress, they acknowledged neglect of children who are left behind or who were advanced, only focusing on the average level of the class (Yuen et al, 2004).

Table 1 displays questionnaire items in descending order of frequency of reported usage. As can be seen, teachers make high use of strategies related to classroom management (1, 3, 2, and 11) to deal with multi-level classes. This result is in line with previous studies mentioned in section 2. Curriculum adaptation, on the other hand, is less favoured by these teachers. These strategies require teachers to adjust their teaching content (5, 7, 8, 9); extra instructional resources (12, 13) and/or further support (10, 4).

Table 1: Teachers teaching strategies for helping less proficient students (n=55)

Strategies	Mean	SD
1. Encourage other students to give help to less proficient students when needed.	4.00	0.82
3. Give less proficient students more direct help during the lesson.	3.83	0.68
2. Allow students with lower proficiency more time to finish written work.	3.8	1.06
11. Place students with difficulties near you.	3.64	1.25
5. Revise reading and writing core vocabulary more frequently.	3.36	1.02
7. Provide less proficient students with extra tuition out of lesson time.	3.07	1.20
8. Set smaller tasks and exercises, with less reading and writing for less proficient students.	2.95	0.95
6. Place the low achievement student in a particular ability group in class.	2.83	1.37
12. Use computer-aided instructions with the students.	2.67	1.16
13. Find and use simpler books and materials for the students with less proficiency.	2.45	1.26
10. Allow the students with lower proficiency to leave your lesson to receive remedial teaching.	2.36	1.25
9. Set the less proficient students different homework from other students.	2.35	0.91
4. Make more frequent contact with the parents of less proficiency for help at home.	2.29	1.01

Surprisingly, teachers reported a low tendency to contact parents to negotiate help at home. It is highly valued for parents involving in children’s education (Ellis, 2001). In my study of preschool English learning (Hsu, 2006), teachers also made good use of

this strategy for helping children learning at home. However, it seems to be less favourable for primary English teachers. The first three strategies listed in Table 1, indeed, would be easier to apply, because they are convenient and time-saving. The strategies do not require extra preparation before the lesson. In contrast, the last three strategies displayed in Table 1 imply to add extra workload for teachers and are more time consuming.

Looking for patterns of usage in the data, the following associations and disassociations emerge. While these teachers did experience a certain degree of difficulty while teaching in multi-level classrooms, such problems appear not to relate to their age, educational background. However, teachers' length of teaching experience with young learners does have a slight negative correlation with the difficulty of teaching multi-level classrooms ($r_s = -0.337$, $p < 0.012$) (See appendix). This suggests, unsurprisingly, that newer teachers have more difficulty with multi-level classes. There was also no significant correlation between teachers' backgrounds and the 13 teaching strategies. The exception here is that teachers who were English-majored in the university tend to use computer more often to assist children's English in class (strategy 12, $r_s = 0.304$, $p < 0.024$).

As regards the strategies, correlation again emerged (See Appendix for statistical table). Most notably, if teachers encourage students to help less proficient students, they provide remedial teaching as well. In class, teachers may place less proficient students in a particular group, use simpler material, and give them different homework. Teachers who use grouping strategy are also more likely to have low achievement students sit near the teacher in class, offer remedial teaching and extra tuition for those students as well as set smaller tasks or exercises and give them more time to finish. Likewise, teachers who design different tasks for less proficient students tend to give those students different homework from others, tend to find simple material or resources, revise core vocabulary frequently in class, use grouping strategies and provide extra teaching after class. The use of computer technology also correlates with the use of simple books and material for those less proficient students. Some negative correlations also emerge with regard to strategies: notably that those who like to give direct help to those less proficient students in class tend not to set different homework for them or give remedial teaching or rearrange sitting in class. Thus, the results seem to imply that these teachers like to stick to the plan that they already have, only providing clear guidance in class rather than making any changes to suit individual needs.

Table 2 summarizes further strategies mentioned in the open-ended section of the questionnaire. Comments are grouped into two parts, whose frequencies are indicated in brackets.

Table 2: Teachers' own strategies for helping less proficient students

Strategies already mentioned in the closed items	<ol style="list-style-type: none"> 1. Grouping students based on their English proficiency either heterogeneous or homogeneous. (32) 2. Encourage higher achieving students to help less proficient ones. (14) 3. Provide remedial teaching after class. (6) 4. Arrange different level of tasks for students to finish. (5) 5. Place low achievement students near the teacher or next to advanced one for monitoring. (3) 6. Give extra guidance to those who need it while teaching. (2) 7. Give extra attention to less proficient students in class. (2)
New strategies proposed by the teachers of this study	<ol style="list-style-type: none"> 8. Use bilingual repetition of classroom instructions. (1) 9. Use props or realia to get students' attention while teaching. (4) 10. Ask students questions according to their English proficiency. (3) 11. Ask homeroom teacher for help. (3) 12. Do easy tasks first, and follow up with some more challenging ones. (3) 13. Allow whole class performance first then require individual responses. (1) 14. Help them to build up correct concepts. (1) 15. Give higher achieving learners more challenges to accomplish. (3) 16. Allow higher achieving learners to choose whether to join or leave the class activity. (1) 17. Encourage advanced learners to read more. (1) 18. Apply mentor-mentee system in class (pupil-pupil). (4) 19. Encourage less proficient students to practice more. (4) 20. Assign a group leader or a teaching assistant in each group. (4) 21. Try to build up confidence in less proficient students. (4) 22. Ask less proficient student to do basic tasks only. (2) 23. Assign less written work but more oral practice for lower proficient students. (2) 24. Ask proficient students to read aloud, acting like a model for less proficient. (1) 25. Putting (reasonable) pressure on less proficient students. (1)

Most popular strategies, clearly, are very close to strategies covered in the provided statements (Items 1-7 in Table 2). Again, most frequently mentioned is grouping (item 1) based on children's English proficiency either heterogeneously or homogeneously. Also, a high percentage of respondents use peer support (item 2). Teachers encourage higher proficiency students to help less proficient ones. Several teachers considered this strategy to be very useful, and they believe that students learn better through peer teaching. The teacher is also taking an extra burden for remedial teaching after normal class time (item 3). Teachers set different levels of tasks for children to accomplish

(item 4). Several teachers give extra guidance (item 5) and attention (item 6) to less proficient children in class. Clearly, those children take up more of the teacher's attention in class.

The second part of Table 2 presents further strategies (items 8-25) which are provided by the respondents and are not included in the close-ended questionnaire. Future research might profit from including these as prompts to see if other teachers do in fact use them. They can be grouped as follows: program adaption (items 12, 23); bringing in extra resources (item 9); classroom instructions (items 8, 24); strategies beyond the classroom (item 11); grouping (items 13, 18, 20); positive reinforcement (items 14, 21, 25), and differentiated teaching (items 10, 15, 16, 17, 19, 22). Based on the responses shown in Table 3, it can be seen that these teachers did not contribute many strategies based on redesigning the teaching plans (items 12, 23). Most teachers tend to follow the fixed schedule instead of reconstructing their teaching plans for learners in a multi-level class. The reason for this may be that English teachers in primary schools are viewed as subject teachers; therefore, they only appear in the English class. Thus, they only have limited time to stay with the children. They may expect help from the homeroom teachers to review vocabulary and sentences for improving children's English learning. However, homeroom teachers are also quite busy; and it is unclear how much those homeroom teachers will do. This finding seems to indicate that these teachers prefer to ask the homeroom teachers for help rather than look for help from the parental side. It may be because of the availability and the convenience for looking helps from the homeroom teachers at school, while contacting with parents takes more time and may not as efficient as homeroom teachers do.

6 Discussion

As indicated earlier, primary school English teachers in Taiwan experience a certain degree of difficulty while teaching multi-level classes. However, the findings suggest that they seldom adopt any specific teaching strategies to solve the difficulty or to meet individual needs in class. Unlike whole class teaching, adopting differentiated teaching means extra workload. Nowadays, children have a great opportunity to engage in the English language from various resources before receiving school English instruction. They may have experiences from kindergarten, private sector, parental tutoring at home, English TV programs, English CDs, storybooks and so forth. Children, therefore, may have various levels of exposure to English when they come to school English classes. Thus, it will be very helpful if teachers have a general

understanding about children's learning backgrounds and preferences while teaching, as this would help teachers to revise curriculum and design materials which make teaching more efficient.

Primary level of English teaching is highly demanding. Within limited class time, teachers cannot always pay attention to individual children in class. Without significant guidance, sticking to the middle level would be the choice of most teachers would do. Yet, the needs between higher proficiency children and lower-level ones are quite different. Low achievement children will develop low motivation and will become shy when expressing themselves in class or even give up learning. If teachers apply different classroom management policies to students inappropriately, this can also cause extra trouble. For example, lower achievement students may think they only need to reach a lower standard rather than an average one. Other learners or even higher achieving children may think it is unfair and that they are being penalised because their English is better. Also, some studies (Artiles, 1998; Minow, 1990) show that students might feel they are being labelled through different tasks; thus, recognizing the differences among students needs to be handled in sensitively ways to prevent negative outcomes. Hence, teachers need to be careful while giving any specific instructions.

In this study, grouping is the most common teaching strategy used in class. In fact, grouping can be viewed as part of peer cooperation, that is, children can accomplish the task through working together. Some teachers also mentioned that children feel less stressed and learn better while working with peers. From teachers' side, it is also a good way to relieve teachers' working loads during limited class time. Researchers (Arthur, Gordon & Butterfield, 2003) also indicate that peer cooperation is truly useful and can develop a student-to-student support network. However, grouping needs more attention. Inadequate grouping strategies may not improve lower achievement learners' learning (Tomlinson, 1999; Todd, 1998), but flexible grouping can provide "better instructional match between students and their individual needs" (Heacox, 2002, p. 85). Thus, it is worthwhile for TEYL teachers to adopt different managerial skills while grouping children in mainstream classes for having better learning.

Finally, these teachers' background features in this study seem to have little or no impact on their strategy application. Teachers who have taught for longer years seem to use fewer teaching strategies. This may be because well-experienced teachers have already constructed their certain teaching frameworks which they think they do not

need to or are unwilling to change. It implies that the teachers may have different approaches for applying the teaching strategies that are not connected with their backgrounds which needs further investigation. Generally speaking, these teachers seem to stick to what they are used to doing and tend to not apply many instructions for children with various learning backgrounds and levels of English. Further studies may include more factors like schools, teacher training programs, class sizes or any information to examine the relationships among them.

7 Conclusion and Implications

It is inevitable that children receive English instruction before enrolling at primary schools in Taiwan nowadays. However, Taiwan's educational policy does not encourage school authorities to group schoolchildren by their English proficiency level which may also pose difficulties in implementation. Though differentiated teaching can be a good solution to this problem some students may not like to be treated differently. In addition, elements such as content, process, products and environment have been highlighted for teachers to differentiate (Tomlinson, 1999; 2000; 2001). In fact, there is no certain rule for successful teaching, thus, coping with mixed-level classes certainly needs to be a feature of teacher training.

Indeed, unlike the whole class teaching, differentiated teaching means extra workload for teachers. As Schumm and Vaughn (1995) point out that obstacles like time-consuming preparation, difficulties in applying different tasks in the whole class, hindering the progress of higher-achieving students while simplifying the curriculum may make teachers reluctant to implement differentiated teaching. However, the key to good teaching is to meet individual needs, teachers need to make more effort to the problem of teaching multi-level classes.

Apart from teachers' perception of dealing with multi-level classes, the educational authorities, no doubt, need to take seriously on this issue and to provide more teacher training programs to help TEYL teachers with this multi-level class teaching. It is also the key to keep constantly high quality of curriculum adaptation and classroom instructions, and to improve and maintain children's best interests in this early stage of learning English.

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Appendix

Spearman's Correlation between teachers' background and teaching strategies using for helping low achievement learners

	Spearman's rho	EDU	MAJOR	Years of TEYL	Yrs teaching YLs in primary school	Difficulty of teaching	Strategy 1	Strategy 2	Strategy 3	Strategy 4	Strategy 5	Strategy 6	Strategy 7	Strategy 8	Strategy 9	Strategy 10	Strategy 11	Strategy 12	Strategy 13
AGE	Correlation Coefficient	.126	-.047	.311(*)	.346(**)	-.174	.017	.036	-.074	-.180	-.258	-.082	-.032	-.055	.092	-.084	-.244	-.155	-.156
	Sig. (2-tailed)	.360	.735	.021	.010	.205	.899	.793	.594	.189	.057	.552	.818	.688	.506	.544	.073	.259	.254
EDU	Correlation Coefficient		.277(*)	.204	.245	-.201	.054	.160	.134	-.135	-.209	.088	.019	.099	.210	-.097	.041	-.012	-.025
	Sig. (2-tailed)		.041	.135	.071	.142	.695	.242	.330	.327	.126	.524	.890	.474	.124	.479	.767	.931	.856
MAJOR	Correlation Coefficient			.224	.158	-.027	.194	.035	.011	.203	-.027	-.082	-.258	.003	.075	.014	-.035	.304(*)	.181
	Sig. (2-tailed)			.100	.248	.847	.155	.801	.937	.137	.846	.550	.057	.985	.585	.920	.798	.024	.186
Years of TEYL	Correlation Coefficient				.682(**)	-.337(*)	.158	.061	.053	.155	-.195	-.025	-.160	-.053	.135	-.031	-.153	-.121	.066
	Sig. (2-tailed)				.000	.012	.249	.658	.702	.260	.154	.858	.243	.702	.328	.820	.264	.378	.632
Yrs teaching YLs in primary school	Correlation Coefficient					-.233	.130	.136	.074	.054	-.171	.056	-.072	-.145	.041	-.014	-.220	-.079	-.067
	Sig. (2-tailed)					.087	.342	.322	.593	.698	.213	.685	.603	.290	.766	.918	.107	.567	.629
Difficulty of teaching	Correlation Coefficient						-.024	-.165	-.119	.016	.088	-.107	-.170	-.017	.054	.066	.052	.075	-.079
Strategy 1	Correlation Coefficient							.548(**)	.242	.312(*)	.218	.338(*)	.021	.127	.321(*)	.399(**)	.141	.071	.270(*)
	Sig. (2-tailed)							.000	.075	.020	.109	.012	.878	.356	.017	.003	.304	.605	.046
Strategy 2	Correlation Coefficient								.412(**)	.082	.113	.276(*)	.198	.190	.128	.303(*)	.158	.184	.170
	Sig. (2-tailed)								.002	.550	.411	.042	.148	.164	.351	.024	.250	.180	.214
Strategy 3	Correlation Coefficient									.023	.299(*)	.041	.088	.192	-.004	-.041	-.061	.052	.148
	Sig. (2-tailed)									.867	.027	.765	.521	.159	.976	.765	.658	.706	.282

Linguistic Violence; A study of violence in the oral discourse of 9 schools in Tehran

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Abstract

In this paper I endeavor to define what is meant by Linguistic Violence then as an empirical study, I try to take some elements as representatives of violence in language and descriptively demonstrate their existence in the oral discourse in high schools. The existence of linguistic violence is a prime question that is put forth in this study; then proposed as a hypothesis, it will be tried to test with measurable elements if there are any possible correlations between linguistic violence and gender and also between linguistic violence and socio-economic status in the sample population. This research was done in 9 schools in 5 areas of Tehran, Capital of Iran, on 325 students between 15 to 18 years old whose first language was Farsi.

1 Violence in Language

1.1 Introduction

Violence, as such, has been worked on more in sociology, anthropology or can be found among psychological and philosophical works (Arndt, 1970); it is, however, a subject that is yet to contemplate in linguistics. Due to the vagueness of the meaning of violence and the contradictories over its applications, it has less intrigued the linguists even though there are already plenty of works on politeness, face and other peripheries in the interdisciplinary area of sociolinguistics (Lakoff et al, 2005). In this paper I try to theoretically challenge the definition of violence from linguistic point of view then in the informal spoken language in 9 high schools, I will demonstrate some linguistic and paralinguistic components corroborating the existence of linguistic violence in the oral discourse; then, I will try to measure if there is any correlation between linguistic violence and gender or socio-economic status.

Violence implies disapproval for many people and the question is why? What is violence? A philosopher like Arendt (1970) puts it in a way that is totally intermingled with power and power can seemingly be seen as the exertion of one's will over others (Lee-Chai & Bargh, 2001: 44). This will-power can be imposed in many ways, and from kind of perspective, violence can be easily pictured by many people, who are familiar with the scenes of beating, fighting and so on, as a physical damage to others or their properties (Torrance, 1984: 4). But the point here is if violence, per se, only occurs physically.

In regard to the definition of violence, one may encounter the restricted or elaborated one. Some scholars tend to define violence in a way that is a bit exclusive; therefore, some behaviors are not involved in the territory of violence. It can be simply accused of being used as a justification for the existence of violence: on the pretext of law and order or even self-defense. Besides, it can lead us to what Max Weber calls the

“exclusive privilege of the governments to use violence”, for instance (Wollin, 2004: 242).

On the other hand, there are scholars who believe that there should be an inclusive definition of violence not only to include physical harm but also to highlight non-physical hurt (Curtin & Litke, 1999); it should subsume a variety of violence ranging from “systematic” one which is the group violence or organized one to “individual” and also “overt” and “covert” forms of violence (Garver, 1968).

This extensive definition is also criticized by some people like Thomas Plott (1992) who believes that generalization of the referents of violence in the society may not help to reduce it. On the contrary, it might provoke violence to increase. Since the possible punishments for those violent behaviors raise a new streak of violence and it may justify the application of violence against violence.

To exceed the basic physical definition of violence, even though, it seems difficult to measure non-physical damages to a soul but most of us have experienced at least being exposed to an oppressive language, verbal abuse or even hurting tone. Therefore, I agree with William Gay who reiterates that broadening the definition of violence should embrace even the use of language as a tool to hurt people and it should be counted as violent behavior (O’Tool and Schiffman, 1997). Because of that it makes sense when we talk about the sexist or racist language due to this fact that they violate the social agreements of not using language in a way that hurts a group of people based on their race or gender.

So we can see there is an imaginary line or acquired regulations like the example of sexist or racist language to tell us what to use, where to use and how to use the language. And when we do not follow them we are supposedly violating the rules. Now the question is what these regulations are. This argumentation seems to go very far back in the history when Plato in *Cratylus* (1998: 160) tries to find an answer for it and he quotes Socrates talking about the “conventions and agreements” in language and his concerns about the truth.

When somebody is called names, what is in language that bothers them? Is it the truth behind the words like the argument that Socrates put forth about the changing the name of ‘horse’ and ‘man’ and use them in place of each other? He asks ‘what happens if we call a man a horse?’ Does it affect the truth about them? (Plato, 1998: 3) I totally agree with some scholars who believe that etymology of words and division of them into the groups of good and bad or evil can not explain why some words are considered malevolent or for example satanic (Ross, 1981: 195) Here it can be well recognized that the question is about the difference between **sense** and **reference**; something which was known as one of the achievements of Gottlob Frege (1952).

Frege tries to distinguish the difference between the truth conditions of an utterance and its sense when he simply asks how it would be possible that the true sentence of ‘A is B’ has more information than ‘A is A’. He sets the example of “**the Morning star is the Evening star**” and compares it to “**the Morning star is the Morning star**” (Beaney, 1997: 29). We can see easily that it is not just the referent that gives information but sometimes information lies just in the language itself. Here Frege

talks about the ‘*customary sense*’ and the difference between ‘thought’ and ‘assertion’ (Beaney, 1997 and Mendelsohn, 2005).

Although the distinction between sense and reference was not welcomed by Wittgenstein (1961) and his teacher Russell who believed that the sense is dependent on the truth value of the words (March Charles, 2004), Wittgenstein, later on, emphasizes the functions of the words in language and their effects on the sense regardless of the reference (Wittgenstein, 2003: 269). Therefore conventions and regulations, which Socrates was talking about, again, tremendously became the center of attentions. Quoted by Smith (2003: 282), it is believed by Wittgenstein that every time hearing a noun may bring a referent to mind but it would be definitely perceived differently in different situations.

So there are senses in each utterance which are not necessarily presented by the linguistic meaning of the utterance referring to the entities in the sensory world but can project itself into the world in a way that would be taken virtually true. Sometimes there is hidden information in the utterances like what is called Metinformation (Yokoyama, 1995: 18) or something associated with the denotative meanings like connotation or even some actions or feelings. That is the context which should be noticed and senses which human develops as his knowledge ruling over the situations.

As Austin (1962) questions the position of the speaker and asks if somebody is in the position to state the utterance, the question is about the hidden knowledge of conventions and agreements which are the constrainers of the domain of meaning. They provide the social boundaries that speakers acquire as their pragmatic competence.

To define linguistic violence I borrow Searle’s views considering meaning not only in the level of the proposition but also in the level of pragmatics which is the intention of an utterance and the intention of the speaker of the very utterance so violence can happen in all mentioned layers. (Searle et al, 1980)

1. 2 Linguistic Meaning and Pragmatic Meaning

With the insinuation of difference between the sentence meaning and speaker’s meaning (Strawson, 2004), we can illuminate how two simple utterances like ‘would you stop talking!’ and ‘shut up!’ have different effects in the different situations. One can imagine how more insulting would be, for instance, in a presidential debate a candidate says to another ‘would you stop talking!’ than the utterance like ‘shut up!’ which is used between friends in a friendly casual conversation.

Therefore the speaker’s meaning is totally under the influence of what we can call the *pragmatic meaning* bound by conventions which is among additional speculations in theory of meaning that Searle took from Austin’s philosophy (Miller, 2007: 257); that is, ‘what is said, what is heard, what is meant by that saying and what is taken by that’ are all dependent on pragmatic competence of the interlocutors. Consequently, I do not think that the speaker has a complete authority over the effect of his utterance. In interaction meaning is affected by many factors such as the cultural background of the participants, context’s influence or the perception of the hearer. As Beeman (1986:

19) says “individual’s creative use of their own language is ultimately the mechanism that determines meaning in interaction”.

To make it clearer, I can set an example; a person who is an English teacher once in her class tries to teach the word ‘gullible’ to the native Farsi spoken students who are learning English as their second language. Not getting hold of the meaning, they try to find an equivalent for it in Farsi and they say /golabi/. The teacher supposes that they do not get the pronunciation of ‘gullible’ very well and they are mixed up, so she repeats the pronunciation and tries to set examples again but students were well understood by its equivalent which was totally new for the teacher herself. The students were using the slang form of the word in Farsi that teacher was not aware of. The word /golabi/ literally means pear but the new connotation of it has been recently used as a person who is naïve and gullible.

So no matter what the intention of the speaker is, it would not be enough to guarantee a proper understanding. However we can claim that interpretation always is there with the hearer, even though they do not grasp the intention of the speaker as he wishes. So there is a necessity at least to consider the conventions and their influence on the meaning to reduce the level of ambiguity and misunderstanding. Thus, ‘using the expressions according to the conventions may help the illocutionary effect’ (Miller, 2007: 257).

At this point we can say the linguistic meaning or pragmatic meaning of an utterance are two dimensions that in the definition of linguistic violence should be paid attention to. Without the proper transfer of each one of them the communication will not be successful. Besides, what we call misunderstanding happens when one part of this complex is missing.

Suppose a kid humming and uttering “*lala la lalalala la la laaaa*” enters the classroom when he is late and teacher is in the middle of his lecturer. The utterance doesn’t have the linguistic meaning and supposedly the kid does not have this intention to interrupt the teacher or disrespect anyone, but the teacher gets upset and sort of offended. This is the situation and convention of ‘not humming in the class’ or ‘not interrupting the teacher’ which is dominant here and gives the impression of violation of the conventions in the context of teacher-pupil relationship. It is what I mean by pragmatic meaning.

Second example would be more common to conceive of. Imagine a situation, usually in a friendly atmosphere, in which someone imitates someone else’s utterance in a distorted babbly form in order to make fun of them. So the utterance again may not have a linguistic meaning but has got pragmatic meaning of an insult so the use of it in order to insult someone is a linguistic violence. Therefore either according to conventions or violating the conventions, sometimes there are senses in discourse that insult the hearer which are called violence in language.

1.3 Linguistic Violence

Since the definition of Linguistic Violence should be comprehensive then some pragmatic points should be mentioned. Even though some words in the dictionaries are labeled as disapproval, taboos and so on, they are widely used by many in the so-

called non-disapproving situations. However we can not ignore the fact that, generally speaking, there are some overall agreements that the majority of people tend to follow and they usually teach their children to avoid those expressions.

So we can see why people at one level label some words as taboos and at the other level sometimes they use them not as taboos. Semantically speaking for example they do not want children to use such words and pragmatically speaking they like them to know where to use them! With regard to linguistic violence, then, we can have some semantic and pragmatic levels.

Therefore, semantically we can quite easily talk about the dictionary meaning of the so-called offensive expressions but it pragmatically seems very difficult to put the linguistic violence into realization. It would be easier to name the semantic agents of violence in language but to be more precise we need add some pragmatic conditions to actualize semantic violence in the situations.

I would like to adopt the combination of Grice's view (Miller, 2007, 249) and Searle's analysis of the speech act in his book "the Philosophy of Language" (1979: 46) and define the linguistic violence as follows:

A verbal behavior of a person, **A**, in producing an utterance, **X**, addressing the audience **B** can be called linguistic violence if there is an intention **Y** in **X** tending to hurt **B**'s feelings under the condition of:

1. According to the conventions, **X** and **Y** or either of them is not normally used in that situation, or
2. Conventionally or non-conventionally, **Y** is used to hurt **B**'s feelings.

So it can be defined in this way that *Linguistic Violence can happen in terms of producing discourse which is or is not compliant with the conventions viable hurting an audience in a way that it is semantically or pragmatically recognizable*. Some may think of it as marked behavior and I can not really endorse this idea because sometimes it seems right when some non-semantically known violations like shouting at people can be controversially justified as a convention, for example, in military service. On the other hand, some semantically known violations like verbal abuse can not be simply ignored even if they are used expectedly in places like prisons.

The emphasis on the existence or lack of conventionally accepted behavior is because it is an important condition of the recognition of linguistic violence which seems sort of subjective and unfathomable to assess. It can be used as a reason to call a verbal behavior violent or nonviolent. Misunderstanding, for instance, may happen when somebody is not fully aware of the situational meaning but it doesn't excuse the utterance from being judged as being linguistically violent. So some linguistic or paralinguistic constituents of an utterance are semantically or pragmatically assumed to provoke linguistic violence.

Therefore in the study that I am presenting, to be more objective, I will choose some elements from linguistic and paralinguistic aspects ranging from phonology to even a social phenomenon which are used in the realm of language like 'interruption' as representatives of violence in language.. So linguistic violence can happen in different levels from phonology to pragmatics; a suprasegmental feature like the tonal contour

of an utterance can explain 'shouting' under the title of violence, for example, or pragmatically it is explainable why swearing at somebody is taken as violence, and the lack of some verbal actions like 'apologizing' when it is conventionally needed may be considered as the violation of convention, or linguistic violence. Surely there must be more examples of linguistic violence than what are considered in this study but as to working on the oral discourse in the high schools, after piloting studies and an observation, the following indices of linguistic violence have been chosen:

1. Interrupting 2. Contemptuous hurting tone 3. Not apologizing (defying the acknowledgement of an insult) 4. Shouting 5. Threatening, 6. Cursing (to invoke evil), 7. Bossing (to order aggressively to do or not to do things) 8. Mocking (calling names and putting nicknames) 9. Swearing (using offensive words)

The abovementioned representatives of linguistic violence are chosen to prove the existence of linguistic violence. So this study is conducted to examine the existence of these elements according to the definition of linguistic violence and their relations with gender and socio-economic status.

2 Linguistic Violence, Gender and Socio-economic status

2.1 Introduction

The presenting research is conducted among native Farsi students in Tehran in order to demonstrate the existence of the abovementioned elements in the verbal discourse permeating in high schools to test the hypothesis of any correlations between language violence and gender, and also between language violence and socio-economic status of the subjects in this study.

What is meant by gender in this paper is obviously about the difference of sexes, male and female in their social behavior which is not necessarily derived from their biological differences (Moi, 2005: 4); moreover, socio-economic status is here used as a sociological term for the social position of a person according to their income, education, job and their social network which are among the indices to determine the socio-economic status (Demarest, 1993).

The subjects were chosen in the high schools of 5 areas in Tehran. The areas were deliberately selected on the basis of the reputation of public violence and economic level of average income out of 22 municipal districts of Tehran. The first problem in gathering data was the lack of enough reliable information about the average income of people living in different areas but any general observation may make it possible to find the obvious gap between two geographical poles in south and north of Tehran and between districts 1 and 20.

The complications of the formalities in getting an administrative permit to gather data forced me to ask many high school principals for help and on the whole more than 400 hundred students voluntarily participated in the research. Due to the obstacles of legal measures, not in all schools was observation made and perhaps the foremost problem was the system of single sex policy of education in Iran that hindered the

progress of research and made it difficult for me to observe and question freely the female subjects.

The whole process of research took more than 7 months and more than half of this time was spent on gathering data and analysis. In this research the schools are all state schools and no private ones were taken into consideration.

Before going through the process of data gathering and analyzing the correlation between linguistic violence and gender and between linguistic violence and socio-economic status, there is a need to explain how the representatives of violence are certainly chosen in language to be called linguistic violence and as it was told before two factors of conventionality and hurting feeling conveyed by utterances were considered. Primarily a public opinion survey could show the expectations of the parents whose children are school goers and more significantly the feelings and thoughts of the students themselves about the elements would be credential. We might somehow reach this result that there is a permeation of the use of these elements in the schools but it doesn't justify their non-violent effects and still there can be a dispute on their impacts on the children and their psychological development as well as the educational results.

A short questionnaire with three quick questions was asked from 31 people, 19 women and 12 men all over 30:

1. Do you think that language can hurt?
Yes No I don't know
2. Do you think mocking, calling names, threatening and cursing happen in the schools?
Yes No I don't know
3. Do you expect your children to expose themselves to the mentioned behavior?
Yes No I don't know

The purpose of the questions is just to see if parents have any idea what is going on in the schools and what their expectations and presuppositions are. We can interpret that the result would be the cultural view of people on the oral discourse and a comparison between what is expected to happen in the schools and what is really happening there.

90 percent of people replied 'Yes' and 3 percent said 'No' while 7 percent answered 'I don't know' to the first question. 87 percent said 'Yes' to the second question whereas 13 percent chose 'I don't know' and nobody answered 'No'. Regarding the third question, 96.5 percent of answers were 'No' and 3.5 percent were 'I don't know' while nobody said 'Yes'.

In short, the result is that the majority of people who were interviewed believed that language can hurt and they think that some verbal misbehavior, which I prefer to call linguistic violence, happens in the schools and they do not like their children to be exposed to this kind of sociolinguistic behavior.

Consequently, a series of questions were designed to ask students themselves about the violence in the oral discourse of schools and also to get enough information about socio-economic status of their family to compare linguistic violence with them.

2.2 Data Gathering Process

After piloting the first questionnaire the result indicated that students were reluctant to answer some questions which were directly put forth. For example they did not answer the questions about the family income or their parents' occupations or even their parents' educational background directly. So in the second questionnaire, instead of straight question of income, *the number of family members* and *the area of the living place* of them were asked as the indicators of the economic status. Then for the social status just the parents' educations were asked through the four choices of *having no or little education, having graduated from the junior high school, having graduated from the senior high school or having studied in college or university.*

Learning from the experience of the piloting, to encourage the students to participate in the survey, instead of having multiple choice questions, a series of a yes-no question was designed only in one page. The reliability of questions was tested by the Scale Alpha test and the result was acceptable.

The questionnaire with 36 items was distributed among 400 students in 9 schools in 5 areas of Tehran, municipal districts of 2, 3, 5, 15 and 20.

To validate the existence of each element of linguistic violence in the oral discourse of high schools, the relationship between the students and the school board (particularly teachers) and also the linguistic behavior of students themselves were emphasized. And due to the prediction of use of data for other purposes, more questions were specified to the so-called dirty words in the speech of students.

The whole process of the practical study and data gathering took more than 5 months and from 400 subjects only 325 of them were recognized valid to analyze.

2.3 Data Description

The purpose of the study, as mentioned above, is to test the hypothesis of the existence of linguistic violence and to find out any possible relations between violence as a linguistic variable and gender and socio-economic status as social variables.

Therefore the elements of linguistic violence are called dependent variables and social factors are called independent variables.

2.3.1 Independent Variables

The sample population contains 175 girls and 150 boys all between 15 to 18 years old going to state senior high schools. The figure and table 2.1 are indicating the distribution of gender in the sample population:

Table 2.1: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	girl	175	53.8	53.8	53.8
	boy	150	46.2	46.2	100.0
	Total	325	100.0	100.0	

Figure 2.1: Gender

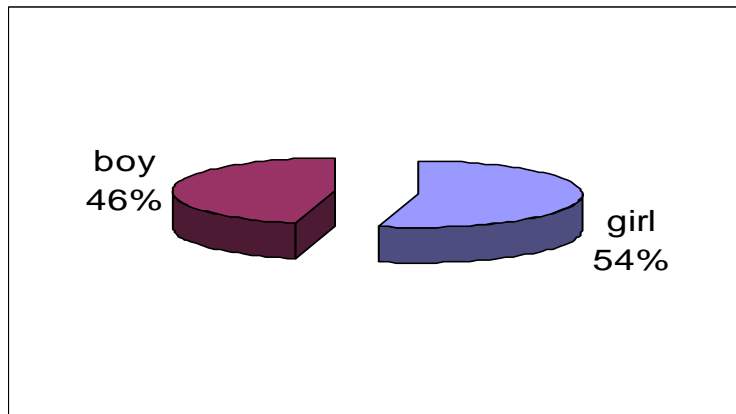
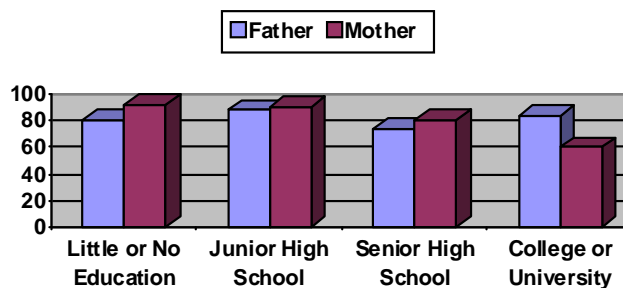


Figure 2.2 indicates the distribution of education among the parents of subjects in the sample population:

Figure 2.2: The distribution of education among parents



The table 2.2 shows the average meter square of the area of the living place of the subjects, according to which the standard deviation helps us to categorize the whole sample population in 4 groups in the table 2.3:

Table 2.2: The mean of the distribution of the area of the living places

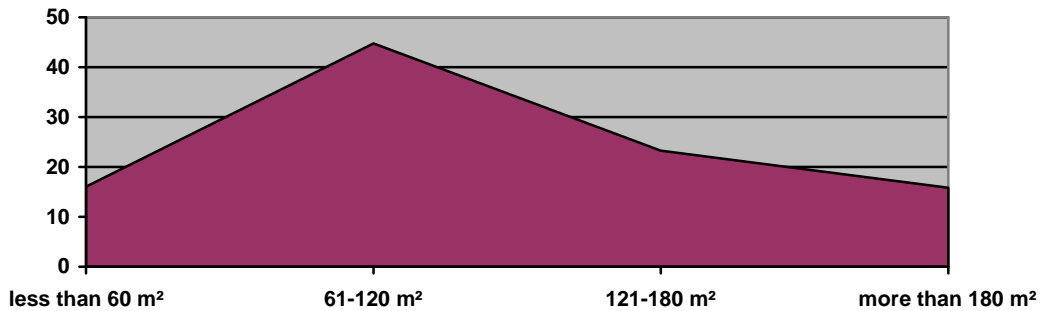
	N	Minimum	Maximum	Mean	Std. Deviation
How big is your living place?	322	18.00	400.00	123.1925	63.46193
Valid N	322				

Table 2.3: The distribution of the area of the living places

	Area of the living place	Frequency	Percent	Valid Percent
Valid	<i>Less than 60 m²</i>	52	16	16/15
	<i>61 – 120 m²</i>	144	44/31	44/72
	<i>121 – 180 m²</i>	75	23/08	23/29
	<i>More than 180 m²</i>	51	15/69	15/84
	<i>Total</i>	322	99/08	100
Missing	<i>System</i>	3	0/92	
	Total	325	100	

Figure 2.3 shows the maximum and minimum of the distribution of the living places' areas among the sample population:

Figure 2.3: The distribution of the area



The average number of the members of the families is 5 people (it is rounded up) so according to the table 2.4 we can have at least two big groups of the subjects:

Table 2.4: Two main groups of subjects according to the number of the family members

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<i>5 or Less</i>	207	63.7	63.9	63.9
	<i>More than 5</i>	117	36.0	36.1	100.0
	<i>Total</i>	324	99.7	100.0	
Missing	<i>System</i>	1	.3		
	Total	325	100.0		

2.3.1.1 Socio-Economic Status

The area of the living place of each subject, the number of family members and the education of parents are three elements taken as constituents of socio-economic status of the subjects. Consequently, we have four groups based on the area of their living place and the number of the family members. As it was shown in the table 2.2 the

mean of the areas has been 123 m² and the average number of the family members according to table 2.5 was 5. Therefore the categories can be as follows:

- 1) **low:** the subjects living in the area smaller than 123 m² with more than 5 people in their families
- 2) **mid low:** the subjects living in the area smaller than 123 m² with 5 or less than 5 people in their families
- 3) **mid high:** the subjects living in the area bigger than 123 m² with more than 5 people in their families
- 4) **high:** the subjects living in the area bigger than 123 m² with 5 or less than 5 people in their families

Now we can see if there is any correlation between these categories and the distribution of education among the subjects' parents. Accordingly there is a direct linear relationship of the categories above with the education of the subjects' parents; that is, the higher the level of the economy, the more educated parents.

Therefore the categories can be called the levels of the socio-economic status since there is a direct linear relationship among three elements taken as socio-economic factors in this study. But to see if the result of this correlation matrix is reliable enough, there is a test on its significance level called Chi Square test which is taken to test the reliability of the result. This test proves that with the significance level of less than 0.01 the reliability of the test is more than 99 percent.

2.3.2. *Dependent Variables*

a. interrupting:

Around 79 percent of the subjects say they are interrupted by their classmates and 62 percent of them say they are also interrupted by their teachers. (They explain that interruption is an activity of getting to their nerves since they can not complete their talk and they are prevented to finish what they wanted to say.)

b. apologizing:

To answer the question if the students usually *apologize* when they insult their mates, almost 69 percent of them replied 'yes' to the question whereas they answered the same question about their teachers differently. More than 56 percent of the sample population believes that the teachers do not apologize when they insult their students. (In this study expressing no apology while it is conventionally needed is considered violence.)

c. contemptuous tone

More than 81 percent of the subjects believe that some teachers have contemptuous tone towards them while 79 percent of them say their principals have also the same manner behaving towards the students. (When the students were asked what is in the talk that they feel contempt, they say it is a quality which is hard to explain. The tone and utterances bother, but it is difficult to say what is there to bother.)

d. threatening

Around 54 percent of the subjects claim that 'threatening' (the question was about the threat to fight among students) is used by students in the high schools and more than

67 percent of them believe that ‘threatening’ is not only common among students but teachers use it against students too. The threats that teachers use, were told by the subjects, are related to the education and failure in the exams.

e. shouting

More than 68 percent of the subjects confirm that the students shout at each other and 94.5 percent of them claim that their teachers shout at them; meanwhile, almost 83 percent of the subjects say shouting is hurting and do not like to be shouted at.

f. cursing

Only 30 percent of the subjects claim that they were exposed to be cursed by their teachers and slightly less than 20 percent of them say ‘yes’ to the question if they have ever been exposed to be cursed by their principals. However, the examples of cursing in the oral discourse of the high schools are remarkable. 90 subjects gave 117 instances of cursing among which 53 percent are used by teachers and principals wishing the students’ harm and 47 percent of them are used wishing the students’ educational failure. Some of the typical evil wishes are: “I hope you drop dead”. “I hope I see your mother crying on your grave”. “I hope you fail in your exams”.

g. bossing

The common issue in the high schools which can catch the eyes in the first sight is bullying among students and in this case, the verbal aspect of this phenomenon, bossing, is relevant to the study; however, just 26.5 percent of the answers confirm the existence of such behavior among students. On the other hand, more than 84 percent of the subjects claim that they are exposed to the bossy behavior of their teachers.

h. mocking

When the commonness of mocking was asked from the subjects, more than 73 percent of them agreed that it is permeated among students in the high schools, moreover, around 77 percent of the subjects complained about the negative effects of it on their feelings. More significantly it is the response of the subjects to the use of mocking by the teachers; according to this survey, more than 77 percent of the sample population believes that teachers mock the students in the schools.

i. swearing

More than 68 percent of the replies to the commonness of swearing in the high schools were ‘Yes’ and 80 percent of the subjects believe that they will get furious when they are sworn at. 54 percent of the sample population says that it has happened to them to start fighting because of being sworn at. Moreover, this study shows ‘swearing’ does not occur just among students, 66 percent of the subjects claim that they have been exposed to such behavior exerted by their teachers.

2.3.2.1. Correlations of the Dependent Variables

To answer this question if there are any correlations among dependent variables, a test called Pearson Correlation Test was taken and the results designate that with reliability of 95 percent in most cases and the reliability of 99 percent in some cases; there is a direct linear relationship among variables except for ‘apologizing’ which has an inverse linear relation with others. (This inverse relation is expected here since the lack of apology in this study is a reference to violence.)

3 Analysis

3.1 Linguistic Violence

Since the questions in the questionnaire are ‘yes-no’ ones, ‘No’ can be taken **zero** and ‘Yes’ can be taken **one**, so that the mean of the two poles can be a measurement to show the tendency of the subjects to each choice. As to questioning the existence of the dependent variables as linguistic violence in the oral discourse of the high schools and the students’ feelings towards them we can use a statistical analysis and put the results in the table below:

Table 2.5: Group Statistics: Dependent Variables

	N	Mean	Std. Deviation	Std. Error Mean
Interrupting	318	.7044	.34263	.01921
<i>Not</i> Apologizing	322	.5637	.36789	.02050
Contemptuous Tone	321	.8069	.31387	.01752
Threatening	322	.6056	.35260	.01965
Shouting	325	.8190	.22936	.01272
Cursing	319	.2476	.36314	.02033
Bossing	325	.8462	.36136	.02004
Mocking	325	.7115	.19712	.01093
Swearing	325	.6036	.14861	.00824

As it is seen in the table 2.5 there is a positive inclination in each item toward ‘yes’ except for ‘cursing’. The average value of ‘cursing’ is lower than 0.5 and it can be explained because of either its occurrence which is normally lower than others or the result which is most probably affected by the lack of enough data to analyze. Furthermore, in this table the shortage of ‘apologizing’ is taken into consideration not the ‘*apologizing*’ itself. To rely on the results of the calculations the One-sample test can test the reliability of the findings. This test clarifies that with regard to the significance level in the test, we can say the reliability of the results is considerably more than 99 percent.

3.2 Linguistic Violence and Gender

As it was done for the occurrence of all dependent variables in the data, the same statistics can be tested to assess the tendency of each gender to each dependent variable. In the table 2.6 the average value of ‘Yes’ and ‘No’ to each question was measured based on the gender of the subjects.

Table 2.6: Group Statistics: Dependent Variables * Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Interrupting	<i>Female</i>	172	.7616	.31276	.02385
	<i>Male</i>	146	.6370	.36446	.03016
Apologizing	<i>Female</i>	173	.4653	.33491	.02546
	<i>Male</i>	149	.6779	.37251	.03052
Contemptuous Tone	<i>Female</i>	174	.8247	.30320	.02299
	<i>Male</i>	147	.7857	.32583	.02687
Threatening	<i>Female</i>	173	.5000	.33671	.02560
	<i>Male</i>	149	.7282	.33127	.02714
Shouting	<i>Female</i>	175	.8333	.21811	.01649
	<i>Male</i>	150	.8022	.24147	.01972
Cursing	<i>Female</i>	172	.1860	.34239	.02611
	<i>Male</i>	147	.3197	.37447	.03089
Bossing	<i>Female</i>	175	.8571	.35093	.02653
	<i>Male</i>	150	.8333	.37393	.03053
Mocking	<i>Female</i>	175	.6994	.19402	.01467
	<i>Male</i>	150	.7257	.20040	.01636
Swearing	<i>Female</i>	175	.5933	.13273	.01003
	<i>Male</i>	150	.6156	.16487	.01346

To test the reliability of the results, another test called Independent Samples Test was taken, and it was concluded that the results in some cases are trustworthy with the reliability of 95 to 99 percent and the other differences between female oral discourse and male oral discourse are not reliable enough to be remarkable. As it is shown in the table above, differences between girls and boys in the oral discourse of the high schools are just credible among variables *interrupting*, *apologizing*, *threatening* and *cursing*. The rest of differences because of the low significance level can not be reliable so they are not meaningful.

3.3 Linguistic Violence and Socio-Economic Status

To test the correlation between linguistic violence and socio-economic status, the independent variable with each dependent variable separately is tested in a non-parametric test called Spearman to see if there is any meaningful relation between them. According to the results only two relations are meaningful *threatening* with 99 percent of reliability and *cursing* with 95 percent of reliability. Their relations are direct linear relationship.

4 Conclusion

I would like to interpret from the results of the study that according to the data analysis and with a cautious conclusion based on the questionnaire taken from the sample population:

1. As it is indicated in the table 2.6, except for *cursing*, the existence of dependent variables is confirmed by the majority of the subjects; in other words, with caution we can claim that the majority of the students believe the elements of linguistic violence exist in the oral discourse of the aforementioned senior high schools.

2. According to the analysis of this study, based on the data gathered from the sample population although there are differences in the average occurrences of the dependent variables among boys and girls, there are only four meaningful differences reliable enough recognized to be mentioned. According to the results it can be concluded that

A. *Interrupting* occurs more among female subjects rather than male subjects or we can say in the female-only high schools rather than the male-only high schools

B. *Apologizing* occurs less among female subjects as it does among male subjects which can be inferred it happens less in the female-only high schools in comparison to the male-only high schools

C. *Threatening* happens more among male subjects as it does among female subjects and it means it happens in male-only high schools more than female-only high schools

D. *Cursing* although has the low average of occurrence comparing to other variables, according to the findings we can still come to this conclusion that the rate of occurrences of *cursing* in the oral discourse of male-only high schools are more than female-only high schools

3. In regard to the results, we can cautiously claim that in the sample population there are two dependent variables having correlations with socio-economic status and correlations of the rest are not significant. Therefore we can conclude that there is a correlation between linguistic violence and socio-economic status only in two dependent variables:

A. The rate of the occurrence of *threatening* shows the correlation with socio-economic status in a way that *threatening* is more mentioned by the subjects who are considered being socio-economically in a better situation than others. We can cautiously state that in the oral discourse of the sample population involving interlocutors with higher socio-economic status, it is more probable in order for *threatening* to happen because there is a direct linear relation between these two variables.

B. Even with the low average value of the occurrence of *cursing*, the correlation between this variable and socio-economic status can not be dismissed on this ground. So we can conclude that there is a direct linear relationship between them and based on the data analysis it can be stated that the higher socio-economic status is, the more likely it is that *cursing* occurs.

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An Analysis of Politeness as Function of Speech Acts (SAs) and Target Reader in Print Medical Advertising

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Abstract

The current paper is an empirical study of politeness as function of SAs and target reader. Starting from the premise that politeness strategies establish the type of relation between the advertiser and the receiver determining the degree of imposition, this analysis will draw on the relationship between the type of SAs and the resulting politeness in a corpus of 45 randomly selected leaflets in English addressing heart surgeons worldwide and consequently, on the type of language employed in order to persuade the target consumers to purchase the products. We investigate the choice of SAs and demonstrate that the target reader variable [-Power] induces awareness of a distant professional environment and consequently employment of non-impositive SAs specific for [+Distance] negative politeness and deference. Linguistic characteristics specific for medical advertising (M-spec) as opposed to general advertising (A-spec) are also pointed out. Finally, we suggest that advertising to cultures that attach greater importance to positive politeness might benefit from a more positive approach.

1 Introduction

1.1 Politeness theory

According to major studies of politeness (Lakoff, 1973; Leech, 1983; Brown and Levinson, 1987; Ervin-Tripp, 1976; Blum-Kulka, 1987; Ide, 1989; Fraser, 1990; Kasper, 1990), linguistic expressions display different degrees of politeness. Leech (1983) provides a set of principles to account for linguistic politeness whereas Brown and Levinson (1987) use Goffman's (1967) concept of "face" to explain the politeness phenomenon. Face refers to the "public self-image that every member [of a society] wants to claim for himself" (Brown and Levinson, 1987: 66). To maintain the other's face means to recognize and respect the claim members of society make with respect to each other in interaction. The act of communicating such an acknowledgment is politeness.

Face (Brown and Levinson, 1987) is assumed to be of two types: positive face, or the want to be approved of by others, and negative face, or the want to be unimpeded by others. Acts that run contrary to these wants threaten the face of the speaker (e.g. apologies) or the hearer (e.g. requests). Certain acts of politeness, such as orders or requests, are intrinsically face-threatening (FTA) and thus require strategic redress.

The choice of appropriate polite expressions in a given context depends on a number of factors which Brown and Levinson have reduced to a simple formula: $P = \text{Distance (D)}$ of the speaker and hearer, the relative power (P) between them, and the absolute ranking (R) of the imposition in the particular culture.

1.2 Speech Acts (SA) and Politeness. Negative Face

1.2.1 Speech Acts

The seminal influence in the development of SA theory was brought by the philosophers Austin (1962) and Searle (1969) who distinguished among representatives, directives, commissives, expressives and declarations, each with different illocutionary forces (IF)¹(e.g. directives can have different IF, varying from wishes to orders).

From the point of view of politeness, representatives and commissives are inherently polite since their illocutionary point² is to represent reality (e.g. state, report, assert, announce) and to create an obligation in the speaker, respectively (e.g. promise, offer, etc). Expressives (e.g. thank, congratulate, praise, etc.) are also courteous and involve positive politeness.

Directives (e.g. order, request, recommend, suggest) are inherently eliciting speech acts (Leech, 1983), their illocutionary point being defined as the speaker's effort to get the hearer do something. Orders or requests, which try to influence the hearer to perform an action for the speaker's benefit have been termed *impositives* (Havertake, 1984). When the distance between speakers is reduced, directives are legitimate. Eliciting directives in which the result of the action is supposed to be primarily beneficial to the reader/consumer, such as recommendations and invitations, are *non-impositives*.

According to the cost/benefit to hearer and the amount of choice the speaker allows hearer to perform or reject an action, the directive force is reduced from bold imperatives which deny choice, to indirectness and tentativeness. People either resort to positive or negative Face saving strategies (Brown and Levinson, 1978) or they may choose not to do the FTA at all and have their needs recognized by others. Positive face represents the want to be approved of by others and the receiver is considered socially close, a friend. It allows imposition and is encoded through strategies of solidarity, alignment, similarity and flattery.

1.2.2 SAs and Politeness in Advertising.

In advertising, ads employing positive politeness express a friendly tone. Similarly, imposition through orders and requests, as well as concepts such as "this product is specifically for you", are based on solidarity and intimacy, and do not attempt to distance

¹ FORCE – illustrates the degree of a speaker's involvement in what is uttered, e.g: an order and a request have similar illocutionary points, i.e. goals, but different force (Mey, 1993).

² Point – represents the goal, i.e. the point of giving an order is to make somebody do something; the point of a descriptive act is to represent reality (Mey, 1993).

S from audience (Hardin: 74). Conversely, negative face represents the want to be unimpeded (lack of orders and requests) and implies freedom of action. It is encoded through informational load (i.e. representative SAs), and formal indexicals or no reference to the target consumer at all (i.e. no response seeking, absence of the bond construed to achieve a friendly attitude) or strategies that allow options (i.e. disallowing impositive SAs) and overtly communicate the freedom to decide. In advertising negative face expression takes the form of distance from the reader, avoidance of imposition (requests, orders), use of formal indexicals and expression of notions such as “this is what the product does”.

In the following example an indirect assertive SA performed instead of an eliciting FTA allows the target specialist freedom to decline the offer, since the advertiser has made the greatest effort in terms of *negative face concern: assertion* - “The most trusted injector. The Mark V Plus Injection system for any patient, any procedure, any place”(MarkV Plus). Occasionally the advertiser can choose the other extreme: to go on the record baldly and make no effort to minimize threats and imposition, i.e. take no redressive action: “Buy X. Try now and experience yourself” (Holten). This is frequently the case of medical advertising directed to end-users (M-spec) when our positive image and desires to be unimposed are challenged, as in the following government campaign advertising e.g. “Speed kills, so does AIDS. Slow down!”.

2 Method

2.1 Corpus and target reader

We will draw on the relationship between the type of SAs and the resulting politeness in a corpus of 45 leaflets in English, addressed to heart surgeons worldwide, randomly selected from the library of the Institute of Cardiovascular Surgery and Transplantation from Targu Mures, Romania. The corpus was subdivided into body-copy and headline according to their clear-cut difference in grammatical realization: discursive grammar (declarative, imperative clauses) in the copy versus disjunctive grammar (DG) in the headline (NGs and fragments - minor and non-finite clauses), as well as function, i.e. substantiate product claims versus attract attention.

2.2 Hypothesis

The target reader variable [-Power] induces awareness of a distant professional environment and consequently employment of non-impositive SAs or eliciting directives of lower IL force, specific for [+Distance] negative politeness and deference.

2.3 Scope

Several other linguistic characteristics of medical advertising (M-spec) as opposed to general advertising (A-spec) at SA level as well as at the level of other pragma-linguistic categories (indexicals, discursive versus disjunctive grammar) are also pointed out.

Finally, we suggest that advertising to cultures that attach greater importance to positive politeness might benefit from a more positive approach.

3 Analysis

3.1 Eliciting versus Non-Eliciting Speech Acts of the Copy

For statistical purposes we have counted the presence/absence of a speech act per copy and not repetitions. The general SA distribution and their contribution to persuasion/politeness are illustrated in the following table:

Table 1: Distribution of speech acts in copies of medical leaflets and their force

reliability	higher commitment	more polite, motivated
Representatives	Commissives	Directives
↓ Assertions 100% Reports 68.2%	↑ Statements 8.8% of loyalty Guarantees 4.4%	↑ Suggestions 20% Instructions 15.5%
↓ Announcements 13.3%	↑ Promises 24.5% Offers 26.5%	↑ Orders 35.5% (recommendations, requests)
Higher importance, force	binding	less polite, eliciting

3.1.1 Representative SAs

Representative SAs entertain the idea that the information presented in the copy is true, exact and important. Their employment articulates the greatest effort in terms of negative concern for the consumer. With no exception this is the communicative intent of all the examined leaflets (see table 1).

Assertions articulate the informational intent, whereas reports highlight that the asserted information is not subjective claim but exact knowledge based on experience, trials and tests.

Reports are expressed through: a) declarative sentences: “*Laboratory tests demonstrate superior needle penetration*” (Sharpoin) with perfect tense verbs: “The experience results from 800,000 implantations with GORE-tex. Examenable results have been documented in 230 scientific papers” (Gore-tex); the verb “report”: “Some minor localized effects such as burning, stinging and itching have been reported” (Bactroban); b) non-finite clauses: “Proven ‘surge’ quality platelets” (pcs plus – Haemonetics). Although the report force in Sharpoin ad above is also computed on lexical grounds, the difference in IL force between assertions and reports (Hardin, 2001) seems to be bound to present-ness in assertions and perfect-ness in reports: e.g. *Report*: “Ansell Medical has been involved in

the development and research of latex products for almost 90 years” versus *assertion*: “Because latex surgical and examination gloves are (*assertion*) one of the healthcare workers’ first line of defence against infections, glove use has significantly increased (*report*) in recent years”.

Announcements are similar to introductions (commissives) but applied to products instead of persons and function as attention-getters. When present, announcements are articulated in shorter sentences than the adjacent linguistic context in order to achieve rhetorical contrast and thus fulfill their basic function. The most common SA verbs in announcements were: “present”, “introduce”, and “announce” in discursive or disjunctive mode (i.e. groups, non-finite clauses, etc.): “Toshiba now presents super HG”; “Sharpoint introduces the ultra –SCS skin closure system”; “Today, yet another revolution is occurring”...”Announcing the St. Jude Medical mechanical heart valve”.

3.1.2 Commissives

Commissives represent the utmost evidence of politeness as they create an obligation in the advertiser, binding them to the claim veracity. Unlike in commercial advertising (Hardin, 2001), commissives expressed as offers, promises, and guarantees and negatively as disclaimers, are frequently employed (see table 1) (M-spec).

Moreover, in commercial advertising *offers* (free gifts) are construed as false, their purpose being primarily that of attracting attention. In medical advertising offers for sponsorship, courses, etc. are real: “The Company’s Educational Group sponsors an Autotransfusion training course for physicians” (Electromedics). Were it not for their frequent lexicalization as “offer”, indirect offers would resemble announcements, introducing important characteristics of the product: e.g. “[Carbofilm]...offers excellent reliability, high quality levels...”; “The mitroflow pericardial heart valve offers superior performance for the older patient”.

Promises have a higher illocutionary force and in medical advertising they do not express general ideas but commit advertisers and companies to a definite future action. In our corpus promises were encoded as: declarative sentences employing: a) “will”- “As far as your assistants are concerned, you will score a real hit” (Jaeger); b) conditional promises: “Just describe your application and they will suggest the right centrifuge” (Eppendorf).

Guarantees. Advertising is not a proper medium for guarantees since the IL force of guarantees is stronger than that of promises and it does not give advertisers freedom to make unsubstantial claims. However, guarantees (M-spec) were either lexicalized in medical advertising as in: “You get a versatile information system... and a guarantee” (Current Contents), or disjunctive grammar can represent a bypass: Noun Group: “Your guarantee for reliable and professional centrifugation” (Eppendorf). Frequent testimonials in the form of endorsements by famous international specialists in the field, though subjective, are also intended to serve as guarantees of good performance.

Another register-specific commissive with the force of a guarantee is *the statement of loyalty* meant to build the consumer's confidence in the company professionalism and dedication (M-spec). This statement is made in an impersonal form, not having the force of a declaration. It is written in fine print like disclaimers, presumably meant to be covertly communicated by flouting relevance, i.e. to be interpreted as less important, but it enhances the creation of a positive attitude towards the product. The following loyalty statement has a humorous twist towards the end due to the higher isolating force of the dots - a specific punctuation oddity encountered in medical advertising - which throws into focus the temporal dimension of the claim: "Medrad is dedicated to continually improving the quality of all our products and services such that our customers' satisfaction, loyalty and respect are unsurpassed. It is our policy to clearly understand and agree upon the valid requirements of the work we perform to our customers both internal and external and to pursue 100% conformance to those requirements.... *on time, every time.*"

With evident predominance of the representative and commissive SAs in the copies (see table 1), part of our hypothesis of predominance of polite SA has been demonstrated. The strategies employed in order to reduce impoliteness of impolite ILs still remain to be demonstrated in what follows.

3.1.3 Directives

Directives are eliciting devices that indicate the existence of an interactional intent. If we judge the ad intent by the speech act predominance, medical copies seem to thrive on persuasion and incitement to action (70.5% as presence/copy). *Requests and recommendations* (see table 1) form the majority of directives and are motivated on grounds of straight talk and potential risk for the patient's life (M-spec). However, the IL force of recommendations is *weaker* than that of orders, although in other advertising media (commercial advertising) recommendations would sound face-threatening and direct since they presuppose higher knowledge and expertise from the advertiser's part.

Even though certain recommendations were realized directly with the verb to "recommend" - "For longer run we recommend that you support your ECOM with the following accessories" - strategies for reducing the impoliteness of impolite ILs were predominantly employed: e.g. high modulation (obligation): "A possible hypovolemia must be corrected before treatment with dopamine" (Dopmin); disjunctive grammar recommendation: "A must for almost every lab" (EFOX-Eppendorf); indirect recommendation (declarative): "St.Jude recommends that patients implanted with BioImplant heart valve be maintained on a short term anti-coagulant program". (medium modulation); more tentative (objective, explicit modulation): "It is recommended that the Flexible Containers be stored at room temperature"; "It is advisable to use a calibrated electronic infusion device" (Primacor); mitigated directives: "Just print out an order for The Genuine Article, You'll receive the full text in 48 hours.." (Current Contents).

Requests appear only towards the end of the copy (12%) where the attainment of such perlocutionary effects is sought. Customarily, the specialist is required to: "call"

“contact” – “For professional information/ordering information, call...” (Hemopad);
“ask” – “Ask your sales representative for additional information...” (Medtronic);
“consult” - “For further information please consult local packaging leaflet”.

Unlike commercial advertising, direct requests are usually *please*-mitigated (5 ads, 11.1%): “*Please* use the reply card below or contact us directly...” (Holten); “If you have questions on this accessory guide, *please* contact your local distributor” (Eppendorf). Most often, however, the copy simply presents a contact address, which can be interpreted as the lowest degree of imposition specific to off-the-record politeness. Likewise, the information can be presented as offers (1) or expressives (2) instead of eliciting requests: 1). Impersonal offer: “Further information is available on request” (Bactroban); 2). “Your local distributor will be pleased to give you additional information on EDOS”(Eppendorf); 3). Disjunctive grammar: “How to order:” (Medrad).

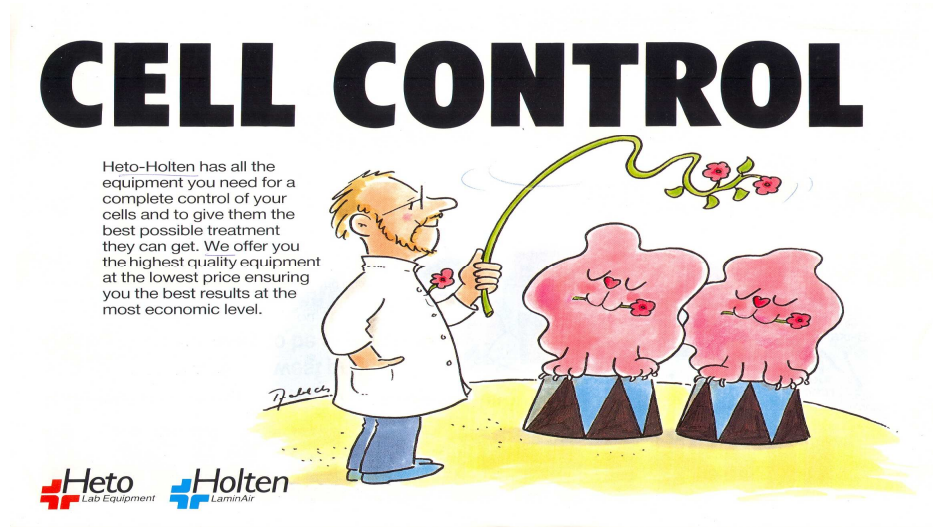
Instructions (I-s) function to explain the product use (M-spec) and are therefore perceived as less face-threatening. High benefit for the user entitles direct eliciting I-s: “Avoid contact of Bactroban ointment with the eyes”; “Avoid prolonged exposure of the treated areas to sunlight” (Fenistil). The following strategies were employed for reducing I-s impoliteness: a) *should* deontic modulation: “Primacor *should be administered* with a loading dose followed by a continuous infusion”; b) passive constructions obscuring the agent: “Care *should be exercised* to avoid overpacking Hemopad”; c) I-s packaged as assertions: “Hemopad *is applied* directly to the bleeding surface”; d) mitigated instructions: “Just enter once” (Eppendorf).

Suggestions (Ss) signal that the advertiser does not want to coerce and usually the action is considered beneficial to the reader/consumer. In our corpus Ss were realized as: a) imperatives with *let*: “Let Medrad handle your inventory and you’ll get the syringes you need, right when you need them”; b) declarative modalized assertions (Mood Adjunct) encouraging future action (objective, implicit) : “*Maybe* you want to use the Iso-therm system...”; c) finite indirect Ss, *should*-modulated (subjective, implicit) “Last but not least, you *should* not forget the conveniences involved in transfer tools..” (Jaeger).

Warnings are directives imposed by the medical field specificity (M-spec) expressed not as bold imperatives (entitled by the high-risk, high-benefit to the patient’s life), but indirectly as declaratives: *may* – “Due to an increased tendency towards calcification in children and young adults under the age of 35, the use of bioprosthesis *may* be undesirable” (St.Jude Medical).

In two copies orders counted as strong suggestions, their impositive force being, however, diminished and infelicitous due to rhetorical repetition. The copy below is an atypical illustration of achieving solidarity (*let’s*) based on recurrence of orders – an interpretation which is also intimated by the humorous visual appeal, highly uncommon in this corpus (non M-spec - picture below):

Figure 1: An atypical illustration of achieving solidarity



COPY: **Try** our -85° C freezers, our CO₂ incubators..... **Experience** the extremely high control, safety quality.... **Try** now and experience yourself!..... **Let's bargain** now! **Get** our new comic poster!" (Holten- Cell Control)

Such non-specific underpoliteness is fit for humorous approaches and has as immediate effect the creation of a bond of familiarity as in the second case: "See how they work. Clearly the only thing that works as well as a Medrad syringe is a Medrad syringe. Other manufacturers may tell you that their syringes are "just as good as Medrad's". *Don't take chances with imitations. Compare for yourself*" (Medrad).

It has been contended that the intent of an ad is reflected in the type of selected speech acts (Hardin, 2001: 199). In our corpus prevalence of **reliable information** at a remarkable **degree of commitment** presented in a **formal and motivated** type of **eliciting persuasion** is specific to medical advertising copy targeting specialists as the SA re-distribution below suggests:

Assertions 100% > reports 68.8% > **orders** 35.5% > **offers** 26.5% > **promises** 20% > **suggestions** 20% > **instructions** 15.5% > recommendations, announcements 13.3% > statements 8.8% > guarantees 4.4%

3.1.4 Other linguistic characteristics of copies

Body-copies of medical leaflets are long, elaborate, and based on reason persuasion (M-spec). Despite sporadic disjunctive elements, copy language *meets the basic standards of scientific informational texts (M-spec)*, e.g.: a) long, elaborated sentences employing hypotaxis and science-specific circumlocutions: "Intraperitoneal implantation of

polyethylene catheters with and without CARBOFILM coating in the mouse showed that the latter adhered to the surrounding tissue after 6 weeks and were fibrosed, whereas the former were still free and displayed no evidence of tissue rejection”; b) impersonal style rendered by frequent passives which evade reference to author and addressee: “Similar findings were obtained with Dacron replacements...”; c) nominalizations: “Accelerated life-testing of devices”; d) medical jargon; e) absence of rhetorical questions;

Unlike in commercial advertising, copies are based on formal pronoun reference and/or lack of personal reference: 2nd person deixis construed to achieve personal effect, friendly attitude and to simulate a face-to-face interaction was employed only in about 50% of the ad copies (M-spec). Employment of formal pronoun reference or no reference at all endorses our hypothesis of negative politeness, as polite language tends to be formal (Gu, 1990).

3.2 Headlines

Headline SA distribution is presented in the table below:

Table 2: Speech act distribution in headlines for medical products targeting professionals

Representatives	Assertions	38 (76%)
	Announcements	6
	Reports	2
Directives	Requests	3

The predominance of **representative** SAs emphasizes a system of politeness based on rational persuasion and therefore avoidance of imposition since representatives are inherently polite. At the level of directives, in order to bypass Face-threatening impositions, advertisers exploit the ambiguity inherent in puns and disjunctive grammar. Most cases of NGs, verbless clauses and non-finite clauses counted as **representatives**, as follows:

Assertions: a) NGs – “*Medrad. The original. Anything else is an imitation*”; “*Bactroban. Today’s topical antibiotic. From Beecham*”; b) verbless clauses: “*Probably the best class II safety cabinets in the world...Laminair*” (Holten); “*Cardiosmart. Strong in performance – smart in price*” (Hellige); ZA³: “*More control with less effort*” (Interspec); c) Non-finite clauses: “*Setting new standards.... in protection*” (Ansell Medical);

Ellipsis in assertions consisted of the copula “to be” which is omissible and can be easily retrieved in headline economy registers (Bruthiaux, 1996): “be”: “*Centrifuge 5417C and R [are]. Record-breaking. (Eppendorf)*”; “is”: “*Automatic channel ECK. [is] Strong in performance – smart in price*” (Hellige); “There” + “are”: “*300,000 Good reasons to put*

³ ZA = nominal element plus adverbial in minor clauses (Leech, 1966:15).

the Bio-Pump in Your operating-room” (Medtronic); other VGs: “represent”: “EFOX. [represents] New highs in precision. The flame of innovation” (Eppendorf); “allow/perform”: “Titerman 4908. [allows/performs] Easy change” (Eppendorf).

The other representatives, i.e. announcements (13.3%), imply that the information presented is new to the readers and worthy of notice, whereas reports construe information as trustworthy, e.g.: declarative sentence: “Cardio-thoracic surgeons around the world have benefited from Bio-Pump Technology in over 300,000 clinical procedures. You can too” (Medtronic); NG (sub-head): “Eight decades of Experience in Ventilation Technology” (Drager); Nonfinite participial clause (slogan): “The Intact Bioprosthetic Heart Valve... The bioprosthesis created to last” (Medtronic); Non-finite infinitive clauses: “300,000 Good Reasons to put the Bio-Pump in your operating room” (Medtronic).

Requests, by definition, are imposing as they threaten the specialist's freedom and impinge on the boundaries of their self. However, tact that attenuates the IF and symbolically demonstrates deference is employed, taking the form of DG (through which the IL force is left “open”) and pun as in the following case: e.g. “Keep cool. Isotherm Systems” (Eppendorf) is morphologically ambiguous between the indicative/imperative and therefore between the assertive: “Isotherm systems are created to refrigerate your products” (metaphorical image anchorage – penguins- and slogan “The *cool solution* for a *burning issue*”) or as a directive: “Keep (your products) cool. (Use) Isotherm Systems” primed by the idiomatic meaning “don’t worry” in the pun. Furthermore, punning extends the means-ends interpretation chain (Leech, 1983) and dilutes the coercive force of imperative orders through indirectness: “Take the easy ride! Centrifuge 5410” layered by image of merry-go-rounds and slogan metaphor: “We spin out winners” (Eppendorf).

3.3 Positive vs Negative Politeness as Culture-Bound

Pragma-linguistic studies demonstrate that politeness is culture-bound, people “typically using ‘polite’ relative to some norm of behavior which, for a particular setting they regard as typical” (Leech, 1983:84). According to this norm, it is said that the Russians and the Poles are not polite, whereas the Japanese and the Chinese are very polite (Leech, 1983:84).

Furthermore, Spaniards have been characterized as, in general, preferring to attach more importance to positive politeness, whereas the British seem to attach more significance to negative politeness (Hickey, 1991:2). Vazquez Orta (1995) has also hypothesized that the difference between the Spanish and English systems of politeness in requests (both the frequency of strategies and their conventionalized realization) is that of positive and negative politeness systems, respectively: “Requesting constructions and their modifications clearly indicate that a different kind of politeness is prevalent in the two societies” (Vazquez Orta, 1995:2). The author concludes that the prevalence of positive politeness strategies in the Spanish data and of linguistic realizations of negative politeness strategies in the English data “may constitute a partial justification of the

hypotheses that Spain is a positive politeness society when compared to England'' (Vazquez Orta, 1995: 6).

The British appear to be more inclined toward negative politeness, thus attaching more significance to negative aspects of face, such as non-imposition and detachment, also when compared to Uruguayan Spanish speakers. The latter appear to be more inclined toward positive politeness, thus attaching more importance to the positive aspects of face, such as approval and involvement (Marquez-Reiter, 1997, 2000).

Some Hispanic cultures, exemplified by the Havana speech community, are much more concerned with the maintenance of positive face (or the preservation of a consistently positive public self-image) than the protection of the basic right of their speakers to be unimpeded in their actions and territories, which, according to Wierzbicka (1985) is a primary concern of interactional participants in Anglo-Saxon cultures. Venezuelan women have been characterized as “ [. . .] casual, seeking to maintain a positive friendly face on a more equal basis” (Garcia, 1999:413), while Venezuelans overall, based on their preference of solidarity politeness strategies, have been classified as belonging to a positive politeness culture.

This complex enactment of politeness in the SA of different cultures might be relevant for commercial purposes in the sense that using a negative face politeness where a positive attitude suggesting friendliness and solidarity represents a norm, would go against the very essence of the trade. In order to enhance their chances of success when a product is launched internationally, advertisers should resort to copy adaptation in order to better overlap with the politeness norms of the targeted culture.

Therefore, we suggest that the non-culture-specific approach possibly responsible for the negative politeness bias of international medical advertising, is proper for negative politeness cultures such as England (Scollon and Scollon, 1981), whereas others such as Spain, USA, that attach greater importance to positive politeness, might benefit from alterations towards a more *positive approach*.

4 Conclusion

We have examined the pragmatic category of SAs and determined which strategies are most reflective of the print medical advertising discourse. The classes of SAs that occur most frequently in the data are the inherently polite representative SAs at both copy and headline level. This frequency suggests that print medical advertising intends to present facts : “this is what the product does” in order to attempt to determine the specialists to purchase or use a product.

The target reader variable, i.e. surgeons [+P], induces awareness of a distant professional environment and consequently employment of [+D] negative politeness, evident in employment of :

- a) inherently non-impositive speech acts: 1. predominance of representatives *whose illocutionary force is to present all information as factual, commit the speaker to*

the truth of what is described and avail themselves to truth/falsity judgment, such as assertions, announcements and reports. In other words, avoidance of imposition is translated at medical advertising level as: “this is what the product does”; 2. confidence building SAs (M-spec): SAs of offering, guaranteeing, stating loyalty are frequent.

- b) eliciting directives of lower illocutionary force such as recommendations, invitations.
- c) Employment of strategies for decreasing the imposition of impositive IL force such as: disjunctive grammar, modulation/modalization, mitigators (*please, just*), rhetorical (puns), etc.

Positive face politeness [-D] addressing the positive face wants such as solidarity and appreciation are fit only for humorous approaches or certain products which seem to favor social distance reduction, accept familiarity and enhance cooperation. Furthermore, considering that politeness is culture-bound, we have suggested that advertising to medical specialists from countries that attach greater importance to positive politeness, might benefit from alterations towards a more *positive approach*.

To conclude, the discourse of print medical leaflets targeting surgeons evinces hybrid advertising-specific characteristics (A-spec) as well as characteristics specific to the medical discourse (M-spec) at the level of SAs and other investigated pragmalinguistic categories.

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Multilingual Luxembourg: Language Attitudes and Policies

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Abstract

Luxembourg's multilingualism is closely connected to its geographical location, which places it on the linguistic border between a Germanic and a Romance area in Europe. The linguistic situation is further complicated by the influence of the various immigrant communities. This paper investigates language attitudes towards the linguistic diversity in Luxembourg. The data originate from both an analysis of language policy documents and audio-recorded qualitative interviews with Luxembourgish nationals and members of different immigrant groups. Particular attention is paid to the use of multiple languages in Luxembourg's education system. The Council of Europe (2006) has recently argued that the current system shows limitations and is unable to satisfy the needs of the society as a whole. Based on my findings, I intend to demonstrate how conflicting attitudes between informants and the authorities can be at the origin of some of the failures of Luxembourg's multilingual education system. The analysis of data obtained from teachers and students experiencing a change in the language of instruction highlights the many difficulties connected with a multilingual education system characterised by changing linguistic priorities. Finally, an exploration of the various functions of language attitudes will allow for some explanations of the attitudinal discrepancies found among the different social groups under investigation.

1 Introduction

The linguistic situation in Luxembourg is characterised by its multilingualism. The majority of the population are faced with a complex mixture of Luxembourgish, French, German and a number of immigrant languages on a daily basis (Berg & Weis, 2005: 20). This paper presents results from a pilot study focusing on language attitudes towards the linguistic diversity in Luxembourg. Particular attention is paid to the use of multiple languages in Luxembourg's multilingual education system. Language Planning and Policy activities are closely connected to the study of language attitudes as the successful implementation of language policies often depends on an awareness of language attitudes of the target population (Lewis, 1989; Spolsky, 2004). In fact, Wright (2007) draws attention to a recent focus on language attitudes in Language Planning and Policy activities. This paper correlates attitudinal data drawn from qualitative interviews with an analysis of language policy documents in order to show how Luxembourg's language in education policies are often in disagreement with the sampled population's attitudes and beliefs.

2 Context

2.1 Location and population

Luxembourg's territory covers an area of 2586 km² and the country shares borders with France, Germany and Belgium. In 2007, the total population amounted to 476,000 inhabitants (Statec, 2007: 8). Luxembourg is characterised by heavy immigration as 39% of the population are immigrants originating from various countries. Portuguese inhabitants represent the major immigrant community with over 73,000 members. French (25,000) and Italian (19,000) immigrants constitute the second and third largest groups of incomers (Statec, 2007: 8). The population of Luxembourg has steadily increased over the past twenty-five years by almost 100,000 inhabitants. Berg and Weis (2005: 12) argue that this rise can largely be attributed to a thriving immigration as the population of Luxembourg nationals has remained relatively stable. In fact, since 1981 the community of Luxembourgish nationals has grown by 8,000 people as opposed to a rise of 80,000 people in the foreign population. The Italian and Portuguese communities represent a particularly interesting case due to their comparable patterns of immigration. The beginnings of Italian immigration date back to the industrial development of Luxembourg in the nineteenth century. Italians were recruited for unskilled and semi-skilled work and their influx reached a peak in the 1960s (Hoffmann, 1996: 99). At that time many construction firms started to employ Portuguese immigrants as manual labourers on building sites (Hoffmann, 1996: 99). Consequently, both Italian and Portuguese immigrants were initially recruited to fill a gap in manual labour at different times in Luxembourg's recent past. Luxembourg's population is highly diverse due to heavy immigration and the Italian and Portuguese groups are only two of many immigrant communities.

2.2 Linguistic Situation

Luxembourg's multilingualism is closely connected to its geographical location, which places it on the linguistic border between a Germanic and a Romance area in Western Europe (Fehlen 2002: 80). Hoffmann (1996: 97) describes Luxembourg as 'a linguistic melting pot' and explains its current multilingual situation as 'a matter of inheritance'. At the beginning of the nineteenth century the majority of the population spoke West-Moselle-Franconian, a Germanic dialect, while the nobles and upper classes frequently employed French; the clergy, on the other hand, largely used German (Fehlen, 2002: 80). In the aftermath of the Second World War, the revisions of the Luxembourgish Constitution did not officially regulate the language situation (Newton, 1996: 57). In 1984, however, West-Moselle-Franconian was recognised as Luxembourgish, the national language of Luxembourg. French was awarded the status of legislative language while administrative matters were to be carried out in French, German or Luxembourgish (Davis, 1994: 11). Interestingly, this rise of status for Luxembourgish has barely influenced the Luxembourgish administration which is still governed almost exclusively by French (Fehlen, 2002: 83). Newton (1996: 57) draws attention to the failure of the law of 1984 to establish the official use of French and German. Luxembourgish, French

and German all fulfil different functions but none of them have official status (Berg & Weis, 2005).

2.3 Languages in Education

The multilingual situation of Luxembourg is undoubtedly reflected in its education system. The Council of Europe (2006: 15) highlight the major role of language teaching in Luxembourgish schools where 35 to 40% of school lessons are dedicated to language teaching at primary and secondary school level. German and French constitute compulsory languages throughout schooling. English is introduced as a foreign language at secondary school level where students can also opt to study Latin, Italian and Spanish. German and French are employed as languages of instruction at different levels in the curriculum. German is the language of alphabetisation and is mostly employed as a medium of instruction throughout primary education and the first years of secondary schooling (Council of Europe, 2006: 16). Secondary education is largely split into classical and technical schools. Both types of schools are characterised by foreign languages of instruction. Technical schools put less emphasis on language teaching and German is largely used as a medium of instruction (Berg & Weis, 2005: 65-66). In classical secondary schools the language of instruction is abruptly changed from German to French after the first three years when students are aged fifteen. Luxembourgish, on the other hand, is only taught for one hour a week at primary school level and is completely discarded after the first year of secondary education (Horner & Weber, 2008: 92). Officially, it is only employed as a language of instruction for arts, music and sports in primary schools (Hoffmann, 1996: 131-132). Luxembourg's education system is, therefore, characterised by both extensive language teaching and the use of multiple languages of instruction.

The Ministry of Education proudly emphasise the multilingual nature of Luxembourg's education system and argue that multilingualism is the 'hidden native language of many Luxembourgish people' as neither French nor German or even Luxembourgish represent the native language for many Luxembourgish residents (Berg & Weis, Ministry of Education 2005: 33). Similarly, in an interview carried out as part of the data collection for this pilot study the Minister of Education, Mady Delvaux-Stehres, claimed that 'our education system is multilingual; the answer to our problem does not consist of choosing one language over another'. Baker (2001: 221-222) describes Luxembourg's education system as 'bilingual education in majority languages' which is based on the combined use of two (or more) majority languages in a school and he defines it as a strong form of bilingual education. Strong, as opposed to weak forms, of bi- and multilingual education typically promote high levels of multilingualism without neglecting minority or heritage languages (Skutnabb-Kangas, 2000: 580). However, the multilingual nature of Luxembourg's education system poses many challenges for students and teachers as numerous students fail to meet the linguistic requirements of the Luxembourgish education system (Council of Europe, 2006: 17). In fact, 62.6% of secondary school students in Luxembourg show an educational delay of one year or more; this delay results from repeating a school grade at least once due to insufficient marks (Council of Europe, 2006: 18). Horner and Weber (2008: 88) highlight the extremely high fail rates among

pupils in Luxembourg as only ‘16.7% of young people successfully obtained the secondary school leaving diploma’ in 2005. The disturbingly high fail and drop-out rates as well as the negative assessment of the education system by the Council of Europe (2006) draw attention to the fact that Luxembourg’s education system is characterised by a number of shortcomings. An investigation of language beliefs and attitudes can throw light onto some characteristics of these limitations.

3 The Study

3.1 Methodology

The data for this pilot study were collected from two separate samples. The General Population Sample consists of 46 informants, stratified according to gender, ethnicity and life stage. Different ethnic groups consist of Luxembourgish nationals as well as Italian and Portuguese immigrants. Informants are also distinguished by life stage; students, enrolled in secondary or university education, are, therefore, separated from informants in employment at the time of data collection (Table 1). Social class is not employed as an explanatory variable due to the size of this project; however, there is a range of socio-economic backgrounds. In the larger project for which this study is acting as a pilot social class will be employed as an explanatory variable.

Table 1: Distribution of informants across ethnic, gender and life stage groups

	MW	FW	MS	FS
Luxembourgish	7	5	2	3
Italian	5	6	3	3
Portuguese	2	6	2	2

M = male; F = female; W = working; S = student

The School Sample was created in order to investigate attitudes towards the change of the language of instruction from German to French after the first three years of classical secondary education. In total, 18 secondary school students, both male and female, are sampled for this particular aspect of the study. Secondary school teachers, directly affected by this change of the language of instruction due to the nature of their subjects (German, History, French, Biology) are also included in the sample (Figure 2).

Table 2: Distribution of students and teachers across gender groups.

	Male	Female
Students	11	7
Teachers	2	4

Informants were selected through various approaches. The majority of participants for the general population sample were contacted through the ‘friend of a friend approach’

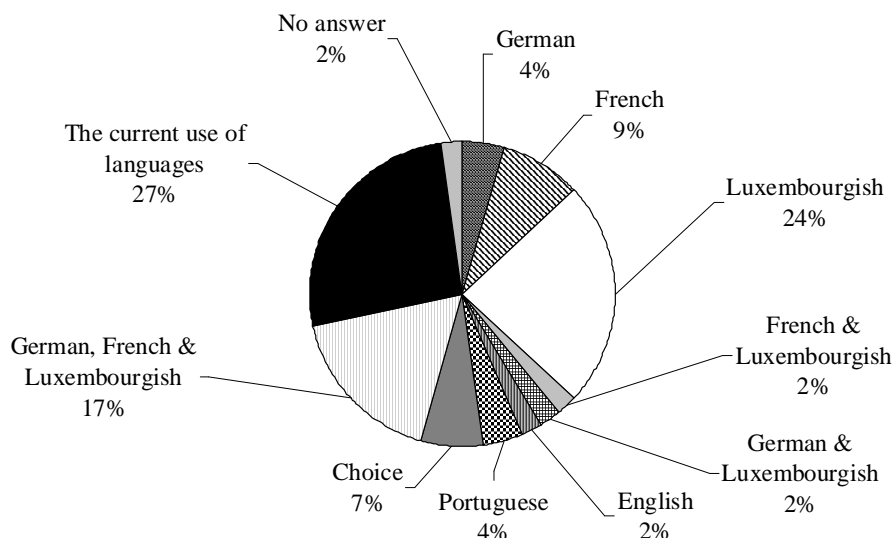
(Milroy & Gordon, 2006: 32). The fieldworker asked informants to recommend any potential participants and was, therefore, not introduced as a complete outsider to new informants who consequently became more inclined to participate (Milroy & Gordon, 2006: 32). In order to fill gaps in the sample, some participants were contacted randomly. Students and teachers affected by the change of the language of instruction were accessed by permission of a classical secondary school. Moreover, in July 2006 an interview was carried out with the Minister of Education, Mady Delvaux-Stehres, who provided extremely valuable information on language in education policies.

The data collection for this project is characterised by the sole use of audio-recorded semi-structured qualitative interviews. The interview questions were carefully planned in advance and covered language attitudes in various domains. Many interviews are characterised by follow-up questions. Students and teachers from the school sample were questioned about their attitudes towards the change of the language of instruction from German to French. Informants were given the choice to be interviewed in Luxembourgish, French, German or English. The vast majority of the interviews were carried out in Luxembourgish. Three Portuguese and one Italian informant were interviewed in French.

3.2. Findings

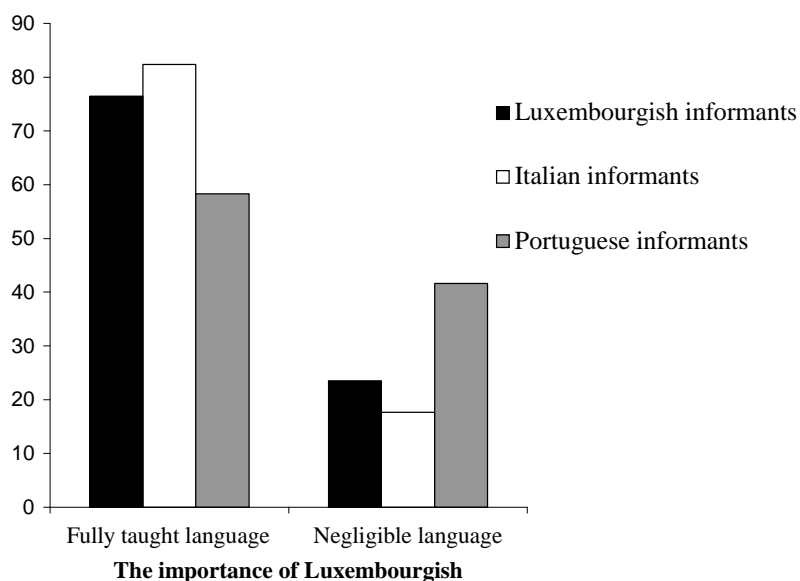
The use of multiple languages of instruction and changing linguistic priorities in Luxembourg's education system are at the origin of different language preferences among the sampled population. All informants were asked to express their views concerning the current distribution of languages of instruction and were encouraged to describe their personal language preferences. Figure 1 demonstrates the complex and highly varied attitudes towards various languages of instruction. Only 27% of all informants express a sense of satisfaction with the current use and distribution of French, German and Luxembourgish as media of instruction in the classroom. Interestingly, 17% of the sampled population report positive attitudes towards exactly these three languages as media of teaching and learning but do not agree with their current distribution. The majority of informants express a desire for multiple languages of instruction. The only language which is frequently established as a single language of instruction is Luxembourgish. In fact, 24% of informants establish Luxembourgish as their preferred single medium of communication and teaching at school. These positive attitudes towards Luxembourgish conflict with the current language in education policies which officially restrict the use of Luxembourgish to a small number of school subjects (arts, music, sports) at primary school level.

Figure 1: Preferred languages of instruction



The discrepancy between the informants' positive attitudes towards Luxembourgish as a language of instruction on the one hand and the exclusion of Luxembourgish from most subjects at both primary and secondary school level by the authorities on the other hand demonstrates the controversial status of this language in the education system. In order to gain a better understanding of the status of Luxembourgish in education the informants' attitudes towards the possible future introduction of compulsory Luxembourgish language classes, comparable in importance to French and German language classes, were assessed. Informants were asked whether Luxembourgish should be introduced as a language subject. Luxembourgish was awarded the status of a negligible language by the informants who did not regard the introduction of Luxembourgish language classes a necessity. Figure 2 represents the responses of the different ethnic groups and shows that extremely positive attitudes towards Luxembourgish language classes prevail among the entire sample as the majority of the sampled population express a desire for the teaching and learning of Luxembourgish at school. Italian and Luxembourgish informants in particular express positive attitudes towards such a development.

Figure 2: Attitudes towards the status of Luxembourgish in education

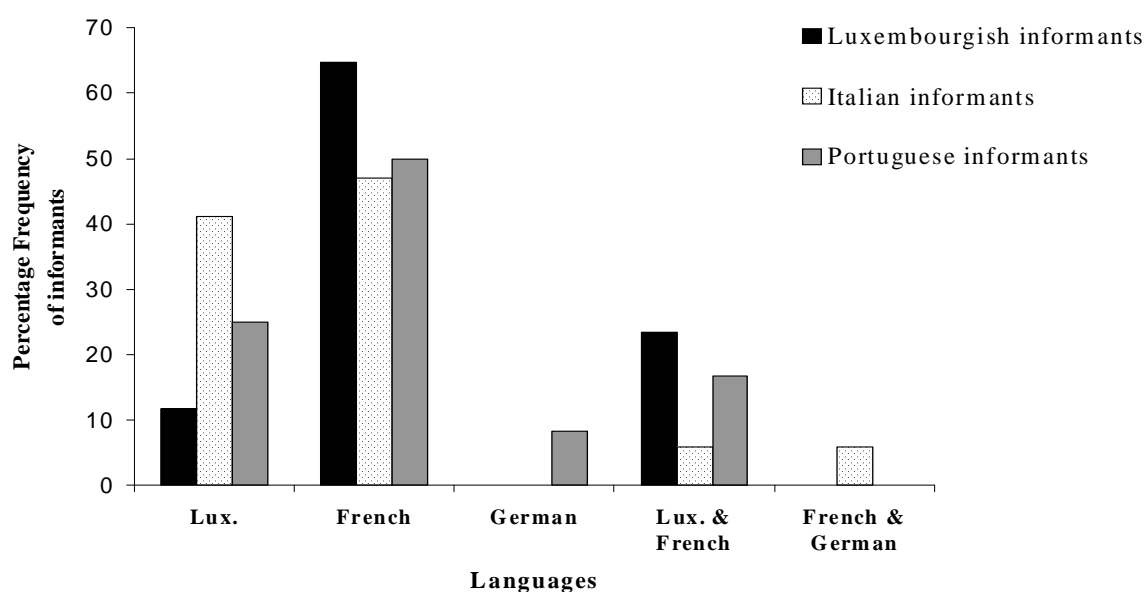


The Ministry of Education is currently undertaking a reform of the secondary school education system. The policy document entitled *Réajustement de l'Enseignement des Langues Plan d'Action 2007-2009* provides details regarding envisaged changes and discusses the function and status of the various languages taught and used at school. Whereas Luxembourgish is acknowledged to play an important role in various social interactions in Luxembourg, a clear reluctance to increase its use and status in education emerges. The Ministry of Education explain that the Luxembourgish language currently does not cause any direct problems in the education system and that 'we, therefore, have to make sure it does not become a problem' (Ministry of Education, 2007). This statement expresses a clear reluctance to officially recognise and include Luxembourgish in the education system. This approach also signals a belief among the authorities that by banning Luxembourgish from most parts of the education system they can ensure that it cannot become a hurdle for students as they are not officially confronted with it at any point. Ways in which the use and status of Luxembourgish could be increased are discussed but remain limited to the study of Luxembourg's literary heritage. The document defines a Luxembourgish literature course as the study of Luxembourgish authors who write in Luxembourgish, French or German. The continued exclusion of Luxembourgish in the envisaged educational reform sits in stark contrast to the positive attitudes towards Luxembourgish expressed by the population sampled for this study.

An investigation of further attitudes towards Luxembourgish, French and German beyond the educational sphere highlights the complexity of Luxembourg's linguistic situation. In other contexts Luxembourgish loses much of its importance in favour of French. Figure 3 demonstrates that all ethnic groups under investigation establish French as the most important language in Luxembourg. The extremely positive attitudes towards French are most noticeable among informants of Luxembourgish ethnicity (65%) and least

noticeable among Italian informants (47%) where positive attitudes towards Luxembourgish continue to be common (41%). The widespread belief among Luxembourgish ethnic informants that French represents the most important language in Luxembourg constitutes an important finding. Luxembourgish informants were hypothesised to emerge as the ethnic group with the most positive attitudes towards Luxembourgish as Luxembourgish is their mother tongue and home language in the majority of cases. Moreover, 42% of the sampled Luxembourgish ethnic informants claim to regularly feel forced to speak a language which poses considerable problems for them. This challenging language consists of French in 72% of the cases. To sum up, extremely positive attitudes towards French prevail among informants of Luxembourgish ethnicity despite the fact that it constitutes a difficult language for many speakers.

Figure 3: Attitudes towards the importance of languages commonly used in Luxembourg



These findings demonstrate that attitudes towards both French and Luxembourgish are extremely complex. An understanding of possible motivations for the positive attitudes towards French beyond the educational sphere can be gained by looking at the student sample's attitudes towards the change of the language of instruction from German to French at secondary school level. 67% of the sampled students claimed that the improvement of their French language abilities was an extremely beneficial outcome of the introduction of French as a medium of teaching and learning. During the interviews the majority of students express a strong desire to improve their French language abilities as they regard proficiency in French as a necessity in Luxembourg. To sum up, a comparison between language attitudes and language policies draws attention to the complex nature of Luxembourg's linguistic situation and the fact that attitudes and policies do not seem to be in agreement with each other.

3.3 Discussion

The findings from the interview data show a widespread desire amongst the sampled population for the recognition of Luxembourgish in the education system. An exploration of some of the underlying reasons for these positive attitudes towards Luxembourgish can draw attention to why a majority of the sampled population are not satisfied with the current distribution of languages in Luxembourg's education system. Due to the high complexity of attitudes and social behaviour in general (De Vaus, 1991: 294) the following discussion constitutes a preliminary attempt at explaining some of the complexities of Luxembourg's linguistic situation. Different motivations for the inclusion of Luxembourgish in the education system are thought to apply to the various ethnic groups under consideration.

First of all, Fehlen (2002) argues that for Luxembourgish nationals Luxembourgish is 'the symbol – and for many even the essence of Luxembourgish identity'. The connection between the Luxembourgish language and a Luxembourgish identity is thought to have emerged after the establishment of Luxembourg's independence in 1839 and strengthened due to the invasion of the country in both world wars by the Germans who refused to accept Luxembourgish as a separate language from German (Newton, 1996: 181). Statements such as 'Luxembourg will lose its identity if we lose the Luxembourgish language' are commonly observed in the interviews carried out for this study. Dyer (2007: 102) draws attention to the indexicality of language and argues that a language can become 'an index of, or a pointer to a speaker's social identity'. Similarly, Bohner (2004: 243) explains that the social identity function of attitudes helps people to identify themselves with certain social groups through the expression of their attitudes. Consequently, the positive attitudes towards Luxembourgish can be interpreted as an attempt by Luxembourgish informants to express their distinctive identities in a country characterised by the use of multiple languages. Ferguson (2006) argues that the development of supranational institutions such as the European Union are at the origin of many national and regional groups' attempts to maintain and to protect their distinctive identities. Luxembourg's central role and geographical location in the European Union may then be at the origin of the informants' desire to further the status and function of the Luxembourgish language. Luxembourgish, as opposed to German and French, can function as a differentiating characteristic from the larger neighbouring countries.

Portuguese and Italian informants also show positive attitudes towards the recognition of Luxembourgish in the education system. The integrative function of language attitudes may be at the origin of these positive attitudes towards Luxembourg's national language. Baker (1994) highlights that positive attitudes towards foreign languages can result from a 'desire to be like representative members of the other language community'. Similarly, Gardner and Lambert (1959) explain that positive attitudes towards learning a language can be connected to a speaker's attempts to form social relationships. The Ministry of Education's acknowledgment of the crucial function of Luxembourgish in many social interactions in Luxembourg highlights that immigrants are frequently confronted with the necessity of acquiring and using Luxembourgish on a daily basis. Despite the lack of recognition and absence of teaching Luxembourgish at school, teachers frequently

employ this language to explain difficult concepts and to interact with pupils in an informal fashion. Consequently, the knowledge of Luxembourgish constitutes a prerequisite for immigrant children who are enrolled in Luxembourgish schools. Full recognition and teaching of the language would, therefore, provide an opportunity for immigrant children to acquire Luxembourgish faster and more successfully. To sum up, a willingness to integrate better into Luxembourg's society may be at the origin of the positive attitudes among immigrants towards the recognition of Luxembourgish in education.

The findings of this study have shown that positive attitudes towards Luxembourgish are particularly strong in the educational context. Education plays an important role in determining the status and function of individual languages in multilingual contexts through the ways in which some languages are taught as subjects, some are used as languages of instruction and some are excluded (Skutnabb-Kangas, 2000). The widespread positive attitudes towards the possible future inclusion of Luxembourgish at school could potentially be linked to the awareness among the sampled population of the powerful nature of the educational domain in determining the status and function of a language. Tsui and Tollefson (2004: 2) describe the medium of instruction as 'the most powerful means of maintaining and revitalizing a language and a culture' and highlight a frequent absence of dedication on the part of policy makers. Such a lack of commitment is seen in extremely unfocused and vague policy documents characterised by 'exit clauses and qualified statements' (Tsui & Tollefson, 2004: 6). The envisaged introduction of a Luxembourgish literature course (focusing on literature written in Luxembourgish, French and German) as a means of increasing the role and representation of Luxembourgish at school demonstrates a lack of commitment on the part of the Luxembourgish authorities.

The widespread desire for the recognition of Luxembourgish at school is, however, replaced by more positive attitudes towards French beyond the educational sphere. An exploration of the instrumental function of attitudes can throw light onto some of the underlying motivations for this shift in attitude. Baker (1994) explains that the instrumental function of language attitudes is 'characterised by a desire to gain social recognition or economic advantages through knowledge of a foreign language'. Instrumental attitudes are, therefore, individualistic in nature and are closely connected to the 'utilitarian' function of attitudes described in social psychology (Bohner, 2004: 242-243). Utilitarian attitudes assist people in achieving positive goals such as, for example, successfully finding employment. The instrumental or utilitarian nature of the positive attitudes towards French beyond the educational context found among the sampled population can be illustrated by a number of statements taken from the interviews. The necessity of being able to speak French in Luxembourg is supported by one female Italian informant claiming that 'it is easier to find a job if you speak French rather than any other language'. French is established as the most useful language in Luxembourg. One male Italian informant provides a possible explanation for this by claiming that 'in Luxembourg you must speak at least French'. A female Luxembourgish informant supports this view by arguing that 'speaking Luxembourgish is not enough to get by in Luxembourg'. These comments draw attention to the practical and instrumental nature of

positive attitudes towards French, which is widely regarded as a prerequisite for professional success.

The positive attitudes towards French beyond the educational sphere can be further explained by applying the concept of linguistic prestige to the linguistic situation in Luxembourg. Milroy (2007: 136) distinguishes between prestigious and stigmatised language varieties and argues that certain language varieties carry prestige because they are closely associated with higher social classes. According to Fehlen (2002: 81) among Luxembourgish people, 'only the most educated or those in contact with French native-speakers can speak French easily'. The prestigious status of French can also be related to its extensive use as well as its dominance over Luxembourgish in many official domains and written contexts. The high concerns to better their French language abilities found among the student sample in relation to the change of the language of instruction from German to French support the argument that French frequently benefits from a higher social status than any other language in Luxembourg. Consequently, in order to guarantee upward social mobility many informants regard the knowledge of French as a necessity.

The conflicting attitudes towards French and Luxembourgish highlight the complex nature of Luxembourg's language situation. The desire to award recognition and status to Luxembourgish in the education system, however, indicates that attitudes might be changing in favour of Luxembourgish. Ferguson (2006: 191) claims that in some contexts Language Planning and Language Policy activities must begin with status planning as 'form tends to follow function'. Status planning consists of activities related to increasing the functions and extending the domains of use of a particular language (Wright, 2007: 165). Consequently, in order to fully develop linguistically a language must first be employed extensively in various domains. The recognition of Luxembourgish as a medium of instruction or the introduction of compulsory Luxembourgish language classes could increase the status of this language and contribute to Luxembourgish language abilities. Such a development could potentially allow for a more extensive and 'prestigious' usage of Luxembourgish beyond the educational sphere. The findings of this pilot study demonstrate that language attitudes are often in disagreement with current language in education policies. The low sense of satisfaction with the status and functions awarded to the various languages used in education are particularly worthy of attention considering the high fail rates of Luxembourg's education system.

4 Conclusion

The discrepancies between the sampled population's language attitudes and current language in education policies highlight the importance of the policy makers' awareness of the population's language attitudes and beliefs (Lewis, 1989; Spolsky, 2004). In fact, the correlation between the high fail rates among pupils enrolled in Luxembourg's schools and the disagreements between language attitudes and language policies support the argument that a successful implementation of language policies requires an investigation of language attitudes and beliefs of the target population. This study has drawn attention to a possible change in attitudes in favour of Luxembourgish, the

traditionally less prestigious language variety in Luxembourg. The preliminary findings discussed in this paper have provided an insight into the complex nature of Luxembourg's linguistic situation as well as supplied the foundations for a more in-depth and large scale investigation of language attitudes and multilingual language behaviour in Luxembourg, which is currently being undertaken by the author.

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Instruments in Argument-structure*

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Abstract

A binary classification of instruments in English has been observed of which only one can be realized in subject position. The present paper seeks to explain this observation through consideration of the causal conceptualisation of the instrument and illustrate how this information can be fed to argument-structure.

1 Instrument Classification

Several studies observe that some instruments can be expressed in adjunct-type positions with ‘with’ as well as in subject position, whereas others cannot. This observation goes back to at least Fillmore (1968), but is also made in Nilsen (1973), Marantz (1984), Ono (1992), Schlesinger (1995), Levin & Rappaport Hovav (2005), *inter alia*. Consider the contrast between (1) and (2), where the instrument is the underlined NP.

- (1) a. Jack opened the door with the key.
b. The key opened the door.
- (2) a. Emily devoured the pasta with the fork.
b. *The fork devoured the pasta.

Instruments of the kind in (1) that can appear in subject position have been termed **intermediary** instruments, while those of the kind in (2) that cannot appear in subject position have been termed **facilitating** instruments (Levin & Rappaport Hovav (2005: 39)). Marantz (1984: 247) labels ‘the key’ in (1) as an intermediary agent in the act of opening the door: Jack does something to the key, the key does something to the door, and the result is the door in a different state, namely open. In (2), in contrast, while ‘the fork’ is a tool in Emily’s devouring of the pasta, it is not an intermediary agent in the devouring event, but a facilitating one. However, while this observation has been noted in a number of works such as those aforementioned, it has not received much detailed analysis and the observation remains largely descriptive. I shall refer to the construction in (1b) as the **instrument as subject construction**.

2 Instruments: Arguments, Adjuncts or A(rgument)-Adjuncts?

Arguments are the necessary phrases demanded by the verb that must be realized in the linguistic expression (e.g. Dowty’s (1982) Subcategorization Test aims to distinguish arguments and adjuncts on the grounds that only arguments are obligatory). Both ‘the door’ and ‘the pasta’ in (1a) and (2a) respectively are

* I wish to thank Mary Dalrymple for many very helpful discussions and suggestions, and the audience at LangUE 2008 for useful comments.

arguments in this sense as, if they are omitted ((3) and (4)), the constructions become ungrammatical.

- (3) *Jack opened with the key.
- (4) *Emily devoured with a fork.

Under this test, instruments are not arguments because their omission does not result in ungrammatical sentences:

- (5) Jack opened the door.
- (6) Emily devoured the pasta.

Adjuncts are different in that they are not required by the verb, although they do add extra information to the linguistic expression. There can be zero or theoretically an infinite number of adjuncts, although in practice this number is restricted by human cognition and pragmatics. (7a, b and c) contain 3 adjuncts, all individually optional, and in more or less any distribution (some, but not all, of the permutations are shown here).

- (7) a. Today₁, Jack opened the door quickly₂ at four o'clock₃.
- b. At four o'clock₃ today₁, Jack opened the door quickly₂.
- c. Quickly₂, Jack opened the door at four o'clock₃ today₁.

Under this test, instruments are not adjuncts either as their number cannot be multiplied.

- (8) *Jack opened the door with the key₁ with the swipe card₂.

Although adjuncts are not restricted in number, they nevertheless cannot be added in such a way as to result in a contradiction or conceptual conflict, except through coordination. Consider the following.

- (9) a. *Jack opened the door at 3 o'clock at 4 o'clock.
- b. *Lena went to Las Vegas by plane by ship.
- c. *Ken quickly went to the store slowly.

These examples are all ungrammatical. However, if the two adjuncts are conjoined with 'and', the sentences are grammatical, although (9c) does not permit this.

- (10) a. Jack opened the door at 3 o'clock and at 4 o'clock.
- b. Lena went to Las Vegas by plane and by ship.

This situation is the same for instruments: when conjoined, more than one is acceptable.

- (11) (cf (8)) Jack opened the door with the key and with the swipe card.

I suggest instruments are restricted in number (when not conjoined) for conceptual reasons, like many other adjuncts. This holds for both types of instrument and so does

not distinguish intermediary from facilitating instruments and the reason for their distinction remains unexplained.

This means instruments share one property each with arguments and adjuncts, and, in turn, do not share one property with arguments and adjuncts. To acknowledge this result, I adopt an additional category which is something similar to Grimshaw's (1990) **a(argument)-adjuncts** (see Grimshaw (1990: 108ff)). For Grimshaw, a-adjuncts are licensed by a-structure but do not receive a thematic role. I do not employ thematic roles but Dowty's (1991) proto-roles which will be used for both arguments and a-adjuncts. A-adjuncts in the system I propose do receive a proto-role and feature in a-structure. The similarities and differences between arguments, adjuncts and a-adjuncts are shown in the table below.

(12)

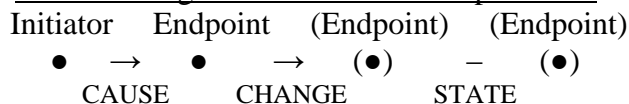
	Argument	Adjunct	Argument-adjunct
Optional	NO	YES	YES
Number restricted	YES	NO	YES
In verb's a-structure	YES	NO	YES

The last characteristic, whether the category is represented at a-structure or not, is a theoretical one and used to capture formally (part of) the distinction between arguments and adjuncts. The theoretical claim made for a-adjuncts is that they are represented at a-structure like arguments (Grimshaw (1990: 109)). This accounts for their number restriction. From these characteristics, both types of instruments are a-adjuncts: they are optional and their number is restricted. However, we want a way to distinguish intermediary and facilitating instruments and so there is still work to be done. The suggestion below is that this can best be done through a consideration of instruments' **causal force** in bringing about the event.

3 Causal Chains

Croft's (1991) Causal Order Hypothesis takes a causal approach to event structure. He builds on Talmy's (1988) work on the dynamics of force and takes as his approach's philosophical underpinning Davidson's (1969) *The Individuation of Events*, where it is argued that causal structure defines events. Croft proposes to apply Davidson's ideas to lexical items. His hypothesis represents events by their parts and the causal relations between them. The mechanism he develops is that of **causal chains**. Croft's causal chains are grounded in a cognitive model represented in (13) below.

(13) Idealized Cognitive Model of a Simple Event



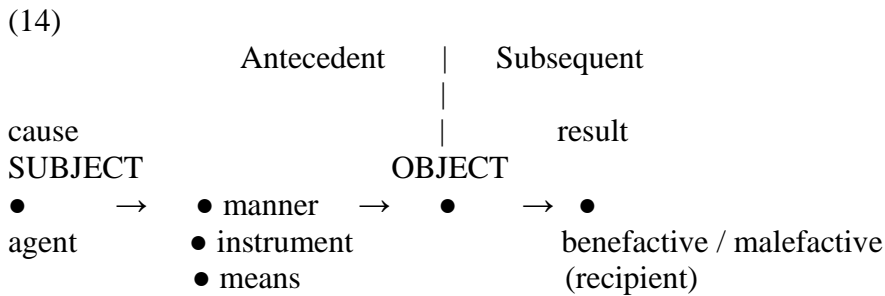
(Croft 1991: 37)

Croft's remarks on the notation are:

“a dot indicates a participant; an arrow indicates a relationship of transmission of force, which can be described by the capitalized label just below it; a line without an arrowhead indicates a noncausal (stative) relation; a parenthesized dot indicates that it is the same participant as in the preceding causal (or noncausal) segment.”

(Croft (1991: 37, n.5)

Causal chains are embedded in this cognitive model; we can regard the causal chain as some of the linguistically relevant parts of the cognitive model. (14) is a schematic of a causal chain.



VERB SEGMENT

modified from Croft (1991: 185)

Again, dots represent participants and arrows indicate a relationship of transmission of force. The causal chain centres around the OBJECT which undergoes the change; hence the components are divided into what is antecedent to the OBJECT and what is subsequent to it. What is subsequent can be, for example, a benefactive, such as ‘for Bill’ in ‘Luke bought a book for Bill.’ This aspect of the causal chain will not concern us at all and I will refer to it no further. Antecedent aspects are relevant: there is the cause of the event, coinciding here with the SUBJECT and the agent, and then, between the SUBJECT and OBJECT, three possible participants that represent manner, instrument and means, of which instrument is the only one we will be concerned with.

It is clear that what Croft means by SUBJECT and OBJECT in the causal chain is ‘logical subject’ and ‘logical object’. Verb alternations can be analysed as alternative profilings of parts of the whole event; this is how Croft derives *grammatical* subject and object. For example, in an English passive, Croft’s SUBJECT, if realized, will be realized in a ‘by-phrase’ and Croft’s OBJECT will be realized as grammatical subject in the sentence. Linking points in the causal chain to grammatical roles in the syntax is not central in Croft’s agenda and he does not explain how certain alternations are permitted and how others are prohibited. One issue is that the concepts of subject and object are defined in terms of the points they occupy in Croft’s causal chain; subjects are initiators and objects are the final affected entity, for example (Croft (1991: 178)). The surface orderings of these concepts (i.e. spoken sentences) are derived through different mappings, but the concepts remain the same; this means there is no theoretical distinction between logical and grammatical subject and object. This is problematic because for non-causal verbs not conceptualized in terms of causal chains, the concepts subject and object cannot be defined. As such, they must be defined in a completely different way. This means subject and object in surface constituent-structures will be defined differently depending on the verb in the sentence, an undesirable outcome. Positing grammatical concepts outside the causal chain distinct to the logical concepts inside them enables an autonomous definition. For different kinds of verbs, the conceptual principles affecting a-structure can then be different leaving the core grammatical concepts of subject and object uniformly defined. This is the position taken in the current proposal. Consequently, I shall relabel Croft’s SUBJECT and OBJECT as L(OGICAL)-SUBJECT and L(OGICAL)-OBJECT

respectively, leaving SUBJECT and OBJECT to indicate the relevant grammatical concepts.

4 Proto-roles

The a-structure I shall adopt does not utilize fixed thematic roles. The differences between arguments and a-adjuncts will be captured in relative terms using Dowty's (1991) proto-roles. Dowty ((1989), (1991)) argues that arguments are associated with lexical entailments (or presuppositions) imposed on them by their verbs. Thematic roles are then best understood as labels for clusters of lexical entailments imposed on arguments by predicates. Dowty further argues that a label for a cluster of lexical entailments is only warranted in cases where they exhibit significant linguistic generalizations; he calls these "L-thematic roles" (Dowty (1989: 77)). For argument selection, Dowty proposes only two such L-thematic roles need be recognized, the proto-roles **proto-agent** and **proto-patient**. These are the properties he associates with each of these proto-roles.

(15) Contributing properties for proto-agents:

- (a) volitional involvement in the event or state
- (b) sentience (and/or perception)
- (c) causing an event or change of state in another participant
- (d) movement (relative to the position of another participant)
- ((e) exists independently of the event named by the verb)

(16) Contributing properties for proto-patients:

- (a) undergoes change of state
- (b) incremental theme
- (c) causally affected by another recipient
- (d) stationary relative to movement of another participant
- ((e) does not exist independently of the event named by the verb)

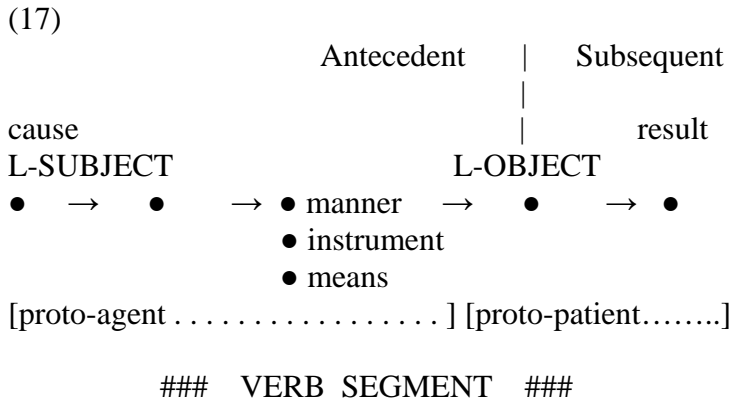
Dowty (1991: 572)

The last property of each list is parenthesized as Dowty is unsure whether they belong to the discourse dimension of subjecthood rather than the semantic dimension. Any particular argument does not have to possess all the properties to be labelled a proto-agent or a proto-patient. In addition, arguments can exhibit stronger and weaker degrees of agent- or patient-hood. Although the proto-role system and the other apparatus I shall use do not make use of thematic roles such as agent and instrument, I shall use the terms agent and instrument to refer descriptively to the corresponding NPs in the surface sentences. This is also for ease of reference: it is simpler to say e.g. 'agent' rather than having to refer to 'the 1st tier proto-agent with proto-properties x and y' each time. This descriptive use of these terms should be straightforward.

The similarities between agents and instruments can be captured via proto-roles in this way: they both tend to possess proto-agent properties (15c) and (15d). The difference between agents and instruments on the one hand and experiencers on the other is that experiencers do not possess (15c) and (15d). The relationship between agents and experiencers is that they both possess proto-agent property (15b) (instruments do not). Thus the proto-role system can capture the similarities and differences between the surface labels of agent, experiencer and instrument (and indeed others).

5 Proto-roles and causal chains

Participants that are arguments or a-adjuncts in the causal chain (represented by dots – but note, not dots that are not arguments or a-adjuncts) will correspond to a proto-role. L-SUBJECTs and other participants in the antecedent area, including instruments, will be proto-agents, while L-OBJECTs and other participants in the subsequent area will be proto-patients, as shown in (17).



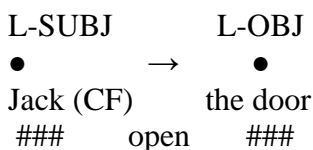
modified from Croft (1991: 185)

I will leave aside the issue of where arguments that are ‘neither’ proto-agents nor proto-patients appear. It is important to note that it is not that points in the antecedent area *must* be proto-agents but that the proto-role properties these points possess will naturally lead them to be proto-agents, and this goes too for points in the subsequent area being proto-patients.

The causal chain is envisioned to be a part of the conceptual structure of the event that is being expressed by the linguistic expression. The a-structure receives information from the conceptual structure, and hence from the causal chain. This means that if no instrument is in the causal chain, then the a-structure receives no information about instruments.

Causal force is an element of the causal chain that informs a-structure as to when arguments and a-adjuncts can and cannot be mapped to certain grammatical functions in f-structure. The proposal here is that causal force is equivalent to the proto-agent property *causing an event or change of state in another participant* (see (15c) above) – let us label this proto-agent property ‘causal force’ for brevity. This allows a very smooth transition from causal chains to proto-roles in the proposed system. If a proto-agent has the property causal force I shall indicate it when relevant in the causal chain like this (CF):

(18) Jack opened the door.



If, for example, a participant has causal force in the causal chain, then the proto-role associated with that position possesses causal force, and this information will be transmitted to the a-structure and will be relevant to the grammaticality of constructions. Whether or not a proto-agent possesses causal force will be crucial in determining the grammaticality of some instrument constructions as we shall see in the next sections.

6 Argument-structure

We have seen that there is good reason to classify instruments not as arguments or adjuncts but as a kind of a-adjunct. I propose to represent this by adding a **second tier** to the a-structure. This second tier will contain a-adjuncts, leaving the first tier for arguments. I shall use the following representation:

$$(19) \text{ VERB } 1^{\text{st}} \text{ tier } \langle \alpha \quad \beta \rangle \\ 2^{\text{nd}} \text{ tier } \langle \gamma \rangle$$

The verb whose a-structure is represented will slot into ‘VERB’. α and β represent 1st tier arguments. γ represents an a-adjunct – I shall refer to these items as **second tier arguments** (i.e., 2nd tier arguments correspond to a-adjuncts as outlined above). The properties of 2nd tier arguments are that they are optional in that they need not be realized, but they are listed in the a-structure and so their number cannot be increased like they can for adjuncts. Hence a sentence such as (20) has the a-structure in (21) (p-a = proto-agent; p-p = proto-patient):

(20) Jack opened the door with the key.

$$(21) \text{ open } 1^{\text{st}} \text{ tier } \langle \text{p-a} \quad \text{p-p} \rangle \\ 2^{\text{nd}} \text{ tier } \langle \text{p-a} \rangle$$

A sentence such as (22) without an instrument has the a-structure in (23)¹:

(22) Jack opened the door.

$$(23) \text{ open } 1^{\text{st}} \text{ tier } \langle \text{p-a} \quad \text{p-p} \rangle$$

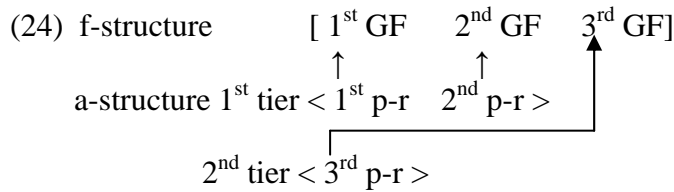
The a-structure system used here is not a subset of the semantics but an interface between conceptual structure and syntax. This type of a-structure system is straightforwardly compatible with a full-blown syntactic theory such as Lexical-Functional Grammar (LFG)². Adopting the syntactic system of LFG means that the proto-roles of the a-structure system presented here will be mapped to **grammatical functions** (GFs) in the f(unctional)-structure³. The GFs I use are those as conceptualised in LFG; the ones used here are subject (SUBJ), object (OBJ) and oblique theta (OBL_θ). The proto-roles in the present a-structure system are ranked in the sense that the first will be mapped to the first grammatical function in f-structure,

¹ Of course, as the instrument ‘with the key’ is optional, (22) could have the a-structure given in (21) in the situation where the speaker chooses not to add ‘with the key’. (20) cannot, however, have the a-structure given in (23).

² See, e.g., Dalrymple (2001) for an account of LFG.

³ See Dalrymple (2001: 7ff) for an account of functional-structure.

the second to the second, and so on. The proto-roles (p-r) in the 1st tier take precedence over those in the 2nd tier. This is shown in (24):

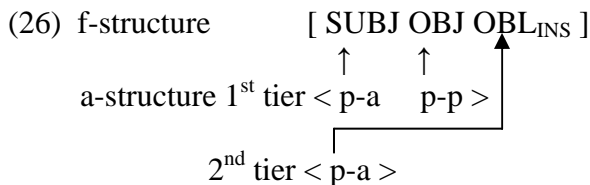


For the standard instrument construction (e.g. (20)), the correct mapping from a-structure to f-structure that we want to ensure is for the proto-agent present on the first tier to be mapped to SUBJECT, leaving the proto-agent on the second tier to be mapped to another position in the chain, and in the current context, that would be to the oblique instrument, OBL_{INS}. I adopt this ranking of grammatical functions: SUBJ > OBJ > OBL_θ. Thus, for our purposes here, the following mapping rules are employed; these follow from the simple ranking procedure given above.

(25) Mapping Rules for the standard instrument construction

- 1st tier proto-agent → SUBJECT
- 1st tier proto-patient → OBJECT
- 2nd tier proto-agent → OBLIQUE_{INS}

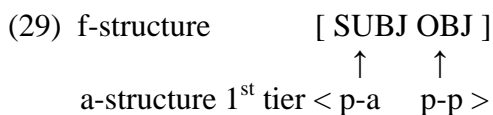
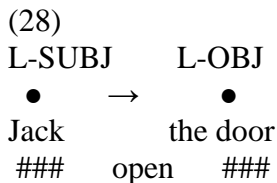
This a-structure representation and mapping rules allow sentences like ‘Jack opened the door’ to be grammatical because the instrument, e.g. ‘with the key’, would appear on the 2nd tier and is hence optional. Diagrammatically, the mapping from a-structure to f-structure for (20) looks like this:



7 Linguistic Constructions with the Two Tier A-structure System

In this section we will see how the two tier a-structure system I have introduced works for simple active and simple passive sentences. (27) has the causal chain representation of (28) and the mapping shown in (29).

(27) Jack opened the door.



Note that because there is no instrument in the causal chain, the a-structure is not informed of such and hence there is no proto-agent on the 2nd tier. The active sentence in (27) has no instrument and two obligatory arguments, the L-SUBJ of the causal chain being a proto-agent ('Jack') and the L-OBJ being a proto-patient ('the door'). Obligatory arguments are represented on the 1st tier, and in (29) we see that this is the case.

(30) is the passive sentence corresponding to (27). (30)'s causal chain representation is given in (31) and the a-structure to f-structure mapping is shown in (32).

(30) The door was opened by Jack.

(31)

L-SUBJ	→	L-OBJ
●		●
Jack		the door
###	open	###

(32) f-structure [SUBJ OBL_{AG}]

a-structure 1st tier < ... p-p >

2nd tier < p-a >

Note that the causal chain representations of (27) and (30) are the same. This shows that the difference between the active and passive is not a difference in the conception of the causal structure of the event but a difference in the a-structure. The 'by Jack' phrase of the passive (30) is optional: this means it is either an a-adjunct or an adjunct. Because the tests we applied to instruments in Section 2 to determine whether an item is an argument, a-adjunct or adjunct applied to by-phrases of passives yield the same results, we can say that by-phrases of passives are also 2nd tier arguments. Hence the corresponding proto-agent is *moved* to the 2nd tier – the dots in (32) represent where the proto-agent has been moved from.

8 The Instrument as Subject Construction

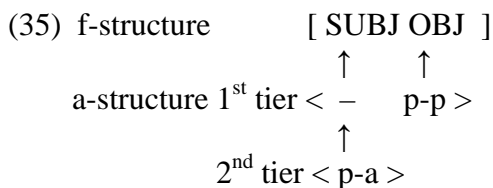
The proposal here is that intermediary instruments possess the proto-agent property causal force but facilitating instruments do not. This is a slight departure from Dowty who classifies all instruments as proto-agents that possess the proto-agent properties movement and causal force but not volition or sentience (Dowty (1991: 577)) – of course this does not differentiate the two types of instrument. As we are now following the idea that only *intermediary* instruments have the property causal force, facilitating instruments will possess movement only. The conceptual merit of this approach can be seen in the light of some examples. Recall:

- (33) a. Jack opened the door with the key.
 b. The key opened the door.

- (34) a. Emily devoured the pasta with the fork.
 b. *The fork devoured the pasta.

Conceptually, ‘the key’ in (33) is necessary to bring about the opening of the door (assuming it is locked), whereas ‘the fork’ in (34) is not necessary to bring about the devouring of the pasta – clearly ‘the fork’ moves independently of another participant (‘the pasta’) in the event and so possesses the proto-agent property movement, but conceptually ‘the fork’ is not causally connected – it is quite literally “facilitating”.

Hence the proposal here is that only instruments that possess causal force (what have been termed intermediary instruments) can be realized as SUBJ and thereby permit the instrument as subject construction. Further conceptual merit for this claim comes from the following consideration. The verbs we have seen depict a change of state⁴ in or for the L-OBJECT (we are not dealing e.g. with experiencer psych-verbs here such as ‘fear’ and ‘worry’). This change of state must be *caused* in some way, and that cause must be brought about by one or more elements in the antecedent of the causal chain. It is therefore quite understandable that to express such events linguistically at least one of these elements needs to possess causal force and appear in the linguistic construction – linguistic construction here includes the a-structure: this means that one of the elements must appear in a-structure. As the causal chain passes information to the a-structure, this requirement will be satisfied. For a passive, when the agent is demoted to the 2nd tier, the element possessing causal force may not appear in the surface sentence, but being in the causal chain and the a-structure, it is both semantically and syntactically implied. For the instrument as subject construction, the element possessing causal force must be realized in the surface sentence for the construction to be grammatical. This is because, I propose, due to the different degrees of causation encoded by different constructions. In cases like (33a), both the agent and the instrument possess causal force – this means that (33b) is grammatical because, with the *deletion* of the agent in the a-structure, there is still an element from the antecedent present (i.e. the instrument) that possesses causal force. This element, a proto-role, is promoted from the 2nd tier and then mapped to SUBJ as shown in (35). The dash in the 1st tier represent that the initial 1st tier proto-agent has been deleted.



For (33a) and (34a), grammaticality results because the agents in SUBJ position possess causal force. In (33b), the instrument in SUBJ position also possesses causal force and so the sentence is grammatical. But the instrument in SUBJ position in (34b) does not possess causal force and so ungrammaticality results. This difference between the two instruments is represented in (36) and (37):

⁴ ‘Eat’ and possibly ‘devour’ are different in that they are not ‘causal verbs’ and so cannot be conceptualized in terms of causal chains.

(36) Intermediary instruments

VERB 1st tier < p-a(CF) p-p >
 2nd tier < p-a(CF) >

(37) Facilitating instruments

VERB 1st tier < p-a(C-F) p-p >
 2nd tier < p-a >

This shows how the difference between intermediary and facilitating instruments is captured in the system presented here.

This is how the mapping looks for the instrument as subject construction (e.g. (33b)). The initial proto-agent argument on the 1st tier has been deleted.

(38) f-structure [SUBJ OBJ OBL_{INS}]
 ↑ ↑
 a-structure 1st tier < - p-p >
 ↑
 2nd tier < p-a >

This grammatical operation deletes rather than suppresses or demotes the 1st tier proto-agent to the second tier; this avoids the ungrammatical sentence in (39) being predicted.

(39) *The key opened the door by Jack.

The proto-agent argument from the second tier moves up to the slot on the first tier. If it remained on the second tier it would be optional and (40) would be predicted to be grammatical.

(40) *opened the door.

The mapping rules for the instrument as subject construction are given here:

(41) Mapping Rules for the instrument as subject construction

[1st tier proto-agent deleted]

1st tier proto-patient → OBJECT

2nd tier proto-agent → 1st tier → SUBJECT

9 Conclusion

This paper took the observed binary classification of instruments in English and attempted to make ground in explaining why only one of these can be realized as subject. It was proposed that a consideration of the causal conceptualisation of the instrument gives the best account. This conceptual information can directly feed a-structure to dictate the grammaticality of the resulting linguistic constructions.

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Language and Ethnic Identity within the Pontic Greek Community in Cyprus: A Comparative Perspective

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Abstract

This paper investigates the relationship between language and ethnic identity of Pontic Greeks who currently reside in Cyprus. More specifically, I examine how ethnic identity is perceived and reflected in language preference by Pontic Greeks. The Pontic Greek community in Cyprus, however, does not seem to be homogeneous in terms of ethnicity and language choice since the majority of Pontic Greeks coming from Georgia and those from Russia show different patterns of linguistic behavior. The geographical distribution of Pontic Greeks, which divides them into two groups on the principle of their respective country of origin, has some effects on their ethnic affiliations that are expressed by the different ethnic labels they self-identify. The obtained results and the relevant analysis suggest that Pontic Greeks from Georgia assimilate more actively into the Greek social and linguistic contexts than those from Russia, who seem to wish to preserve their Russian social, national as well as linguistic ties.

1 Introduction

This paper focuses on the relationship between language and ethnic identity of Pontic Greeks who emigrated from the areas of North Caucasus (Russia) and South Caucasus (Georgia) to Cyprus for permanent stay. As a form of ethnic self-expression, the Greek language is often used among many members of the Pontic Greek community to symbolize their adherence to the larger Greek community, their common descent as well as to their general historical and cultural legacy. Language, thus, assumes the character of a clear identity marker (Blommaert and Verschueren, 1998). However, the ethnic language of Pontic Greeks, the Pontic dialect (of Greek), was almost lost at the time of their migration to Russia and Georgia. Pontic Greeks started migrating towards the northern countries (mainly Russia and Georgia) right after the fall of Constantinople in 1453. The consequent massive migration of Pontic Greeks to Russia was reported during the 19th century¹, which was marked by the Greek Revolution in 1821 and the Russian-Turkish war of 1876-1878.

¹ It must be noted that Georgia signed the 'Georgievsky treaty' and thus joined the Russian Empire for its national/ethnic protection (Tsatsanidis, 2000). Thus, the Georgian areas where Pontic Greeks settled were part of Russia at that period.

Map 1: Pontos



The last migration move of Pontic Greeks towards Russia, where the Soviet rule had already been established, was during and after the disaster of Asia Minor in 1922. The Ottoman Turks, having consequently conquered the capital of Pontos, Trapezuntata (see map 1), seven years later, made every effort to oppress and ultimately suppress the local language², religion and every element of the Greek culture in general. Thus, very few Pontic Greeks managed to preserve their ancestral Pontic dialect. Others, however, adopted Turkish and later Russian (or both) as their mother tongue(s) depending on their place of residence. Having almost lost their ethnic language, Pontic Greeks, nonetheless, preserved their religion as well as their ethnic customs and traditions with recourse to which they maintained and emphasized their identity. It should be noted, that the decline and consequent practical loss of the original group language was not accompanied by radical changes in the cultural content of the Pontic Greek community.

The aim of this paper is to identify and examine the ways in which language is used within the Pontic Greek community in Cyprus in the attempt of its members to establish their ethnic identity within the broader Greek community. There are various ways, in the traditional sociolinguistic inquiry, in which linguistic behavior of a particular individual, or of a particular community, functions as an important indicator of ethnic identity. The role of the Greek language within the Pontic Greek community, as will be discussed and analyzed in this work, is a decisive one in affirming and reaffirming the Greek identity as well as the adherence and loyalty of Pontic Greeks to the Greek land, its culture, customs and traditions. Likewise, equally important proves to be the influence of the Russian language on mundane communication within the Pontic Greek community.

² Pontic Greek, which is a variety of Greek, is very different from SMG and other dialects of Greek “because of the long period of separation and in some cases because of considerable influence from other languages, notably Turkish” (Trudgill, 2002: 126).

3 Literature Review

The literature on language and ethnic identity is extensive and covers a wide array of interrelated disciplines ranging from sociolinguistics to social psychology, sociology and anthropology. Since the present paper addresses issues relevant to dominant language, ethnicity and ethnonyms the literature review focuses on such notions and concepts as *ethnic identity*, *mother tongue* and *language choice*.

Edwards (1985) lists three major features of ethnic identity. Firstly, ethnic identity should not be considered, necessarily, as a minority-group identity, since the geographical context of ethnicity may determine, at least in some part, its constitution. Secondly, defining one's ethnic identity involves marking group boundaries. In other words, ethnic identity acquires meaning by functioning in opposition to foreign cultural markers and social ties that, in complex, differentiate one ethnic group from another (Barth, 1969; Heller, 1987; Haarmann, 1999). The final major feature of ethnic identity, according to Edwards (1985), requires the differentiation of objective from subjective definitions. Objective definitions, as Edwards argues, encompass linguistic, racial, geographical, historical, religious and ancestral characteristics of ethnic identity which imply that ethnicity is inherited, in the context of a particular ethnic group (see also Liebkind, 1999: 140-141). Subjective definitions, on the other hand, involve a more symbolic and emotional approach to ethnic identity.

The relationship between language and ethnic identity is far from simple. Nonetheless, at the micro-sociolinguistic level, the degree of allegiance to a certain ethnic identity is often expressed through adherence to a specific code or certain linguistic features stereotypical of a particular group (Al-Wer, 1999). Given the fact that, subjectively, language possesses some kind of affective potential, it often functions as a powerful symbol of ethnic consciousness, serving "as a shorthand for all that makes a group special and unique" (Ross, 1979: 10). The notion of *mother tongue*, which often functions as an important marker of ethnic identity among members of a particular group, has been looked at from different sociolinguistic angles. It should be noted, that the term "mother tongue" has not received a universal definition in sociolinguistics. On the contrary, many different definitions have emerged that added more conceptual complexity to this term. Weinreich (1953: 88), for instance, defines mother tongue as "the language which has been learned first". A slightly different approach is adopted by Lieberman (1969) who considers mother tongue as the language usually spoken in the individual's home in his early childhood, although not necessarily used by him/her at present. A more emotional content has been added to *mother tongue* by Skutnabb-Kangas and Phillipson (1989) who define it as the language to which a person has the more positive attitude and affection. In simple words, mother tongue could be seen as the language one knows best (Romaine, 1995). In this respect, Romaine's definition of "mother tongue" could be extended to a more concrete notion, which is that of the "dominant language".

More specifically, *dominant language* will be treated as the language one knows best, which consequently implies that one can speak it best along with his or her ability to think in it (Kostomarov, 1993). Therefore, it is not surprising that considerable attention, in the literature, is paid to the intimate link between one's mother language and ethnic identity, especially where the speaker knows more than one language. It must be noted, however, that this relationship between mother tongue and ethnic

identity is not categorical, since losing one's ethnic language does not necessarily lead to ethnic identity loss³ (see Trudgill, 2002).

In situations of bilingualism, bilingual speakers tend to choose a particular language taking into consideration the linguistic behavior of the interlocutor as well as the social contexts in which the event of speech occurs. The idea of who speaks what language to whom and when is discussed in detail by Fishman (1965, 2000), in his study of intragroup multilingualism (see also discussion by Weinreich 1953: 71-82). The term "language choice", according to Hoffman (1991), entails an act of selecting from the linguistic and stylistic items available to bilingual speakers, i.e. favouring some and rejecting others in light of different sets of social, psychological and linguistic factors. Along these lines, Fishman (1964, 1965 cited in Fasold 1984) introduces the notion of 'domains', alluding to certain institutional contexts where one language variety is more likely to be appropriate than another. It is evident that bilingual speakers in certain domains will prefer to use one language, and in others, the other.

Appel and Muysken (1987) go further and add to this list of factors, directly involved in the study of language choice, the factor of group membership. What is important in relation to group membership is that much attention is paid to the fact that language can be used to express one's identity. Consequently, the identity imposed by one's group membership is a crucial factor in language choice (Appel and Muysken, 1987). Evidently, certain group affiliations (e.g. ethnic, national, cultural) play an important role in language preferences. In this respect, Hoffman (1991: 181) points out that the individual's "desire to identify with, or dissociate from, a particular language group can be a determining factor in language choice".

4 Methodology

4.1 Participants

In total 101 Pontic Greeks, 46 male and 44 female, with the age-span ranging from 15 to 45 and older, took part in the present study. All of the participants are permanent residents in Cyprus. The majority of the participants immigrated to Cyprus in the early 1990s from the former Soviet Union, and more specifically, from the southern parts of Russia and from Georgia.

4.2 Questionnaire

A questionnaire was designed in Standard Modern Greek (SMG) for the purposes of the present study and aims at eliciting the relevant linguistic, social and ethnicity-related information. In total, 41 questions are included in the questionnaire. The questionnaire examines demographic information, multilingualism, mother tongue, language attitudes and the relation between language and ethnic identity. The questionnaires were distributed in three major urban centres, where compact Pontic Greek communities reside in Cyprus: Nicosia, Larnaca and Paphos. In total, 90

³ This is also true in relation to many Turkish-speaking Pontic Greeks, who have lost their ethnic language but have not lost their ethnic identity (see sections 5 and 6).

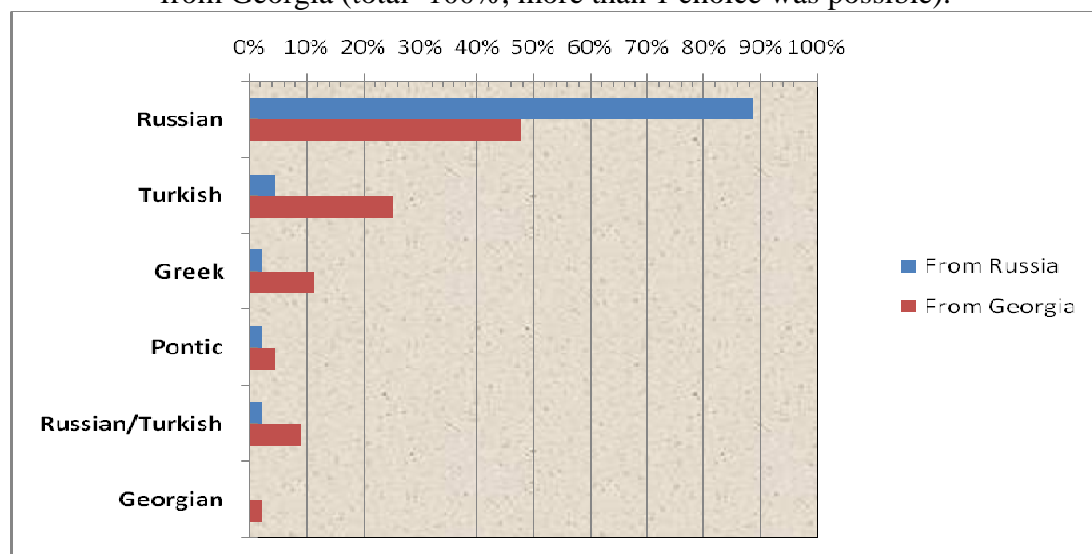
questionnaires were collected. Likewise, 11 interviews were conducted, which were, however, of supplementary nature to the main data.

5 Language, Ethnicity and Identity

5.1 The National Traits of Mother Tongue

A close examination of the “mother tongue” data of Pontic Greeks showed that there are particular differences among the participants which are based on the geographical distribution of their respective place of origin. The following chart compares the languages claimed as mother tongues by Pontic Greeks who arrived to Cyprus from Russia with those Pontic Greeks from Georgia:

Chart 1: Mother tongue choices claimed by Pontic Greeks from Russia and those from Georgia (total=100%, more than 1 choice was possible).



As can be observed from the above chart, the Russian language claimed as a “mother tongue” occupies the leading position among both Pontic Greeks from Russia and those from Georgia. However, there is an evident difference with regard to the number of speakers considering this language as their mother tongue, 88.8% and 47.7% respectively. It seems that the majority of Pontic Greeks from Russia, having lived among the Russian-speaking population, are more competent in Russian and feel, probably, that Russian is a more convenient means of communication for them. With regard to Pontic Greeks from Georgia, it is clear that under half of these participants consider Russian as their mother tongue. The relatively large number of Pontic Greeks from Georgia claiming to have Russian as their mother tongue can be explained by the fact that during the Soviet period, when Georgia was one of the Soviet Republics (1922-1991), Russian was the official language of administration and education.

The Turkish language as a “mother tongue” appears to occupy a stronger position among Pontic Greeks from Georgia than those from Russia, 25% to 4.4% respectively. In order to understand the essential differences between these figures it is important to refer to Fotiadis (2000: 84), who points out that the population of 24 out of 27 of the Pontic Greek villages in the area of Tsalka (in Georgia) was Turkish-

speaking in its entirety. However, not even a single Pontic Greek associated himself or herself with the Turkish culture and/or ethnicity. Nonetheless, the use of the Turkish language on a regular basis in these villages had a strong influence on the oral mundane communication of Pontic Greeks. Pontic Greeks from Russia who consider Turkish as their mother tongue are not many in number.

With regard to the Greek language, it appears that not many Pontic Greeks see it as their mother tongue. More specifically, 11.3% of Pontic Greeks from Georgia consider Greek as their mother tongue and only 2.2% of those from Russia claimed to have it as their mother tongue. Still, however, the difference of almost 9% between these two groups has some implications with regard to this language claimed as a mother tongue, which will be discussed in detail in section 6.

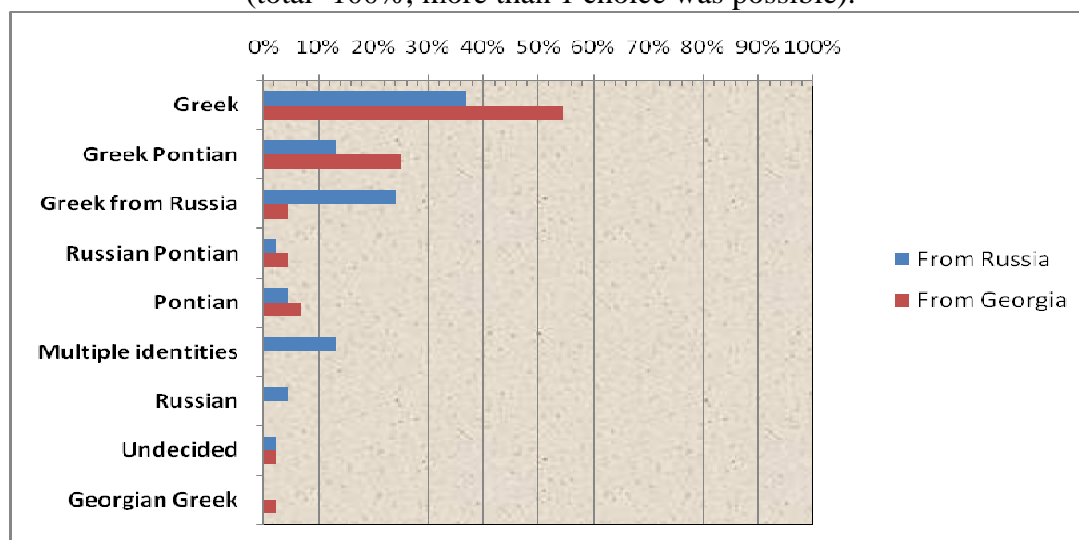
Even smaller is the number of Pontic Greeks, either from Georgia or Russia, who consider the Pontic Greek dialect as their mother tongue: 4.5% and 2.2% respectively. Around 9% of Pontic Greeks from Georgia claimed to have two mother tongues - Russian and Turkish – at the same time. The number of Pontic Greeks from Russia, who feel these two languages to be their mother tongues, amounts to 2.2% only. Lastly, 2.2% of Pontic Greeks from Georgia consider Georgian as their native language. It should be noted that none of the Pontic Greeks from Russia claimed to have Georgian as his or her mother tongue.

5.3 Ethnicity and Ethnonyms

5.3.1 The National Traits of Ethnic Identity

Having detected some differences with regard to the “mother tongues”, it is worth examining whether there are similar differences in ethnonym between these two groups of Pontic Greeks, based on the national element of their respective country of origin.

Chart 2: Ethnic Identity of Pontic Greeks from Russia and those from Georgia (total=100%, more than 1 choice was possible).



It is clear that the majority of both groups of Pontic Greeks favour “Greek” as the label of their self-identification. It must be noted that the number of Pontic Greeks from Georgia claiming to be “Greeks” is bigger than that of Pontic Greeks from Russia, 54.5% to 36.9% respectively. The label “Greek Pontian” (which is equivalent to “Pontic Greeks”) appeals to 25% of Pontic Greeks from Georgia and only to 13% of Pontic Greeks from Russia. The label “Greek from (or of) Russia” appeals to Pontic Greeks from Russia relatively strongly, amounting to 23.9%. What draws particular attention to this label is the presence of the geographical place (presumably country of origin) which is attached to the ethnic label. The fact that these participants stress that they are not simply Greeks but “Greeks from Russia” suggests that their country of origin plays an important role in their lives. More specifically, it seems that they wish to retain some kind of their Russian vestige (cultural, linguistic, social, political or any other). It is noteworthy that, at the same time, these participants do not entertain the possibility of any other ethnic label with which they could self-identify. Interestingly, only 4.5% of Pontic Greeks from Georgia claimed to be “Greeks from Russia”.

The possible explanation for the fact that Pontic Greeks coming from Georgia see themselves as “Greeks from Russia” could be hiding in the fact that Russia today is considered as the heir of the Soviet Union, and many seem to associate Russia with the former Soviet Union, especially abroad in the immigrant contexts. Similarly, the same explanation could be applied to the 4.5% of Pontic Greeks from Georgia who claimed to be Russian Pontians (“Rosso-Pontios” in SMG), having Russian as their mother tongue. With regard to Pontic Greeks from Russia, it seems that they do not favour the label “Russian Pontian” as only 2.1% of them self-identified with this label. It is worth mentioning that 13% of Pontic Greeks from Russia – but none from Georgia – claimed to have multiple ethnic identities. This might be due to the fact that Pontic Greeks from Georgia lived concentrated in villages, in a closed and relatively homogeneous community, whereas Pontic Greeks from Russia lived among other, ethnically diverse, populations of North Caucasus, in Russia. Lastly, 1.1% of the participants claimed to be Georgian Greek. Again, as with the labels “Russian Pontian” and “Greek from Russia”, the fact that these participants claim that they are Georgian Greeks indicates that they wish to retain and highlight some kind of cultural (and may be linguistic) vestige of their country of origin.

5.4 Discussion

Ethnic self-identification of a particular individual is closely linked to the respective label or ethnonym one chooses to attach to himself or herself according to his or her feelings of group membership. The existence of a wide range of ethnonyms within one community implies that this community is not homogeneous in certain respects. Moreover, the apparent differences in relation to mother tongue choices among members of the Pontic Greek community suggest that the integrity of this minority group in Cyprus is under question. Pontic Greeks could be divided into two major groups on the principle of their respective country of origin: those from Russia and those from Georgia. Furthermore, some Pontic Greeks, principally from Russia, claim multiple ethnic identities while some Pontic Greeks from Georgia claimed to have two mother tongues. What these two groups have in common, however, is that the degree of allegiance to the “Greek” identity in both groups is larger than that to the

Greek language chosen as a mother tongue (compare chart 1 with chart 2). Thus, the link between ethnic identity and language is far from simple.

The very small number of the participants who claimed to be “Russian Pontians” can be accounted for in terms of the generally negative attitude to this label within the Pontic Greek community itself. In the same vein, Padilla (1999: 115) argues that if “a person self-identifies as a member of a particular ethnic group, then he or she is willing to be perceived and treated as a member of that group”. Taking this issue into the linguistic dimension, Tabouret-Keller (1997: 320) argues that, in situations of language contact, a bilingual speaker may be identified by linguistic features, which, in certain situations, give “rise to feelings of inferiority, discrimination, or exclusion from the dominant group”. Along these lines, it is important to stress the fact that many other Pontic Greeks, who claimed to be ethnically Greek, do not accept and sometimes even reject a label such as “Pontic Greek” or any other labels that contain the word “Pontios” or “Pontian”.

6 Language Choice

6.1 Ethnicity and Linguistic behavior

Language choice within a multilingual community can be based on a number of different factors. To begin with, the term “language choice” refers to the selection of one language over the other in light of different sets of social, psychological and linguistic factors, in a multilingual community (Hoffman, 1991). Likewise, language choice may depend on the attitudes multilingual speakers hold towards linguistic codes or the linguistic and social status a language is assigned in the speech community (Putz, 1997: x). It is in light of these different approaches to language choice, that the linguistic behavior of Pontic Greeks is examined.

6.1.1 Language Choice of Pontic Greek Parents from Russia

Having outlined certain differences with regard to ethnic labels and mother tongue within the Pontic Greek community in Cyprus, two groups of Pontic Greeks have been established on the basis of their respective country of origin. It is, therefore, important to observe their linguistic behavior in terms of language choices Pontic Greek parents usually make to address their children in Cyprus.

Table 1: The language(s) in which Pontic Greek parents from Russia choose to address their children.

Language known best	Language(s) choice	%
Russian	Russian	70.9%
Russian	Russian/Greek	19.3%
Russian	Greek	3.2%
Russian	Russian/Turkish	3.2%
Russian	Russian/Turkish/Greek	3.2%

All of the participants of this group claimed to have Russian as their dominant language. It is evident that the majority of Pontic Greek parents from Russia choose the Russian language to address their children (almost 71%). The Russian language appears to be highly important as a means of everyday communication among Pontic

Greeks from Russia. There are many potential explanations behind this particular linguistic behavior. One potential account for using Russian is simply the fact that Russian, being the dominant language, facilitates the process of mundane communication. The communicative function of Russian, in other words, is more effective among Pontic Greeks from Russia, who grew up in the Russian linguistic environment before moving to Cyprus. Another possible reason for the use of Russian within this group is the relatively high status of this language. The rich cultural heritage connected to the Russian language, as well as other social values attached to it, make Russian quite popular not only among Pontic Greeks but also among other immigrants from other ex-Soviet republics.⁴ Furthermore, taking into consideration the fact that 23.9% of Pontic Greeks from Russia self-identified themselves as “Greeks from Russia” (see section 5. 3. 1), highlighting thus, the Russian vestige of their origins, suggests that they wish to preserve and pass on to the next generation the national, cultural and linguistic Russian elements.

Considerably fewer, but still a relatively large number of Pontic Greek parents from Russia (19.3%) claimed to use two languages – Greek and Russian – to address their children. The use of both Greek and Russian languages in interaction within the family domain, suggests that parents are aware of the linguistic, and consequently social as well as economic advantages (for instance, increasing their chances of getting a “good” job)⁵ of knowing more than one language.

Interestingly, a very small number (3.2%) of Pontic Greek parents from Russia, whose dominant language is Russian, use exclusively the Greek language to address their children. This, at first sight strange, from the point of view of effective communication, linguistic behavior of these parents, exhibits their categorical adherence to the Greek language, culture and ethnicity. What is striking, however, is the fact that these parents use only a second-learned language, in which their proficiency is apparently at a much lower level than in Russian, with their children. A potential explanation for this particular linguistic behavior of these parents, in relation to their children, can be illustrated in terms of the parents’ strong ethnic sentiments that wish their children to assimilate socially as well as linguistically faster in the mainstream society. The Greek language, in this particular case, is loaded entirely with symbolic value. It must be noted, that the symbolic dimension of a particular language varies. The symbolic function of a language may be weak or it may be strong, depending on the value and status its speakers impart to it.

A similar number of Pontic Greek parents from Russia (3.2%) claimed to use Russian and Turkish to address their children. It seems that these parents, whose dominant language is Russian, are also competent in Turkish and use it as a means of everyday communication with their children. Interestingly, this group of parents does not use the Greek language at all, in interaction with their children. It might be the case that these parents are least concerned with their Greek sentiments related either to the Greek language or ethnicity.

Likewise, 3.2% of Pontic Greek parents use more than two languages, namely Russian, Turkish and Greek, to address their children. The children of these parents,

⁴ Appel and Muysken (1987: 34) point out that Russian, along with French, English and Spanish, has a high status as a language of international communication.

⁵ A “good” job is seen here as the job with limited manual labor.

being exposed to such a linguistic “salad” on an everyday basis, are likely to grow up multilingually. The multilingual settings within the family domain will undoubtedly help them sustain the inter-communal, linguistically diverse status quo.

6. 1. 2. Language Choice of Pontic Greek Parents from Georgia

The linguistic behavior of Pontic Greek parents from Georgia, in relation to their children, appears to be rather diverse in comparison to those from Russia. The overall picture of language choices among Pontic Greek parents from Georgia, as table 2 illustrates, seems to be a quite complex one:

Table 2: The language(s) in which Pontic Greek parents from Georgia choose to address their children.

Language known best	Language(s) choice	%
Turkish	Turkish/Greek	25.9%
Russian	Greek	22.2%
Russian	Russian	14.8%
Turkish	Russian/Turkish/Greek	11.1%
Russian	Russian/Turkish/Greek	7.4%
Russian	Russian/Turkish/Georgian	3.7%
Russian	Russian/Greek	3.7%
Greek	Greek	3.7%
Turkish	Greek	3.7%
Turkish	Russian	3.7%

As shown in table 2, Pontic Greek parents do not have a particular dominant language. Instead, three different languages have been claimed to be the dominant languages in each case. The majority (almost 26%) of Pontic Greek parents from Georgia, whose dominant language is Turkish, choose Turkish and Greek languages to address their children. What is most interesting, however, is that 22.2% of Pontic Greek parents from Georgia, whose dominant language is Russian, claimed to choose exclusively the Greek language to address their children. The paradox here is that these parents avoid using Russian, which is their dominant language, with their children, and instead, employ Greek as a means of regular communication with them. Similarly, 3.7% of the parents, whose dominant language is Turkish, choose exclusively Greek as the medium of everyday communication with their children. Here, I assume that similar explanations for this particular linguistic choice, namely the choice of the Greek language which does not coincide with the parents’ dominant language, could be applied to these parents from Georgia in the same way as those applied to parents from Russia, with the only difference that the number of Pontic Greek parents from Georgia is considerably bigger than that of Pontic Greek parents from Russia. Tabouret-Keller (1997: 319) points out, that “identification is served by the name of a language that fulfills the symbolic function of representation, at both the social and individual levels (...)”. Equally interesting is the fact that 14.8% of Pontic Greek parents from Georgia use exclusively Russian with their children, which also coincides with the parents’ dominant language. Similarly, 3.7% of the parents, whose dominant language is Turkish, use exclusively Russian as a means of communication with their children.

It is worth noting that a large number of Pontic Greek parents from Georgia use three languages to address their children. 11.1% of the parents, whose dominant language is Turkish, employ Russian, Turkish and Greek languages as a mode of everyday communication with their children. Likewise, 7.4% of the parents, whose dominant language is Russian, use the same three languages to address their children. In the same vein, 3.7% of the parents, whose dominant language is Russian, employ Russian, Turkish and Georgian languages to address their children. Note, that there is no Greek among the three languages these parents use. The Georgian language that is present, among Russian and Turkish, suggests that this language still exercises some influence on the linguistic choices these parents make.

6.2 Discussion

The multilingual character of the Pontic Greek community, both at the individual and societal levels, is enhanced by the wide range of languages present in the linguistic repertoire of Pontic Greeks as well as by the diverse linguistic choices Pontic Greek parents make. As has been shown above, many Pontic Greek parents, both from Russia and Georgia, use two or even three languages to address their children. This kind of linguistic behavior on behalf of the parents undoubtedly sustains a flourishing multilingualism within the Pontic Greek community, which is passed on to the next generation.

Interestingly, many Pontic Greeks, notably those from Georgia, claim to use a second learned language, Greek, which is not their dominant language, to address their children. This linguistic behavior might be indicative of the parent's expressing his or her ethnic identity which could also be interpreted as a signal to a child of the parent's preferred (or linguistically imposed) ethnic identity, in the context of the mainstream society. In this respect, Hoffman (1991: 181) points out that, on a personal level, language choice reflects the individual's desire to emphasize or weaken his or her ties with the respective language.

It is clear that the majority of Pontic Greeks want to be regarded as Greeks in Cyprus no matter what language(s) they know or consider as their mother tongue. Evidently, a potential language shift from Turkish to other languages Pontic Greeks possess in their linguistic repertoire might be in process. Language shift, according to Fasold (1984: 213), occurs when a community begins to choose a new language in domains formerly preserved for the old one. This process of abandoning one language in favor of another can last for several generations when a particular "language is spoken by fewer and fewer people until it is no longer spoken by any member of that community" (Hoffman, 1991: 187). In the same vein, Hoffman (1991: 176) proceeds arguing that the correlation between *knowledge* and the *use* of the language is relevant to a group's willingness to maintain or abandon one of its languages. Thus, the fact that some Pontic Greeks know Turkish but refuse to speak it, and those who do not see any communicative value in this language, will automatically mean that there is no transmission (or if there is, it is very limited) of this language to the next generation, which in turn would lead to the decline of the language in question.

7 Conclusion

This paper attempted to examine the relationship between language and ethnic identity of Pontic Greeks in Cyprus. The link between one's ethnicity and linguistic behavior appears to be rather complex. The wide range of languages chosen as mother tongue(s) as well as a number of different ethnonyms employed by Pontic Greeks to self-identify, has revealed clear problems and complexities with regard to their linguistic behavior. As a consequence, the linguistic as well as ethnic homogeneity of the Pontic Greek community in Cyprus is under question. The linguistic as well as ethnic integrity of this minority group, due to social, economic and political factors is threatened. This concerns mother tongue, ethnic labels as well as the linguistic behavior of Pontic Greeks. As has been shown above, many Pontic Greek parents use two or even three languages to address their children. In complex, all these linguistic, ethnic as well as national problems seem to stem from the continuous geographical displacement, settlement and resettlement of Pontic Greeks across centuries as well as from influences, to various degrees, of the local Turkic, Caucasian and Greek language(s) of each respective country or region.

It has also been argued that strong ethnic sentiments may affect the linguistic behavior of Pontic Greek parents in relation to their children. In this respect, it has been suggested that linguistic behavior of using exclusively the Greek language by a number of Pontic Greek parents, notably from Georgia, whose dominant language is either Russian or Turkish, in relation to their children, indicates that there is intense allegiance to the respective linguistic code, probably caused by their strong ethnic feelings. In other words, the identity imposed by one's group membership, especially in immigrant contexts, is a crucial factor in language choice (Appel and Muysken, 1987). In this relation, the symbolic character of the Greek language functions as the projection of the respective ethnic identity of these parents, who make every effort, primarily on a linguistic level, to get across specific messages concerning their "Greekness". Thus, language in this particular case is used as a symbolic identity marker.

Apart from that, it has also been argued that this particular linguistic behavior of these Pontic Greek parents in interaction with their children indicates that language shift might be in process. More specifically, the children who are being exposed only to the Greek language within their domestic environment will probably have a poor command of other languages their parents might know. Moreover, taking into consideration the fact that the majority of these children attend Greek-speaking local schools, it is not difficult to predict that their dominant language will be SMG (and/or Cypriot Greek) which they will use on a regular basis in their social networks. Following Edwards' (1985) argument on language shift, it is clear, in this case, that the loss of the communicative need of the Russian and/or Turkish language(s), marks the beginning of the shift to a language with higher instrumental and communicative values, which is Greek in this case. Thus, Pontic Greeks coming from Georgia seem to be engaged more actively in the processes of (linguistic) assimilation in the mainstream society. These active attempts of integration into the Cypriot society made by some Pontic Greeks, however, may lead to their dominant language decline or even loss after two or three generations.

The majority of Pontic Greeks from Russia, however, appear to maintain Russian as their national language. It is evident, that these parents are highly concerned to pass this language on to the next generation, in the immigrant contexts of Cyprus. More specifically, as has been illustrated, the majority of Pontic Greek parents from Russia choose Russian as the regular medium of interaction with their children. Although all Pontic Greeks from Russia claim to be fully competent in Greek, they show some kind of allegiance to the Russian language. This particular linguistic behavior, as was argued above, is justified by the apparent high status and communicative value of the Russian language that Pontic Greeks from Russia are aware of, which helps this language to maintain its communicative role within the Pontic Greek community in Cyprus. Likewise, it is not a secret that a positive attitude to a particular language may lead to its maintenance in the different linguistic or social immigrant contexts. Therefore, it was suggested that the majority of Pontic Greeks from Russia recognizing their Greek roots by ethnically associating themselves with "Greekness", wish to retain some Russian vestige of their broader identity which is reflected in their linguistic behavior as well as in the ethnic labels they self-identify in Cyprus.

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